
From: Ralston, Michelle <Michelle.Ralston@dhs.gov>
Sent: Friday, March 25, 2011 3:26 PM
To: LIA05 Hoc
Subject: Out of Office AutoReply: NRC Press Release for 25 March 2011

Greetings,

I will on travel status for training Sunday, March 27th through Friday, April 1st. I will be monitoring emails/calls as time permits.

Pls contact Steve Horwitz or John Simpson for Outreach assistance.

If this is an urgent matter, please ring 202-280-9304.

Thank you,

Michelle Ralston

From: LIA05 Hoc
Sent: Friday, March 25, 2011 7:49 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: NRC SITREP 0600 3-25-11
Attachments: NRC Status Update 3.25.11--0430.pdf

Latest SITREP

Larry Broockerd Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Wierman, Kenneth <kenneth.wierman@dhs.gov>
Sent: Thursday, March 24, 2011 9:30 PM
To: LIA05 Hoc
Subject: Fw: Request of Extension for IPX 2011 Graded Exercise. April 13 State Dose Assessment and Field Sampling Activities.
Attachments: March 24 Request Letter to FEMA.pdf
Importance: High

Kenneth L. Wierman Jr.
Policy and Regulations Unit
Radiological Emergency Preparedness
Federal Emergency Management Agency (FEMA) Headquarters
Office: (202) 212-3711
Blackberry: (b)(6)
kenneth.wierman@dhs.gov

Sent using BlackBerry

From: Fiore, Craig
To: Quinn, Vanessa
Cc: Coons, Albert; Sherwood, Harry; Echavarria, Richard; DeFelice, Anthony; Fontenot, Rebecca; Jeremy, David; Horton, Douglas; Wierman, Kenneth; Lusk, Jeff; Howell, Farley; Waiz, Kim
Sent: Thu Mar 24 21:21:01 2011
Subject: Fw: Request of Extension for IPX 2011 Graded Exercise. April 13 State Dose Assessment and Field Sampling Activities.

Vanessa,

Attached for your review and consideration is the official request to postpone the Day 2 ingestion phase portion (State Dose Assessment and Field Sampling) of the upcoming San Onofre REPEX. Please note that the Plume and Recovery Phases of the exercise are still planned to be conducted and evaluated by FEMA as scheduled.

Once you and appropriate HQ REP/THD staff and management have an opportunity to review the request for postponement of a portion of the SONGS REPEX, please contact me to discuss in order to attain alignment between HQ and Region IX on whether or not to grant approval of the request. Based on the justifications provided by CalEMA in the letter, I am advocating that FEMA approve the request as there is historical precedence for REPEX postponements due to State and local response to real life emergencies.

Thank you for your immediate attention and consideration on his matter.

Vr/
Craig

Sent from the BlackBerry of Craig J. Fiore

From: Lee Shin <Lee.Shin@calema.ca.gov>
To: Howell, Linda <Linda.Howell@nrc.gov>
Cc: Fiore, Craig <craig.fiore@dhs.gov>
Sent: Thu Mar 24 20:23:39 2011

Subject: Request of Extension for IPX 2011 Graded Exercise. April 13 State Dose Assessment and Field Sampling Activities.

Linda, the attached letter and the second paragraph has information that is not completely accurate, as you indicated to me directly of possibilities in this calendar year that NRC could accommodate.

If this letter poses a problem please contact me for clarification. Hopefully this letter can help us in moving forward.

Lee

From: Lee Shin
Sent: Thursday, March 24, 2011 5:07 PM
To: Fiore, Craig
Subject: Request of Extension for IPX 2011 Graded Exercise. April 13 State Dose Assessment and Field Sampling Activities.

Craig,

Attached is a letter with our request for an extension for the IPX 2011 Graded Exercise April 13 State Dose Assessment and Field Sampling Activity.

The April 12 Plume Phase and April 14th Recovery Phase Tabletop events will be executed as originally scheduled per your approval.

If you have any questions feel free to contact me. Thank you in advance for the consideration.

Lee Shin
Manager, Radiological Preparedness Unit
California Emergency Management Agency
3650 Schriever Avenue
Mather, CA 95655

916-996-6340



Cal EMA
CALIFORNIA EMERGENCY
MANAGEMENT AGENCY

March 24, 2011

Craig Fiore
Acting RAC Chair
FEMA Region IX
1111 Broadway, Suite 1200
Oakland, California 94607-4052

Dear Mr. Fiore:

The Federal, State, Local, and Utility organizations that collaborate on Nuclear Power Plant emergency planning have been preparing for an exercise at the San Onofre Nuclear Generating Station (SONGS), scheduled for April 12-14, 2011. The ongoing nuclear plant crisis in Japan has clearly impacted many of these organizations both within California and nationally. This week, the California Emergency Management Agency (Cal EMA) was notified by the U.S. Department of Energy (DOE) that their Federal Radiological Monitoring and Assessment Center (FRMAC) as well as other key DOE resources are unavailable to participate in the April 2011 SONGS exercise due to ongoing support they are providing for the Japan incident. FRMAC and DOE participation is critical for day two of the exercise, which tests ingestion pathway and field sampling activities. It is for this reason that we request postponement of day two of the exercise. Cal EMA proposes that days one and three of the exercise, on April 12 and 14, 2011 respectively, continue as currently scheduled.

The Nuclear Regulatory Commission (NRC), which is responsible for calendaring of nuclear power plant exercises, has informed Cal EMA that they are unable to reschedule the day two component until March of 2012. It is California's preference that this reschedule occur sooner. If the NRC exercise calendar and required federal DOE assets and resources become available sooner than March of 2012, the State of California stands ready and prepared to conduct day two at an earlier date.

This request is based upon input from Cal EMA, the California Department of Public Health (CDPH), and stakeholders that represent the SONGS Interjurisdictional Planning Committee (IPC). The following is a more detailed outline of our proposed revisions to the exercise schedule:

- Move forward with the Day One Plume Phase Evaluated Exercise on April 12.
- Move forward with the Day One Advance Party Meeting on April 12.

3650 SCHRIEVER AVENUE MATHER, CA 95655
PREPAREDNESS DIVISION
(916) 996-6340 PHONE • (916) 845-8735 FAX

CK 887 of 3114

Mr. Craig Fiore
March 24, 2011
Page Two

- Re-schedule the Ingestion Pathway Exercise and Field Sampling Activities, initially scheduled for April 13, 2011 to March of 2012, or sooner with NRC and DOE concurrence.
- Move forward with the Day Three Recovery Phase Tabletop on April 14.
- Move forward with the Federal Emergency Management Agency (FEMA) Out-briefing and Public Meeting on April 15.

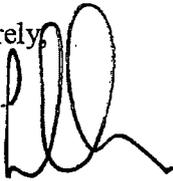
April 13 can be held as an open day with no scheduled exercise activities, but will be devoted to final preparation for day three activities on April 14.

In addition, Cal EMA would like to coordinate with FEMA regarding any additional planning necessary for increased media and public interest in the April exercise due to current events .

Thank you for your consideration of this request to postpone day two of the SONGS exercise for the reasons stated above.

If you have any questions, please contact me at 916-996-6340.

Sincerely,

A handwritten signature in black ink, appearing to read 'LS', with a stylized flourish at the end.

Lee Shin
Manager, Radiological Preparedness Unit

From: LIA05 Hoc
Sent: Thursday, March 24, 2011 7:28 PM
To: Dan Feighert; John Simpson; Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: FW: USNRC Earthquake-Tsunami Update.032411.1800EDT
Attachments: USNRC Earthquake-Tsunami Update.032411.1800EDT.pdf

FYI,

For those who did not receive this update.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA07 Hoc
Sent: Thursday, March 24, 2011 7:20 PM
To: LIA05 Hoc
Subject: FW: USNRC Earthquake-Tsunami Update.032411.1800EDT

From: LIA07 Hoc
Sent: Thursday, March 24, 2011 5:55 PM
To: LIA07 Hoc; OST04 Hoc
Subject: USNRC Earthquake-Tsunami Update.032411.1800EDT

From: LIA05 Hoc
Sent: Thursday, March 24, 2011 5:45 PM
To: Feighert, Dan
Cc: Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Incorrect Information
Importance: High

Mr. Feighert,

I was (and some States) the wrong information from the NRC State liaison. The correct number is 888-603-9604

Passcode

(b)(6)

They are discussing policies and taking questions from the States regarding policies involving contaminated passengers etc.

Policies are listed on usa.gov regarding information on policies on radiological issues regarding the Japan Earthquake and Nuclear Issues.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 24, 2011 2:54 PM
To: Feighert, Dan; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: NRC Press Release from Today
Attachments: 11-056.pdf

Please find the attached.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187



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. 11-054

March 21, 2011

OPENING REMARKS OF NRC CHAIRMAN GREGORY B. JACZKO AT TODAY'S COMMISSION MEETING ON THE EVENTS IN JAPAN

Good morning. The Commission meets today to discuss the tragic events in Japan and consider possible actions we may take to verify the safety of the nuclear facilities that we regulate in the United States. This meeting will—without a doubt—be one of the most heavily watched meetings in the history of this agency.

People across the country and around the world who have been touched by the magnitude and scale of this disaster are closely following the events in Japan, and the repercussions in this country and in many other countries. I would first like to offer my condolences to all those who have been affected by the earthquake and tsunami in Japan. Our hearts go out to all who have been dealing with the aftermath of these natural disasters, and we are mindful of the long and difficult road they will face in recovering. We know that the people of Japan are resilient and strong, and we have every confidence that they will come through this difficult time and move forward, with resolve, to rebuild their vibrant country.

I believe I speak for all Americans when I say that we stand together with the people of Japan at this most difficult and challenging time. The NRC is a relatively small agency, with approximately 4000 staff, but we play a critical role in protecting the American people and the environment. We have inspectors who work full-time at every nuclear plant in the country, and we are proud to have world-class scientists, engineers and professionals representing nearly every discipline.

Since Friday, March 11, when the earthquake and tsunami struck, the NRC's headquarters Operations Center has been operating on a 24-hour basis to monitor and analyze events at nuclear power plants in Japan. At the request of the Japanese government, and through the United States Agency for International Development (USAID), the NRC sent a team of its technical experts to provide on-the-ground support, and we have been in continual contact with them. And, within the United States, the NRC has been working closely with other Federal agencies as part of our government's response to the situation.

We have a responsibility to the American people to undertake a systematic and methodical review of the safety of our own domestic nuclear facilities, in light of the natural disaster and the resulting nuclear emergency in Japan. Beginning to examine all available

information is an essential part of our effort to analyze the event and understand its impact on Japan and implications for the United States. Our focus is always on keeping plants and radioactive materials in this country safe and secure.

As this immediate crisis in Japan comes to an end, we will look at any information we can gain from the event and see if there are changes we need to make, to further protect the public. Together with my colleagues on the Commission, we will review the current status and identify the steps we will take to conduct that review. In the meantime, we will continue to oversee and monitor plants to ensure that U. S. reactors remain safe.

On behalf of the Commission, I want to thank all of our staff for maintaining their focus on our essential safety and security mission throughout these difficult days. I want to acknowledge their tireless efforts and their critical contributions to the U.S. response to assist Japan. In spite of the evolving situation, the long hours, and the intensity of efforts over the past week, staff has approached their responsibilities with dedication, determination and professionalism, and I am incredibly proud of their efforts.

The American people also can be proud of the commitment and dedication within the Federal workforce, which is exemplified by our staff every day. Before we begin our meeting with Mr. Borchardt's presentation, would any of my fellow Commissioners like to make opening comments?

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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.



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. 11-056

March 24, 2011

NRC SEEKS COMMENT ON PROPOSED RULE TO CERTIFY GE-HITACHI ESBWR REACTOR DESIGN

The U.S. Nuclear Regulatory Commission is seeking comments on a proposed rule that would certify GE-Hitachi Nuclear Energy's Economic Simplified Boiling-Water Reactor (ESBWR) design for use in the United States.

The design certification process provides for early public participation and resolution of safety issues for proposed reactor designs. NRC certification, in the form of a final rule, means the design meets the agency's applicable safety requirements. If an applicant for a nuclear power plant license references a certified design, the applicant need not submit safety information for the design. Instead, the license application and the NRC's safety review would address the remaining safety issues for the proposed nuclear power plant.

The design to be certified is fully described in a "design control document," which would be approved (incorporated by reference) in the design certification rule. The NRC has also prepared an environmental assessment of the design to support the rulemaking. The environmental assessment discusses possible design alternatives that could be included in the design certification to mitigate potential severe accidents. The NRC invites public comments on the design control document and environmental assessment as part of this rulemaking. These documents are available through the Federal e-Rulemaking web site at <http://www.regulations.gov> by searching under Docket ID **NRC-2010-0135**.

GE-Hitachi Nuclear Energy submitted an application for certification of the ESBWR standard plant design on Aug. 24, 2005. The ESBWR is a 1,594 megawatt electric, natural circulation reactor. The ESBWR includes passive safety features that would cool down the reactor after an accident without the need for human intervention. These passive features include:

- enhanced natural circulation via a taller reactor vessel, a shorter core and improved water flow through the vessel;
- an isolation condenser system to control water levels and remove decay heat while the reactor is pressurized, and;
- a gravity-driven cooling system to maintain water levels when the reactor pressure has dropped.

The NRC conducted an extensive technical evaluation of the design and issued a final safety evaluation report (FSER) in March 2011. The FSER provides the basis for the design certification now being considered for addition to NRC's regulations at 10 CFR Part 52. The FSER is available through <http://www.regulations.gov> by searching under Docket ID **NRC-2010-0135**.

The NRC is currently reviewing a Combined License application, referencing the ESBWR design certification application, from the Detroit Edison Company for Fermi Unit 3. The NRC has certified four other standard reactor designs: the Advanced Boiling Water Reactor (ABWR), System 80+, AP600, and AP1000, and the agency has published proposed rules to amend the ABWR and the AP1000.

The public can view the NRC's Federal Register notice at <http://edocket.access.gpo.gov/2011/pdf/2011-6839.pdf>. Comments may be submitted for 75 days following publication. Comments may be submitted via <http://www.regulations.gov> under Docket ID **NRC-2010-0135**; by e-mail to Rulemaking.Comments@nrc.gov; by mail to Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, ATTN: Rulemakings and Adjudications Staff; or by fax to Secretary, U.S. Nuclear Regulatory Commission, at 301-492-3466.

More information about the ESBWR design review can be found on the NRC's website at <http://www.nrc.gov/reactors/new-reactors/design-cert/esbwr.html>.

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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.

From: LIA05 Hoc
Sent: Thursday, March 24, 2011 9:43 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Undeliverable mail Mr. Greten

Mr. Gretens mail is now bouncing back as undeliverable due to a full box...so he may not be getting the information being sent from this station.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 24, 2011 7:07 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Assumption of Duties as REP Liaison

I have assumed duties as FEMA REP Liaison at NRC EOC.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Greten, Timothy <Timothy.Greten@dhs.gov>
Sent: Wednesday, March 23, 2011 8:43 PM
To: LIA05 Hoc
Subject: Out of Office AutoReply: Inquires related to U.S procedure during Nuclear Emergency

I will be out of office until 0900 Friday, March 25. Please cc urgent issues to Vanessa.quinn@dhs.gov and harry.sherwood@dhs.gov.

Thank you!
Tim

Subject: Safe Re-entry of Personnel and Food

Request from NRC Team

Larry Broockerd Dayshift 0700-1500
Harry Nash Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Sheffield, Bonnie <Bonnie.Sheffield@dhs.gov>
Sent: Wednesday, March 23, 2011 2:54 PM
To: LIA05 Hoc

Please send me the SOP for the Liaison position

Very Respectfully

Bonnie Sheffield

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

From: McDermott, Brian
Sent: Wednesday, March 23, 2011 2:17 PM
To: LIA05 Hoc; LIA02 Hoc
Cc: Weber, Michael; Miller, Charles
Subject: Notes from Consortium Call for distribution
Attachments: ConsortiumCallSummary23March2011.docx

GOVERNMENT-INDUSTRY CONSORTIUM
TO ASSIST JAPAN IN RESPONDING TO
THE NUCLEAR EMERGENCY AT FUKUSHIMA-DAIICHI

CONFERENCE CALL SUMMARY

23 March 1000

Participants: NRC, DOE/NE, DOE/NR, DOD/J4, INPO

Summary:

1. NRC Chairman Jaczko is working with counterparts at the Department/Agency-head level to identify a lead for the Federal government for the consortium and to coordinate and execute logistical support in Japan; decision actively being sought
2. NRC team (Tokyo) is making arrangements to embed INPO's liaison (Al Hochevar), including introductory meetings with representatives of Japanese nuclear industry and government agencies. INPO expects Mr. Hochevar to serve as the primary point of contact for U.S. industry in Tokyo and will support him from the INPO Emergency Center in Atlanta, GA.
3. INPO's Atlanta team is scaling up their staffing to support representative in Tokyo, including representation from vendors.
4. DOE distributed a report entitled "Robotic and Remote Systems Assistance Available to the Government of Japan", dated 22 March 2011, that was very well received by GOJ counterparts.

Barriers to be resolved:

1. If the Japanese government/industry requests assistance, who will pay for the equipment and supplies; INPO prefers direct arrangements through the supply chain (e.g., vendor → TEPCO)
2. If a request for assistance is received, such requests need to be authenticated and any requests for transport/logistical support also need to be authenticated prior to execution
UPDATE/CLOSED: Daily meetings between the U.S. Government Team, including the NRC, and high level officials from the Government of Japan will be used to authenticate requests for equipment or technical assistance
3. Need to establish a single Federal point of contact to facilitate coordination and facilitation; INPO serves this role for the U.S. nuclear industry

Next call: 1000 (EDT) 24 March 2011

From: LIA05 Hoc
Sent: Wednesday, March 23, 2011 10:36 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Attachments: TAB 8 Japan Protocols Message to the Aviation Industry.pdf

The attached information was requested from CBP. As directed I have provided it to the State Liaisons, Liaison Coordinator, and Liaison Director.

Larry Broockerd

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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**U.S. CUSTOMS AND BORDER PROTECTION
OFFICE OF FIELD OPERATIONS
March 18, 2011**



A message to our aviation industry partners:

U.S. Customs and Border Protection (CBP) is monitoring the evolving situation in Japan carefully to ensure the safety of all passengers and cargo arriving in the United States.

As the Nuclear Regulatory Commission and other experts have said, we do not expect to see radiation at harmful levels reaching the United States from damaged Japanese nuclear power plants. As a result of the Government of Japan's efforts to create a safety zone around the Fukushima Dai'ichi Nuclear Power Facility, we have been advised by technical experts that the exposure of the general population and its industries in the affected area has been minimal to date. Accordingly, cargo and travelers arriving from Japan will contain little to no radiological contamination – well below harmful levels, if any.

Since 9/11, CBP has employed radiation detection technology at Ports of Entry that can determine the presence of radioactive materials or contamination. All frontline Office of Field Operations personnel are equipped with Personal Radiation Detectors (PRD), a personal radiation device that notifies officers of when radiation is present. These devices will provide effective notice of any health risk.

Out of an abundance of caution, CBP has issued field guidance reiterating its radiation detection operational protocols and directing field personnel to monitor air traffic from Japan. We have not changed passenger screening protocols for radiation detection, but we have given guidance to our port directors to meet and screen cargo and baggage plane-side as it is being off-loaded. These procedures should not be interpreted to suggest that DHS or CBP believe there to be a high-risk on cargo and baggage from Japan. Instead, they represent precautionary measures to avoid the potential for even safe, low-levels of radiation on baggage or cargo from entering the terminals and thereby potentially impacting carrier and CBP operations.

Frontline personnel who receive radiation detection readings when processing conveyances, travelers and effects, or cargo arriving from Japan, follow longstanding standard resolution protocols. When officers receive a standard radiation detection alert, our protocols call for the person, baggage or cargo to be referred for secondary screening. CBP radiation detection Standard Operating Procedures (SOP) employ a layered approach that requires that all radiation alerts are adjudicated. To identify the source of an alarm, CBP Officers use sophisticated technology to identify the level and type of radiation present.

During this secondary processing, CBP officers work with technical experts who determine that the radiation source is legitimate and at levels that do not pose a health hazard. If we determine that radiation levels are unsafe in any way, CBP will notify the affected carrier and airport authorities and coordinate on appropriate responses.

It should be noted that since the event in Japan began, no person, baggage, cargo or aircraft entering the United States has received a positive alert for radiation deemed by CBP to be at harmful levels. In fact, the radiation levels measured in the cargo shipments that have alarmed to date are lower than one would receive watching TV for several hours, and represent only a fraction of the radiation levels that one would

be exposed to when receiving a chest X-ray or other radiological medical treatment.

In the unlikely event that a traveler exhibits signs of radiation illness, pursuant to existing protocols, CBP would refer the individuals to health authorities to provide appropriate treatment. Again, to date, no travelers with signs of radiation sickness have been identified.

CBP continues to evaluate the potential risks posed by radiation contamination on inbound travelers and cargo and will adjust its detection and response protocols, in coordination with its interagency partners, as developments warrant. Additionally, we will continue to communicate our operational actions and responses to our partners in the aviation industry and we look forward to continuing to work with you to ensure the safe and expeditious movement of air travelers and cargo from Japan.

Should carriers have any concerns with CBP procedures, they are encouraged to contact the local CBP Port Director to resolve the issue or contact Office of Field Operations Headquarters at 202-344-1850.

From: LIA05 Hoc
Sent: Tuesday, March 22, 2011 8:31 PM
To: (b)(6)
Cc: LIA01 Hoc; LIA08 Hoc
Subject: email receipt

Ms. Sterling,

I am inquiring to see if you received my previous email. Thank you for your attention to this matter.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Tuesday, March 22, 2011 7:32 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: NRC SITREP
Attachments: NRC Status Update 3.22.11--0600 EDT

As directed.

From: LIA05 Hoc
Sent: Monday, March 21, 2011 8:14 PM
To: harry.nashjr@dhs.gov
Subject: Number to call for escort

Importance: High

Mr. Nash,

Call either Joseph Anderson at (301) 415-4114 or Kevin Williams at (301) 415-3264 when you get to the NRC Building Lobby. They will arrange for an escort.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Monday, March 21, 2011 5:52 PM
To: Christensen, Harold
Subject: New Public Meetings Scheduled

Mr. Christensen,

Are there any new local public meetings scheduled as a result of the public meeting that was conducted this morning? Thank you for your attention to this matter.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Monday, March 21, 2011 4:01 PM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: NRC Operations Center

FYI,

I inquired about the continuation of operation and was informed that the NRC Operations Center will be in operation as long as the NRC has a team located in Japan.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Monday, March 21, 2011 2:59 PM
To: Coons, Albert
Subject: RE: NRC Operations Center FEMA Liaison Schedule

It is being sent again.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Coons, Albert [mailto:albert.coons@dhs.gov]
Sent: Monday, March 21, 2011 2:56 PM
To: LIA05 Hoc
Subject: RE: NRC Operations Center FEMA Liaison Schedule

There is nothing attached

Albert Coons
Lead Program Specialist
HQ/NPD-THD-REPP
FEMA
202-212-2318
(b)(6) (cell)
703-305-0837 (fax)
E-mail: albert.coons@dhs.gov

From: prvs=054bd8b01=LIA05.Hoc@nrc.gov [mailto:prvs=054bd8b01=LIA05.Hoc@nrc.gov] **On Behalf Of** LIA05 Hoc
Sent: Monday, March 21, 2011 2:55 PM
To: Quinn, Vanessa
Cc: Sheffield, Bonnie; harry.nash@dhs.gov; Coons, Albert
Subject: NRC Operations Center FEMA Liaison Schedule
Importance: High

Ms. Quinn,

Please find the attached with notes regarding the need for coverage because of the Three Mile Island Exercise and the Instructor Methodology Course.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Monday, March 21, 2011 12:13 PM
To: Steven.P.Burgess@fema.gov

Marc Madden, he is out of the office and he refer me to you. Can you be of any help with the following?

The NRC Operation Center is getting requiring about private companies donations to the Japan event. Do you have any information on this? Is there a website, or agency or phone number we can direct them?

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Monday, March 21, 2011 12:09 PM
To: Marc.madden@dhs.gov

The NRC Operation Center is getting requiring about private companies donations to the Japan event. Do you have any information on this? Is there a website, or agency or phone number we can direct them?

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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To:

FEMA Liaison Contact List

Do we have a contact number for our representative in the NRCC

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Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Monday, March 21, 2011 6:40 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: NRC status update.
Attachments: NRC Status Update 3.21.11--0600.pdf

NRC status update.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 8:22 PM
To: Ian.Adams@Hq.Doe.Gov
Subject: AMS Results

Mr. Adams,

Would it be possible to get a copy of the AMS results from today? Thank you for your attention to this matter.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 6:49 PM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Attachments: Talking Points 11pdf.pdf

Please find the NRC OPA Talking Points for 20 March 2011.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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OPA

TALKING POINTS

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 2:49 PM
To: Dan Feighert
Cc: Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Emailing: Statement From Governor Andrew M. Cuomo

Published on *Governor Andrew M. Cuomo* (<http://www.governor.ny.gov>)
[Home](#) > Printer-friendly

Statement From Governor Andrew M. Cuomo

[1]

Albany, NY (March 19, 2011)

"In light of the catastrophe in Japan, New Yorkers must know the facts regarding Indian Point and its latest risk assessment.

"After watching the events in Japan and having previously opposed the Indian Point plant, this past Tuesday, I requested the White House schedule a meeting between my staff and senior members of the Nuclear Regulatory Commission. That meeting has now been scheduled for Tuesday, March 22 with, among others, Lieutenant Governor Robert Duffy and Director of State Operations Howard Glaser.

"The purpose of the meeting will be to discuss the risks facing Indian Point in the event of an earthquake, how prepared Indian Point is to handle an earthquake, as well as what risk assessments have been completed regarding Indian Point.

"We are looking forward to a productive dialogue with the NRC."

Source URL: <http://www.governor.ny.gov/press/031911statement>

Links:

[1] <http://www.governor.ny.gov/>

Subject: FW:

Importance: High

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 1:55 PM
To: Thomson, Rebecca
Subject:

Ms. Thomson,
Do you have a number for the Lt. Governor's office for New York or someone who may have it? Thank you for your help. NRC is trying to find it.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 2:05 PM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn
Cc: Thomson, Rebecca

NRC is requesting information on the contact information for the State of New York, the Lt Governors' office numbers. A message was left and an email sent to Region II for the information.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 1:55 PM
To: Thomson, Rebecca

Ms. Thomson,
Do you have a number for the Lt. Governor's office for New York or someone who may have it? Thank you for your help. NRC is trying to find it,

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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To: Feighert, Dan

Can you get in touch with the Region for New York. NRC wants to talk to the LT Govn

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 10:05 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn

Importance: High

AP has just requested a FOIA for all Federal agencies involved in the events in Japan.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Sunday, March 20, 2011 9:18 AM
To: Dan Feighert; Andrew Seward; Harry Sherwood; John Simpson; Michelle Ralston;
Steve Horwitz; Tim Greten; Vanessa E. Quinn

Test

Added Mr. Simpson and Mr. Feighert to distribution list. Please verify the message has been received.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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Full Name: John Simpson
Last Name: Simpson
First Name: John

E-mail: john.simpson@dhs.gov
E-mail Display As: John Simpson

Full Name: Dan Feighert
Last Name: Feighert
First Name: Dan

E-mail: Dan.Feighert@dhs.gov
E-mail Display As: Dan Feighert

From: LIA05 Hoc
Sent: Saturday, March 19, 2011 9:21 PM
To: Christensen, Harold
Subject: Public Meetings

Importance: High

If there are any requests for public meetings requested and or scheduled by Congressional Members, could you please forward that information to us at LIA05. FEMA THD needs to know to give a "heads up" to our Regional Staff.

Thank you for your attention to this matter.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Saturday, March 19, 2011 9:02 PM
To: Quinn, Vanessa
Cc: Sheffield, Bonnie
Subject: Staffing Next Week

Ms. Quinn,

They are putting together watch rotations? If asked to either myself or Ms. Sheffield, how long are we planning to staff this position? Any discussion from yesterday?

Thank you for your attention to this matter.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Saturday, March 19, 2011 6:43 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: 1900 Conference Call on Supplying 12 Pumps

Attended conference call on the purchase of 12 pumps. The attendees were USAID, NRC HQ, NRC Tokyo (Embassy) and NRC Japan (Site Team).

(b)(5)

The decision was to continue this effort.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
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NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Saturday, March 19, 2011 4:14 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: BWR Overflights

NRC is attempting to resource over flights for thermal imaging on BWRs (operating and in refuel outages) as to compare with the thermal imaging of the Fukushima Daiichi site.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Saturday, March 19, 2011 4:00 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: USAID/NRC Denies request for Bechtel Assistance

FYI,

(b)(5)

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Saturday, March 19, 2011 1:03 PM
To: Steve Horwitz; john.simpson@dhs.gov
Cc: Andrew Seward; Harry Sherwood; Michelle Ralston; Tim Greten; Vanessa E. Quinn
Subject: FEMA status

Thank you all, for sending me all the wonderful information. I have set up a file, to keep the information in, for the other shift and staff members.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Saturday, March 19, 2011 12:14 PM
To: steve.horwitz@dhs.gov; john.simpson@dhs.gov
Attachments: FEMA REP Program response to Japan Emergency.docx

Thank you for the information. I do have a few questions which are attached. Also the SITREP has several items on the last page that I am unable to open, can you send them separately ?

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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FEMA REP Program response to Japan Emergency
March 19, 2011

- Media monitoring, situation awareness
 - Are we giving out information that is coordinated with NRC or other Federal agencies
- Participation in teleconference with our federal partners
 - Are we getting request for information, staff, and supplies (KI or monitors)?
- Dialogue with Regional offices and RAC chairs in response to questions from our state and local partners
 - What kind of questions are we getting? Are the questions being coordinated NRC or other Federal agencies
- Review and refinement of technologies to collect, analyze and disseminate emergency information
 - What kind of information is being given out and is it coordinated it with other Federal agencies?
- Preparation of daily SITREP
 - Who is getting this and where is it located
- Staff assigned to support other Federal agencies, USAID and NRC Operation Center

From: LIA05 Hoc
Sent: Saturday, March 19, 2011 8:31 AM
To: Purvis, James; Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn

Good Morning,

I would like to thank the staff that worked on the EPZ paper, it was well received and was must appreciated. OPA mentioned that it was very well written and very informative. Thank you for putting it together.

Bonnie Sheffield Dayshift 0700-1500
Ken Wierman Nightshift 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Greten, Timothy <Timothy.Greten@dhs.gov>
Sent: Friday, March 18, 2011 8:05 PM
To: LIA05 Hoc
Subject: Out of Office AutoReply:

I will be out of office until 0900 Monday, March 21. Please cc urgent issues to Vanessa.quinn@dhs.gov and harry.sherwood@dhs.gov.

Thank you!
Tim

From: Quinn, Vanessa <Vanessa.Quinn@dhs.gov>
Sent: Friday, March 18, 2011 4:53 PM
To: LIA05 Hoc
Subject: RE: PAARNG Letter

Ken: Do you want me to fax it to you.

From: prvs=0514256dd=LIA05.Hoc@nrc.gov [mailto:prvs=0514256dd=LIA05.Hoc@nrc.gov] **On Behalf Of** LIA05 Hoc
Sent: Friday, March 18, 2011 3:43 PM
To: Vanessa E. Quinn
Cc: Sherwood, Harry; Coons, Albert
Subject: PAARNG Letter
Importance: High

Ms. Quinn,

Please find the attached. The fax number is (717) 749-7415.

Bonnie Sheffield 0700-1500
Ken Wierman 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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(b)(6)

From: LIA05 Hoc
Sent: Friday, March 18, 2011 4:05 PM
To: terry.hobbs@dhs.gov
Subject: FEMA Liaison at the NRC Operations Center
Attachments: FEMA Liaison Duties and Responsibilities.docx

Ms. Hobbs,

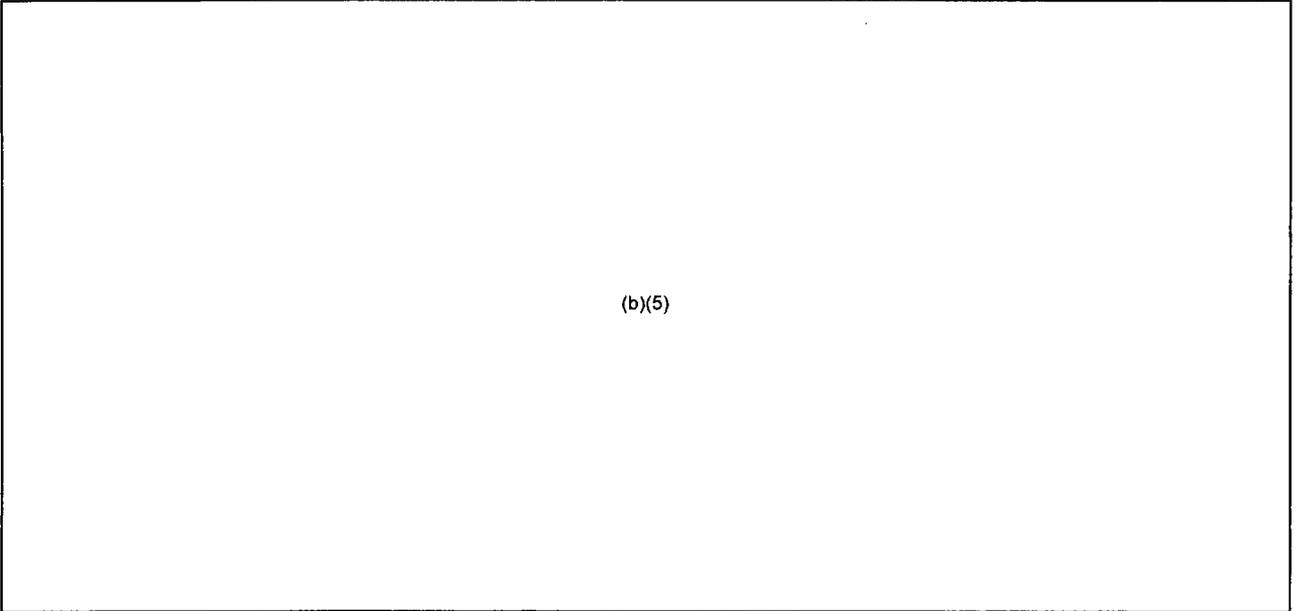
I hope that this is what you require.

Bonnie Sheffield 0700-1500
Ken Wierman 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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**FEMA Liaison
NRC Operations Center
Duties and Responsibilities**



RAC Contact information

Region	RAC Chair	Email	Phone
1	Steve Colman	Steve.Colman@dhs.gov	417-832-4731-0

(b)(5),(b)(6)

DRAFT

(b)(5),(b)(6)

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(b)(5),(b)(6)

DRAFT

(b)(5)

DRAFT

From: LIA05 Hoc
Sent: Friday, March 18, 2011 3:51 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: White House Conference Call with West Coast State and Pacific Territory Governors
Importance: High

FYI,

This is to let you know that there is another conference call like the one that was conducted last night. Keep this close but they are working on one for Monday, that will include all of the Governors. If I get a confirmation, I will let you know.

Bonnie Sheffield 0700-1500
Ken Wierman 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Friday, March 18, 2011 3:39 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: 18 March 2011 1500 NRC Talking Points
Attachments: Talking Points 10.pdf

Bonnie Sheffield 0700-1500
Ken Wierman 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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OPA

TALKING POINTS

JAPAN NUCLEAR SITUATION

As of 3/18/2011 3:15p.m. EDT

**Update: Addition of bullets on Information Notice and Detectable Levels of Radiation at
Diablo Canyon**

- Based on calculations performed by NRC experts, we now believe that it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate. Our recommendation is based on NRC guidelines for public safety that would be used in the United States under similar circumstances.
- The 10-mile EPZ reflects the area where projected doses from design basis accidents at nuclear power plants would not exceed the EPA's protective action guidelines, and we are confident that it would be adequate even for severe accidents. However, the 10-mile zone was always considered a base for emergency response that could be expanded if the situation warranted. The situation in Japan, with four reactors experiencing exceptional difficulties simultaneously, creates the need to expand the EPZ beyond the normal 10-mile radius.

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

- Given the results of the monitoring and distance between Japan and Hawaii, Alaska, U.S. Pacific Territories and the U.S. West Coast, the NRC expects the U.S. to avoid any harmful levels of radioactivity. The NRC is aware of various internet postings depicting modeled radiation plumes for the ongoing events at the nuclear power plants in Japan. All of the models the NRC has seen are based on generic assumptions regarding the potential radiation release from the plants and as such are unable to predict actual radiation levels away from the site. The NRC is working closely with our federal partners to monitor radiation releases from the Japanese nuclear power plants.
- [Only if specifically asked] The NRC is aware that Diablo Canyon nuclear power plant in California detected a very low level of radiation. The site believes that the source of the radiation is likely the Fukushima Daiichi nuclear power plant in Japan. The amounts detected are barely detectable on the instruments and pose no danger to public health and safety. The NRC continues to believe, based on all available information, that no harmful levels of radiation will reach U.S. territory. This information has been shared with the U.S. Department of Energy and the U.S. Environmental Protection Agency. Additional questions regarding monitoring of the radioactive release should be referred to DOE at 202 586 4940.
- [Planned to be issued by COB; confirm before use] The NRC today issued an Information Notice to all of its operating nuclear power plants describing the effects of the March 11 earthquake and tsunami on Japanese nuclear power plants. The purpose of the Information Notice is to inform the plants of the most recent information available to the NRC. The NRC expects U.S. nuclear power plants will review the entire notice to determine how it applies to their facilities and consider actions, as appropriate.
- The NRC continues to work with other U.S. agencies to monitor radioactive releases from Japan and to predict their path.

- The Department of Energy has been designated the lead agency for communicating information to the States regarding monitoring of radiation heading toward or over the United States. The DOE's Lawrence Livermore National Laboratory (National Atmospheric Release Assessment Center) is monitoring weather patterns over the Pacific Ocean. The Environmental Protection Agency maintains air monitoring stations throughout the country and has reinforced its monitoring effort. DOE will provide aerial monitoring. Questions about this effort should be directed to DOE at 202 586 4940.
- The NRC is closely monitoring information about the spent fuel pools as well as radiation levels at the Japanese nuclear power plants. Given the totality of the situation, the NRC's recommendation for U.S. residents within 50 miles of the Fukushima reactors to evacuate remains unchanged. That recommendation was based on actual radiation levels in the nuclear complex.
- In accordance with established protocols, U.S. Customs and Border Protection (CBP) employs several types of radiation detection equipment in its operations at both air and sea ports, and uses this equipment, along with specific operational protocols, to resolve any security or safety risks that are identified with inbound travelers and cargo. Out of an abundance of caution, CBP has issued field guidance reiterating its operational protocols and directing field personnel to specifically monitor maritime and air traffic from Japan. CBP will continue to evaluate the potential risks posed by radiation contamination on inbound travelers and cargo and will adjust its detection and response protocols, in coordination with its interagency partners, as developments warrant.
- The Japanese government has formally asked for U.S. assistance in responding to nuclear power plant cooling issues triggered by an earthquake and tsunami on March 11. The NRC has eleven staff on the ground in Japan as part of the USAID team.

- The NRC is coordinating its actions with other federal agencies as part of the U.S. government response. The NRC's headquarters Operations Center was activated at the beginning of the event and has been monitoring the situation on a 24-hour basis ever since.
- The NRC is always looking to learn information that can be applied to U.S. reactors and we will analyze the information that comes from this incident. President Obama has directed the agency to conduct a comprehensive review of the safety of U.S. nuclear plants; the agency will do so.
- U.S. nuclear power plants are built to withstand environmental hazards, including earthquakes. Even those plants that are located outside of areas with extensive seismic activity are designed for safety in the event of such a natural disaster.
- The NRC requires that safety-significant structures, systems, and components be designed to take into account the most severe natural phenomena historically reported for the site and surrounding area. The NRC then adds a margin for error to account for the limitations on historical data. In other words, U.S. nuclear power plants are designed to be safe based on historical data to predict the area's maximum credible earthquake.
- In response to MSNBC report ranking US NPPs according to vulnerability to earthquakes: The NRC does not rank nuclear power plants according to their vulnerability to earthquakes. This "ranking" was developed by an MSNBC reporter using partial information and an even more partial understanding of how we evaluate plants for seismic risk. Each plant is evaluated individually according to the geology of its site, not by a "one-size-fits-all" model - therefore such rankings or comparisons are highly misleading.

From: LIA05 Hoc
Sent: Friday, March 18, 2011 3:34 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Transcript from Chairman Jaczko's Testimony from 03172011
Attachments: 0317nrc-transcript-jaczko.pdf

FYI,

Bonnie Sheffield 0700-1500
Ken Wierman 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Friday, March 18, 2011 3:31 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: NRC Status Update Electronically 0600 18 March 2011
Attachments: NRC Status Update 3-18.11--0600am.pdf

Please find the attached, another is being developed for issuance at approximately 1700.

Bonnie Sheffield 0700-1500
Ken Wierman 1500-2300
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Friday, March 18, 2011 2:47 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: FW: Letter to PAARNG
Attachments: PAARNG Letter for (b)(6) 03172011.doc
Importance: High

Could someone in REP Management PLEASE review and sign this letter? Once it is signed could you please fax it to (717) 749-7415. (b)(6)

Thank you for your attention to this matter.

Ken Wierman
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 17, 2011 4:33 PM
To: 'Quinn, Vanessa'
Subject: Letter to PAARNG

Ms. Quinn,

Please find the attached letter to the PAARNG that will have to be reviewed, signed. Printed on letterhead and faxed to 1SG Shane Sloat at (717) 749-7415. Thank you for your attention to this matter.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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(b)(6)

Full Name: Bill Webb
Last Name: Webb
First Name: Bill
Company: FEMA

E-mail: bill.webb@dhs.gov
E-mail Display As: Bill Webb (bill.webb@dhs.gov)

From: LIA05 Hoc
Sent: Friday, March 18, 2011 12:39 PM
To: Williams, Kevin

I heard through the grapevine that you need a contact list for FEMA. What do you need Regions, HQ or both? I have all that here.

Bonnie Sheffield

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Friday, March 18, 2011 10:02 AM
To: Purvis, James
Cc: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn

Do you have the EPZ paper done? We are getting request for it.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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Ms. Fontenot,

I was informed that you had the responsibility to take notes for the FRPCC. Can you please send them to me when they are completed? NRC Ops center are requesting them. Thank you

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Friday, March 18, 2011 8:29 AM
To: Harry Sherwood; Vanessa E. Quinn; Tim Greten; Andrew Seward
Subject: RE:

Per the phone call:

To clarify the question, who is responsible for communicating the states , NRC Regions or FEMA Regions or both? It was indicated that Mr. Kish would be the lead on communicating with the states. Yet, on the conference call last night DOE has the lead on the states. Can you clarify this and how we are going to communicate the answers to the questions we are receiving?

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NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Friday, March 18, 2011 7:55 AM
To: 'Andrew Seward'; 'Harry Sherwood'; 'Tim Greten'; 'Vanessa E. Quinn'
Subject:

Mr. Sherwood,

Can you call me to discuss an communication issue with the States?

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From: Milligan, Patricia
Sent: Thursday, March 17, 2011 9:20 PM
To: james.purvis@dhs.gov; LIA05 Hoc
Cc: Greten, Timothy; Howe, Michael
Subject: KI info for FEMA rev 2.xls- updated
Attachments: KI info for FEMA rev 2.xls

1/14/2013

STATE	130 mg tablets	65 mg tablets	TOTAL PILLS
	4,766,454	14,577,129	17,825,551.00
Alabama		270,000	270,000
Arizona		14,398	14,398
Arkansas			0
California		1358032	
Connecticut	370,000		370,000
Delaware	100,000	60,000	
Delaware	74,074	25,000	99,074
Florida		2,115,999	2,115,999
Georgia			0
Illinois			0
Iowa			0
Kansas			0
Louisiana			0
Maryland	192,000	36,956	228,956
Massachusetts	550,220		550,220
Michigan		1,360,000	1,360,000
Minnesota		1,234,680	1,234,680
Mississippi	20,006	5,000	25,006
Missouri			0
Nebraska			0
New Hampshire	330,000	106,000	436,000
New Jersey	682,000	189,000	871,000
New York	1,000,000	140,000	1,140,000
North Carolina	566,000	100,000	666,000
Ohio		1,420,820	1,420,820
Pennsylvania		4,300,000	4,300,000
Prarie Island Tribe			0
South Carolina		1,320,000	1,320,000
Tennessee		446,480	446,480
Texas			0

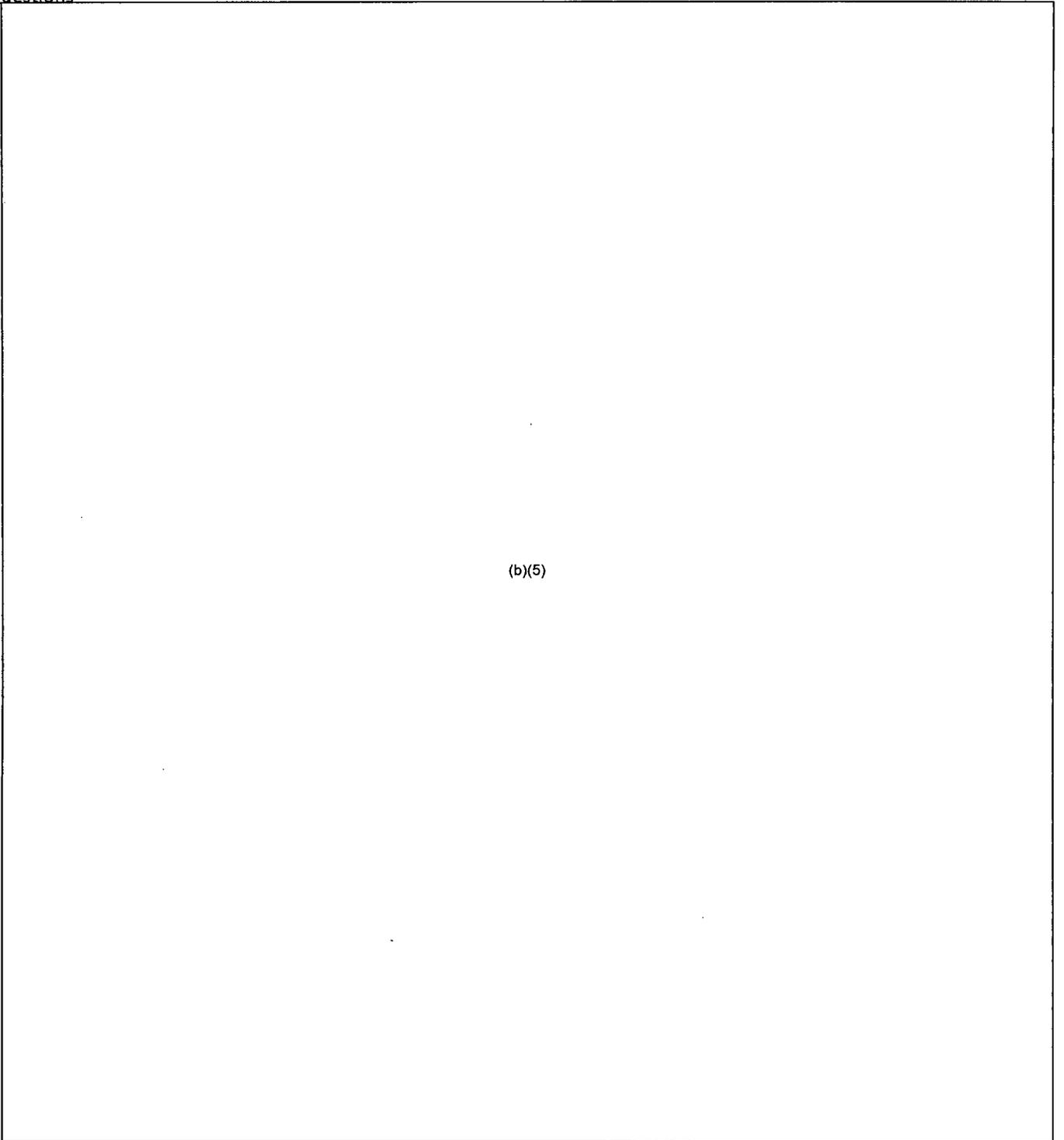
CK 971 of 3114

From: LIA05 Hoc
Sent: Thursday, March 17, 2011 9:14 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Teleconference Summary
Importance: High

Please keep this close.

(b)(5)

Questions



(b)(5)

Meeting concluded at 8:00 pm EDT.

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(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 17, 2011 8:58 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Cc: Albert Coons; Bill Webb; Conrad Burnside; Craig Fiore; Dan Feighert; Darrell Hammons; Lisa Hammond; Rebecca Thomson; Ronald McCabe; Steve Colman; William King
Subject: Access to EPA's RADNET

FYI,

This website provides real-time radiological monitoring information for monitoring across the US. EPA is in the process of installing monitors in CNMI, Guam and the Aleution Islands.

How to Access RadNet Data

RadNet near-real-time data can be viewed on EPA's Central Data Exchange (CDX) website at <http://www.epa.gov/cdx>. Radiation emergency response experts can request access to a restricted RadNet data site, where all RadNet data is housed before being released for public access. As we develop a unified federal web and transparency system, additional data summaries and characterizations will be developed for wider communication and access. The classification of the data requires the user to create a username and password before accessing the site.

Instructions for accessing the RadNet CDX website:

Go to www.epa.gov/cdx

On the left side select "Login"

On the new left side select "registration"

Select "continue"

Select "I accept"

Enter your information including a password

When given the list of access programs, select Radiation Network (RadNet)

There is one more required field that pops up and enter N/A into that

After an option to select more programs, you will be taken to the RadNet page.

RadNet filter data gets posted quarterly to Envirofacts for public access:

<http://www.epa.gov/enviro/facts/topicsearch.html#radiation>.

EPA is currently examining ways to enhance the accessibility and characterization of the data.

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From: Weber, Michael
Sent: Thursday, March 17, 2011 7:53 PM
To: LIA05 Hoc; OST02 HOC
Subject: FYI - Seismic regulations summarization

From: Kammerer, Annie
Sent: Thursday, March 17, 2011 7:52 PM
To: Sheron, Brian; Case, Michael; Richards, Stuart; Ake, Jon; Murphy, Andrew
Cc: Weber, Michael
Subject: RE: Seismic regulations summarization

I have sent the Q&As.

Unfortunately, there's not much on our regs in the Q&As yet. However, Jon and I had already discussed the need for a fact sheet on seismic regulation in the "additional information" section of the document because we are starting to get some questions.

Jon will lead the work to put together the information for Steve tonight. As you note, it's important to run it by NRR (and NRO). So, we'll send it to Meena, Kamal, Niles and Goutam tomorrow so that they can all review. If anyone else comes to mind, please let us know. I hope that the deadline of "tomorrow" is COB, instead of first thing.

Also, just FYI, we have been asked by NRR/DORL and OPA to pull a subset of Q&As together for a public release. This is to support several public meetings in the regions next week. We have to get it to OPA by COB tomorrow so that they can bless it. Those poor guys in the regions are getting pummeled.

Cheers,
Annie

From: Sheron, Brian
Sent: Thursday, March 17, 2011 6:51 PM
To: Case, Michael; Richards, Stuart; Kammerer, Annie; Ake, Jon; Murphy, Andrew
Cc: Weber, Michael
Subject: Seismic

- 1.) Secretary Chu at DOE is scheduled to be interviewed on 5 talk shows Sunday morning. He has requested a 1 page summary of our seismic regulatory requirements. I gave him the 3/16 version of your seismic Q&A package and suggested his staff could screen it and perhaps pull out pertinent info on our regs, however, I haven't read it yet and don't know to what extent it does or doesn't discuss our regulatory requirements. Can you quickly pull together a 1-2 page summary of our seismic regulatory requirements, run them by NRR if possible, and then e-mail them to Pete Lyons at DOE (peter.lyons@nuclear.energy.gov). He needs them tomorrow. Please CC me. Remember, he is just looking for a high level summary sufficient to answer likely questions he might get during the interviews.
- 2.) Can you please e-mail the latest version of your seismic Q&As to Mike Weber.

Thanks.

From: LIA05 Hoc
Sent: Thursday, March 17, 2011 6:39 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Try Again
Attachments: Talking Points 8.pdf; NRC Status Update 3-16.11--1400pm.pdf

Some of these are in Adobe.

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(301) 816-5187

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From: Ralston, Michelle <Michelle.Ralston@dhs.gov>
Sent: Thursday, March 17, 2011 6:39 PM
To: LIA05 Hoc; Seward, Andrew; Sherwood, Harry; Horwitz, Steve; Greten, Timothy; Quinn, Vanessa
Subject: Re: Bill Webb

Try Johanna.

Respectfully,

Michelle Ralston

(202) 280-9304

From: prvs=0505f6d80=LIA05.Hoc@nrc.gov <prvs=0505f6d80=LIA05.Hoc@nrc.gov>
To: Andrew Seward <Andrew.Seward1@dhs.gov>; Harry Sherwood <harry.sherwood@dhs.gov>; Michelle Ralston <Michelle.Ralston@dhs.gov>; Steve Horwitz <steve.horwitz@dhs.gov>; Tim Greten <Timothy.Greten@dhs.gov>; Vanessa E. Quinn <Vanessa.Quinn@dhs.gov>
Sent: Thu Mar 17 18:23:40 2011
Subject: Bill Webb

All of my emails to Mr. Webb have been returned, his mailbox is full.

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(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 17, 2011 5:59 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Cc: Albert Coons; Bill Webb; Conrad Burnside; Craig Fiore; Dan Feighert; Darrell Hammonds; Lisa Hammond; Rebecca Thomson; Ronald McCabe; Steve Colman; William King
Subject: DOE Call with Governors
Importance: High

FYI,

I did find out just now that DOE Public Affairs working with the National Security Staff (NSS) (White House) is attempting to put together a Conference Call with the Governors (West Coast and Pacific Territories). If this transpires, I will send out the information so that we can participate in the call.

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From: Fiore, Craig <craig.fiore@dhs.gov>
Sent: Thursday, March 17, 2011 5:45 PM
To: LIA05 Hoc
Subject: Out of Office AutoReply: 1900 DOE Conference Call with Governors

I am currently out of the office on official business and not scheduled to return until Monday, March 21, 2011. However, I will still be reasonably accessible because all email will be forwarded to my BlackBerry. Also, if you need to discuss something with me immediately, please feel free to call me on my BBerry at (b)(6). Thank you and have a nice day.

-Craig

From: Coons, Albert <albert.coons@dhs.gov>
Sent: Thursday, March 17, 2011 5:45 PM
To: LIA05 Hoc
Subject: Out of Office AutoReply: 1900 DOE Conference Call with Governors

I am out of the office. I will return on Mar.21. I am reasonably available by blackberry. Cell Phone (b)(6)

From: LIA05 Hoc
Sent: Thursday, March 17, 2011 5:38 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Cc: Albert Coons; Bill Webb; Conrad Burnside; Craig Fiore; Dan Feighert; Darrell Hammonds; Lisa Hammond; Rebecca Thomson; Ronald McCabe; Steve Colman; William King
Subject: 1900 DOE Conference Call with Governors
Importance: High

FYI,

Just got off the phone with the DOE Operations Center and they informed me that they have been monitoring email and phone communications traffic about a DOE conference Call with the Governors. They stated that they have no knowledge of requesting this call but are attempting to squelch rumors regarding this phone call. If you wish to verify this information the number is (202) 586-8100 and the individual is Dean Kratzenberg, Operations Program Manager of the Nuclear Incident Team.

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(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 17, 2011 5:16 PM
To: narac@lnl.gov
Subject: 1900 Conference Call with State Governors

Importance: High

I am working as the FEMA Liaison at the Nuclear Regulatory Commission (NRC) Operations Center and have been informed about a 1900 Conference Call between DOE (NARAC) and the State Governors. If possible can you confirm this and if possible forward the information so that both the NRC and FEMA State Liaisons can monitor the call. Thank you for your attention to this matter.

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NRC Operations Center
(301) 816-5187

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From: Ralston, Michelle <Michelle.Ralston@dhs.gov>
Sent: Thursday, March 17, 2011 4:34 PM
To: LIA05 Hoc
Subject: Out of Office AutoReply: KI Distribution to Specific States

Greetings,

I will be away from my desk Friday, March 18, 2011. I will be monitoring emails/calls as time permits.

Pls contact Steve Horwitz, John Simpson or Harry Sherwood for Outreach assistance.

If this is an urgent matter, please ring (b)(6)

Thank you,

Michelle Ralston

From: LIA05 Hoc
Sent: Thursday, March 17, 2011 4:13 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Lead Agency for Communication with the States
Importance: High

There is conversation regarding who is the lead agency for communication with the States. Has it been decided that DOE, FEMA or the NRC? There is a 1900 Conference Call and as soon as I get the information, I will pass it on. Does anyone there know what the final decision is and who made the decision?

Thank you for your attention to this matter.

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NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Thursday, March 17, 2011 3:13 PM
To: james.purvis@dhs.gov
Subject: FW: Latest NRC Press Release 16 March 2011
Attachments: 11-050.pdf

Mr. Purvis,

This and the following RASCAL Calculations are why the NRC Recommended a 50 mile evacuation. I sent this yesterday at 1416.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 2:16 PM
To: 'Andrew Seward'; 'Harry Sherwood'; 'Michelle Ralston'; 'Steve Horwitz'; 'Tim Greten'; 'Vanessa E. Quinn'
Subject: Latest NRC Press Release 16 March 2011

Please find the attached.

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NRC Operations Center
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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. 11-050

March 16, 2011

NRC PROVIDES PROTECTIVE ACTION RECOMMENDATIONS BASED ON U.S. GUIDELINES

Under the guidelines for public safety that would be used in the United States under similar circumstances, the NRC believes it is appropriate for U.S. residents within 50 miles of the Fukushima reactors to evacuate.

Among other things, in the United States protective actions recommendations are implemented when projected doses could exceed 1 rem to the body or 5 rem to the thyroid. A rem is a measure of radiation dose. The average American is exposed to approximately 620 millirems, or 0.62 rem, of radiation each year from natural and manmade sources.

In making protective action recommendations, the NRC takes into account a variety of factors that include weather, wind direction and speed, and the status of the problem at the reactors.

Attached are the results of two sets of computer calculations used to support the NRC recommendations.

In response to nuclear emergencies, the NRC works with other U.S. agencies to monitor radioactive releases and predict their path. All the available information continues to indicate Hawaii, Alaska, the U.S. Territories and the U.S. West Coast are not expected to experience any harmful levels of radioactivity.

###

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.

From: LIA05 Hoc
Sent: Thursday, March 17, 2011 3:01 PM
To: tamara.owens@dhs.gov
Subject: Memo Template

Importance: High

Ms. Owens,

Could you please send me an electronic copy of a document with FEMA Letter head?

Ken Wierman
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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To: Ralston, Michelle; LIA07HOC@nrc.gov
Subject: RE: FRPCC Call

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]
Sent: Thursday, March 17, 2011 2:17 PM
To: LIA05 Hoc; LIA07HOC@nrc.gov
Subject: FRPCC Call

Hi,

Is anyone there available to attend the FRPCC call currently going (Call In: 1-800-320-4330 PIN: (b)(6))

Time: 2:00 to 4:00pm

Respectfully,

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

From: LIA05 Hoc
Sent: Thursday, March 17, 2011 8:51 AM
To: richard.collins@dhs.gov; Tim Greten; Harry Sherwood; Andrew Seward; Vanessa E. Quinn; Michelle Ralston; Steve Horwitz
Cc: Kenneth.wierman@dhs.gov

It has been requested to have a list of FEMA Contacts for the FRPCC agencies. Can you provide me the list of the FRPCC contact list for use in the NRC Operation Center?

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 4:43 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horwitz; Tim Greten; Vanessa E. Quinn
Subject: Passive Monitoring of Aircraft, Passengers and Luggage

FYI,

Just left an HHS EOC Conference Call and it was explained that at the 19 International Airports and there is more focus on aircraft coming from Japan that Customs and Border Patrol Officers monitor aircraft, passengers (passively) and luggage. They have detected low levels of contamination on an aircraft at DFW Airport today as well as contamination on a couple items in shrink wrap. If you have questions, contact Ms. Helen Sterling (b)(6) or (b)(6). Be mindful that their procedures and protocols are law enforcement sensitive.

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From: Sheffield, Bonnie <Bonnie.Sheffield@dhs.gov>
Sent: Wednesday, March 16, 2011 3:26 PM
To: LIA05 Hoc
Subject: RE: Contact List for RAC Chairs

Thank you.

Very Respectfully

Bonnie Sheffield

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

From: prvs=04990403f=LIA05.Hoc@nrc.gov [mailto:prvs=04990403f=LIA05.Hoc@nrc.gov] **On Behalf Of** LIA05 Hoc
Sent: Wednesday, March 16, 2011 3:14 PM
To: Sheffield, Bonnie
Subject: Contact List for RAC Chairs

Ms. Sheffield,

There is now a Contact List for RAC Chairs.

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NRC Operations Center
(301) 816-5187

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Contact Group Name:

FEMA RAC Chairs

Members:

Albert Coons	albert.coons@dhs.gov
Bill Webb	bill.webb@dhs.gov
Conrad Burnside	conrad.burnside@dhs.gov
Craig Fiore	craig.fiore@dhs.gov
Dan Feighert	dan.feighert@dhs.gov
Darrell Hammons	darrell.hammons@dhs.gov
Harry Sherwood	harry.sherwood@dhs.gov
Lisa Hammond	lisa.hammond@dhs.gov
Rebecca Thomson	rebecca.thomson@dhs.gov
Ronald McCabe	ron.mccabe@dhs.gov
Steve Colman	steve.colman@dhs.gov
Vanessa Quinn	vanessa.quinn@dhs.gov
William King	william.king@dhs.gov

From: McSwain, Alonzo <Alonzo.Mcswain@dhs.gov>
Sent: Wednesday, March 16, 2011 1:55 PM
To: LIA05 Hoc
Subject: RE: Bar Code Info

Excellent,

Appreciate the update.

Thank you,

Alonzo McSwain
Program Specialist, Emergency Preparedness
DHS/FEMA
BUS: 202-212-2322
CELL: (b)(6)
alonzo.mcswain@dhs.gov

=====
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From: prvs=04990403f=LIA05.Hoc@nrc.gov [mailto:prvs=04990403f=LIA05.Hoc@nrc.gov] **On Behalf Of** LIA05 Hoc
Sent: Wednesday, March 16, 2011 1:50 PM
To: alonzo.mcswain@dhs.gov
Subject: Bar Code Info

Mr. McSwain,

I will send my bar code info tomorrow however, my printer, monitor are in my office and my Iron Key is in the upper left drawer of my desk (unlocked).

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NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 1:45 PM
To: alanzo.mcswain@dhs.gov
Subject: Bar Code Numbers,

Mr. McSwain,

I will get my barcode numbers to you tomorrow. My hardkey is in the upper left drawer of my desk.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Sheffield, Bonnie <Bonnie.Sheffield@dhs.gov>
Sent: Wednesday, March 16, 2011 1:31 PM
To: LIA05 Hoc
Subject: RE: Contact Information

steve.horwitz@dhs.gov

Very Respectfully

Bonnie Sheffield

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

From: prvs=04990403f=LIA05.Hoc@nrc.gov [mailto:prvs=04990403f=LIA05.Hoc@nrc.gov] **On Behalf Of** LIA05 Hoc
Sent: Wednesday, March 16, 2011 12:17 PM
To: bonnie.sheffield@dhs.gov
Subject: FW: Contact Information

Ms. Sheffield,

Can you send me the correct email addresses for the individuals below? Thanks.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: Postmaster@mta3.dhs.gov [mailto:Postmaster@mta3.dhs.gov]
Sent: Wednesday, March 16, 2011 12:16 PM
To: LIA05 Hoc
Subject: Undeliverable: Contact Information

Delivery has failed to these recipients or distribution lists:

andrew.seward@dhs.gov

The recipient's e-mail address was not found in the recipient's e-mail system. Microsoft Exchange will not try to redeliver this message for you. Please check the e-mail address and try resending this message, or provide the following diagnostic text to your system administrator.

steve.horowitz@dhs.gov

The recipient's e-mail address was not found in the recipient's e-mail system. Microsoft Exchange will not try to redeliver this message for you. Please check the e-mail address and try resending this message, or provide the following diagnostic text to your system administrator.

tim.greten@dhs.gov

The recipient's e-mail address was not found in the recipient's e-mail system. Microsoft Exchange will not try to redeliver this message for you. Please check the e-mail address and try resending this message, or provide the following diagnostic text to your system administrator.

Diagnostic information for administrators:

Generating server: mta3.dhs.gov

andrew.seward@dhs.gov

< #5.1.1> #SMTP#

steve.horowitz@dhs.gov

< #5.1.1> #SMTP#

tim.greten@dhs.gov

< #5.1.1> #SMTP#

Original message headers:

Received: from mx6.dhs.gov (mx6.dhs.gov [152.121.180.7]) by mta3.dhs.gov with ESMTP; Wed, 16 Mar 2011 12:16:03 -0400

Received: from mx6.dhs.gov (localhost.localdomain [127.0.0.1])
by localhost (Postfix) with SMTP id 92AC22F788FA;
Wed, 16 Mar 2011 12:16:03 -0400 (EDT)

Received: from mail2.nrc.gov (mail2.nrc.gov [148.184.176.43])
by mx6.dhs.gov (Postfix) with ESMTP id B54132F78903;
Wed, 16 Mar 2011 12:16:01 -0400 (EDT)

X-IronPort-AV: E=Sophos;i="4.63,195,1299474000";
d="scan'208,217";a="36088784"

Received: from HQCLSTR01.nrc.gov ([148.184.44.79]) by OWMS01.nrc.gov
([148.184.100.43]) with mapi; Wed, 16 Mar 2011 12:16:00 -0400

From: LIA05 Hoc <LIA05.Hoc@nrc.gov>

To: Andrew Seward <andrew.seward@dhs.gov>, Harry Sherwood
<harry.sherwood@dhs.gov>, Michelle Ralston <michelle.ralston@dhs.gov>, Steve
Horowitz <steve.horowitz@dhs.gov>, Tim Greten <tim.greten@dhs.gov>, "Vanessa
E. Quinn" <vanessa.quinn@dhs.gov>

CC: "bonnie.sheffield@dhs.gov" <bonnie.sheffield@dhs.gov>

Date: Wed, 16 Mar 2011 12:15:59 -0400

Subject: Contact Information

Thread-Topic: Contact Information

Thread-Index: Acvj9XAJSeu4H1X+TPWVgESR3Pt80Q==

Message-ID: <CC56DD79EC73A545B9890C3C629E307D9486130FF9@HQCLSTR01.nrc.gov>

Accept-Language: en-US

Content-Language: en-US

X-MS-Has-Attach:

X-MS-TNEF-Correlator:

acceptlanguage: en-US

Content-Type: text/plain

MIME-Version: 1.0

X-DHS-Spam: Gauge=X, Probability=11%, Report='

LINES_OF_YELLING_3 0.671, HTML_90_100 0.1, BODYTEXTH_SIZE_10000_LESS 0, BODYTEXTP_SIZE_3000_LESS 0, BODY_SIZE_3000_3999 0, BODY_SIZE_5000_LESS 0, BODY_SIZE_7000_LESS 0, DATE_TZ_NA 0, __C230066_P5 0, __CT 0, __CTYPE_HAS_BOUNDARY 0, __CTYPE_MULTIPART 0, __CTYPE_MULTIPART_ALT 0, __HAS_HTML 0, __HAS_MSGID 0, __HTML_FONT_BLUE 0, __HTML_MSWORD 0, __LINES_OF_YELLING 0, __MIME_HTML 0, __MIME_VERSION 0, __SANE_MSGID 0, __STYLE_RATWARE_2 0, __SXL_FUR_ERROR_SERVFAIL, __SXL_RIP_ERROR_SERVFAIL, __SXL_SIGV2_ERROR_SERVFAIL, __SXL_SIG_ERROR_SERVFAIL, __SXL_URI_ERROR_SERVFAIL, __TAG_EXISTS_HTML 0, __TO_MALFORMED_2 0'

From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 12:54 PM
To: nationaljic@dhs.gov
Subject: Request for Information Regarding Monitoring Aircraft from Japan

Importance: High

To whom it may concern,

I am working at the Nuclear Regulatory Commission (NRC) Emergency Operations Center (EOC) as the FEMA Liaison. I have been queried regarding any press release or information regarding the radiological monitoring of aircraft and/or passengers departing or arriving from Japan.

Thank you for your attention to this matter.

Kenneth L. Wierman Jr.
FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 12:26 PM
To: Andrew Seward; Harry Sherwood; Michelle Ralston; Steve Horowitz; Tim Greten; Vanessa E. Quinn
Cc: bonnie.sheffield@dhs.gov
Subject: Information on Monitoring Program
Importance: High

Request from NRC State Liaisons,

If you get any information on a program to radiologically monitor persons traveling to and/or from Japan by either HHS, DHS, TSA, DOE, EPA or other resource, please let me know. They are receiving inquiries from the States through the Regional State Liaison Officers. Thank you for your attention to this matter.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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Contact Group Name:

FEMA Liaison Contact List

Members:

Andrew Seward
Dan Feighert
Harry Sherwood
John Simpson
Lisa Hamilton
Michelle Ralston
Rebecca Fontenot
Steve Horwitz
Tim Greten
Vanessa E. Quinn

andrew.seward1@dhs.gov
Dan.Feighert@dhs.gov
harry.sherwood@dhs.gov
john.simpson@dhs.gov
Lisa.Hamilton@dhs.gov
michelle.ralston@dhs.gov
Rebecca.Fontenot@dhs.gov
steve.horwitz@dhs.gov
timothy.greten@dhs.gov
vanessa.quinn@dhs.gov

From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 12:00 PM
To: bonnie.sheffield@dhs.gov

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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Fukushima Daiichi Summary Display

Priority	Unit	STATUS AS OF 06:00 EDT (19:00 Local) - 03/16/2011
4	1	Core Status - Severe core damage (based on the amount of hydrogen generated). Radiation has been released. Possible RCS breach. (GE) Sea water injection to RPV.
		Containment - Primary apparently intact. Secondary Containment destroyed.
		Spent Fuel Pool - No information on SFP status.
3	2	Core Status - Severe core damage likely. Radiation release has occurred. Possible RCS breach (GE). Sea water injection to RPV.
		Containment - Primary apparently intact. Secondary Containment lost.
		Spent Fuel Pool - No information on SFP status. Some reports attribute smoke/steam coming from the SFP.
2	3	Core Status - Severe core damaged (based on the amount of hydrogen generated). Radiation has been released. Possible RCS breach. (GE). Sea water injection to RPV.
		Containment - Primary apparently intact. Secondary Containment destroyed.
		Spent Fuel Pool - May be in the same condition as Unit 4 SFP below. (Monninger)
1	4	Core off-loaded to Spent Fuel Pool. Secondary Containment destroyed. Walls of SFP have collapsed. No SFP cooling is possible at this time. TEPCO requests recommendations. (Monninger)
5	5	Shutdown since January 3, 2011. Core loaded in RPV. RPV/SFP levels lower than normal and decreasing. Unit 6 D/G providing make-up water to Unit 5. (IAEA).
6	6	Shutdown since August 14, 2010. Core loaded in RPV. RPV/SFP levels lower than normal. Unit 6 D/G providing make-up water to Unit 5. (IAEA).

<u>RST Plant Status</u>	Japan Earthquake and Tsunami Daiichi
<p><u>Daiichi Unit 1 (Shutdown)</u> Core Damage Yes Rad Release Yes Sea Water inject RPV Pri Ctmt intact (poss RCS breach (GE)) Sec Ctmt lost SFP Status - no reported problems</p> <p><u>Daiichi Unit 2 (Shutdown)</u> Core Damage - Yes Rad release-Yes Sea Water Inject RPV Pri Cmct- Believed intact (Ulses 0640 3/15)(poss RCS breach (GE)) Sec Ctmt lost SFP Status - ??</p> <p><u>Daiichi Unit 3 (Shutdown)</u> Core Damage - Yes Rad release Yes Sea Water inject RPV Pri Ctmt intact (poss RCS breach (GE)) Sec Ctmt lost SFP Status - no reported problems</p>	<p><u>Critical Safety Functions</u></p> <p>Current 03/16/2011 <u>+1-2 Hours</u> 04:59:56 (ET)</p> <p>Core Cooling & Heat Removal Containment Temperature & Pressure Control RCS & Reactor Vessel Integrity Availability of AC Power Rad. Confinement & Mitigation Reactor Shutdown / Criticality</p>
<p><u>Status</u></p> <p>Site Evacuation to 20 km</p>	<p><u>Licensee Event Classification</u></p> <p>Daiichi Unit 4 (S/D 11/30/10) Core unloaded to SFP Rad release - possible from SFP</p>

<u>RST Plant Status</u>	Japan Earthquake and Tsunami Daiichi
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Sheltering out to 30 km
Fire in Unit 4 was a RB lube
oil fire (fire reported out)
Unit 4 spent fuel in pool for
105 days (GEH)

Water inject to SFP - ?
Sec Ctmt lost
5 - S/D 1/3/11
6 - S/D 8/14/10

Looking Forward:

Flood Drywell U1, 2, 3
Better/Stable DC?
Mobile Diesel Generator
Status?
SFP status including
common SFP ??
4 diesel pumps from DTRA
heading to Daiichi

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<p>Sheltering out to 30 km Fire in Unit 4 was a RB lube oil fire (fire reported out) Unit 4 spent fuel in pool for 105 days (GEH)</p>	<p>Water inject to SFP - ? Sec Ctmt lost 5 - S/D 1/3/11 6 - S/D 8/14/10</p> <hr/> <p><u>Looking Forward:</u> Flood Drywell U1, 2, 3 Better/Stable DC? Mobile Diesel Generator Status? SFP status including common SFP ?? 4 diesel pumps from DTRA heading to Daiichi</p>
---	--

From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 11:17 AM
To: harry.sherwood@dhs.gov; vanessa.quinn@dhs.gov
Subject: Any response from the RAC Chairs on any monitoring program at airports?

Any status on this request?

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 11:13 AM
To: harry.sherwood@dhs.gov; vanessa.quinn@dhs.gov
Subject: HHS Possibly Implementing a Program for Monitoring Individuals Traveling from Japan
Importance: High

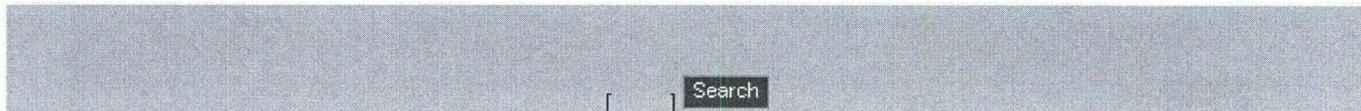
FYI,

We are hearing that HHS is developing a program to radiologically monitor individuals traveling from Japan. Do you have any information on this initiative?

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 9:13 AM
To: LIA04 Hoc
Subject: Emailing: Retired engineer in Greencastle says Japan's nuclear plant poses little threat to Franklin County - Chambersburg Public Opinion
Attachments: image001.gif; image002.gif; image003.gif; image004.gif; image005.gif; image006.gif; image007.gif; image008.gif; image009.gif; image010.gif; image011.gif; image012.png; image013.png; image014.jpg; image015.jpg; image016.jpg; image017.jpg; image018.jpg; image019.jpg; image020.jpg; image021.jpg; image022.png; image023.jpg; image024.jpg; image025.png; image026.jpg; image027.gif; image028.jpg; image029.gif; image030.jpg



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Retired engineer in Greencastle says Japan's nuclear plant poses little threat to Franklin County

Public Opinion Online

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Just to be sure: Sheldon Schwartz, a retired engineer who served on the Nuclear Regulatory Commission, says testing milk for radiation is a step that should be taken in an effort to allay Americans' fear over what may happen at a nuclear power plant in Japan in the wake of the earthquake and tsunami. He was on the teams that worked through the crises at Three Mile Island and Chernobyl.



By ROSCOE BARNES III

Staff writer

GREENCASTLE -- In light of the nuclear power plant crisis in Japan, it wouldn't be a bad idea to have the milk in this area tested for radiation, according to a retired engineer who served on the Nuclear Regulatory Commission.

"I don't want to come across as an alarmist," said Sheldon Schwartz, who lives in Greencastle. "The prognosis of it happening is slim to none, and I don't mean to cause panic. Sampling the milk or taking air samples would be a way to relieve people of their fears and concerns."

Schwartz retired in 1994 as a mechanical engineer after 22 years in the field. He has memories of working with the Three

Mile Island disaster in 1979, and with helping to create two international treaties in 1986 after the nuclear crisis in Chernobyl.

The crisis of the nuclear power plants in Japan following last week's tsunami and earthquake have made people wonder about the possible impact on the United States, Schwartz said.

"My wife asked if we should be worried here," he said. "I said, 'No.' There are enough miles around us and Japan that the radiation would be dissipated. It would just go into the atmosphere, but we will trace it, and stay on top of it."

If there is a problem, it would likely be detected in the food sources and crops, the first things that come to mind, he said.

On Monday, Schwartz called the Pennsylvania Department of Environmental Protection and left a message regarding the

Advertisement

prudence of doing some radiological environmental sampling.

"Doing some radiation monitoring by sampling milk is being prudent," he said. "The milk from Pennsylvania is a major resource for us. It would be prudent to do some sampling right now, and do it for the next 30 or 60 days to make sure you can show there is no change."

Milk is preferred for the testing because fallout gets into the grass, which is eaten by cows. If there is a threat, the cows can be brought in and given stored feed, he said.

According to The Associated Press, a second hydrogen explosion in three days rocked a Japanese nuclear reactor Monday as authorities tried to avert any catastrophic release of radiation in the tsunami zone.

Fearful talks about the disaster reminded Schwartz of the TMI disaster.

Three Mile Island

"It was March 29, 1979. I remember it like it was yesterday," he said. "I was in Bethesda, Md., and worked as part of the emergency response team."

As he recalled, his office received a phone call from the plant operator at TMI that said, "We have a problem."

Everybody was deeply concerned about the impact of the disaster, and wanted to know what was going on, Schwartz said. "We got organized. As an emergency develops, it's a really fluid situation until you get all the details."

People tend to make a lot of assumptions and projections, he said.

"That lack of information is what gets people nervous," Schwartz said.

In the heat of the TMI crisis, Schwartz and his team got little sleep for the first few days. He spent a significant amount of time on the phone talking to people at the TMI site, and to the head of the state's radiation control program.

"We were asking, 'What do we do with the general public?'" he said. "I was talking to people making assessments in the operation center in Bethesda, and on the site at TMI, and various operation centers involved with making decisions.

"We wanted to know the best ways to provide protection, and whether we should evacuate people if necessary. The working environment was very hectic, and pretty stressful."

During the early stages of the crisis, Schwartz and other officials had to rely on "other people's eyes and hands." That meant the information was coming in pieces, and likely to change with time.

In the end, he said, the systems worked as designed. The containers held to the point where the off-site radiation release was minimal. People living in the affected area showed up at various places and registered, Schwartz said.

For the last 30 years, epidemiologists have followed up with the people exposed to the radiation leakage. The research has shown no differences in their health as compared to other populations, Schwartz said.

Chernobyl

After working with the TMI crisis, Schwartz said he was put on loan to the Federal Emergency Management Agency. He later got involved with government policies that followed the accident in Chernobyl.

In Chernobyl, there was a massive release of radiation. Unfortunately, the Russians did not immediately report it, and they did not want anyone to know about it, he said.

"It was not found until a plane landed. Someone noticed some radiation coming off the plane," Schwartz said. "The radiation was found to be airborne. They back tracked and found it coming from Russia."

In 1986, he got involved with a number of U.S. government agencies and attended a meeting in Vienna, Austria, with the International Atomic Energy Agency and other international government organizations.

"We put two worldwide treaties together," Schwartz said. "The first one was for the notification of an accident at a nuclear power plant; and the second one was for the mutual cooperation and assistance if you do have an event."

In recent days, people may have asked why certain information was coming from IAEA, and not directly from Japanese officials, he said. The reason is that Japan is following the international protocol.

It helps to have one agency in the world as the central focal point, he said.

As a result of following this protocol, the mutual assistance is happening in an incredible way, Schwartz said.

"We were hoping we would never need the treaties," he said. "Having those treaties in effect today is making the necessary and immediate help available. You don't have to figure out who's in charge. It's all worked out now."

As the world comes together to assist Japan, people can learn from the situation, and they can do so without fear or being in a state of panic, Schwartz said.

Roscoe Barnes III can be reached at 262-4762 or rbarnes@publicopinionnews.com.



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5. Volvo to more 220 jobs to Shippensburg plant
6. Franklin County area police log
7. PSP: No 'credible' evidence church will demonstrate at Clouse funerals
8. Volvo plans to make \$100M investment in Shippensburg plant
9. Franklin County jury awards \$1.1 million in lawsuit over killing of...
10. Three petitions challenged in municipal election

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1. Volvo plans to make \$100M investment in Shippensburg plant

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- Pennsylvania budget proposal cuts major bridge, road projects
- Sister of Fulton County man who killed estranged girlfriend faces gun charges
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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 8:26 AM
To: harry.sherwood@dhs.gov; vanessa.quinn@dhs.gov
Subject: FRMAC Flights

FYI,

Just informed that FRMAC to start over flights tonight.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 7:18 AM
To: harry.sherwood@dhs.gov; vanessa.quinn@dhs.gov
Subject: Recommendations from NRC and Naval Reactors

FYI,

From the 0700 conference call:

Four Points that will be recommended to the Japanese Government:

- 1)
- 2)
- 3)
- 4)

(b)(5)

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Wednesday, March 16, 2011 6:28 AM
To: harry.sherwood@dhs.gov; vanessa.quinn@dhs.gov
Cc: bonnie.sheffield@dhs.gov
Subject: NRC Operations Center

FYI,

I will be here from 0700 to 2000 until Ms. Sheffield is able to take a shift.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

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From: LIA05 Hoc
Sent: Tuesday, March 15, 2011 5:20 PM
To: harry.sherwood@dhs.gov
Cc: vanessa.quinn@dhs.gov; bonnie.sheffield@dhs.gov
Subject: Contact Information

Importance: High

Mr. Sherwood,

FYI.

FEMA REP Liaison
NRC Operations Center
(301) 816-5187

From: LIA05 Hoc
Sent: Sunday, March 13, 2011 11:42 PM
To: LIA11 Hoc; LIA01 Hoc
Attachments: FW: Questions for GOJ; FYI - TEPCO Earthquake Information Update as of March 14, 0200(JST) - Fukushima Daini Unit 1 is now under cold shutdown; FYI - Japan; FW: NRC IS RESPONDING TO AN EMERGENCY OUTSIDE of the United States; FYI - Update on Japan Situation; NRC IS RESPONDING TO AN EMERGENCY OUTSIDE of the United States; FYI - Good Photos on AOL Photo Form; Response - Earthquake Impact; FYI - Two comments from tonight; FYI - Youtube video - Fukushima

From: LIA05 Hoc
Sent: Friday, March 11, 2011 7:43 PM
To: Franovich, Mike
Subject: Test from McGinty, LIA05

From: LIA05 Hoc
Sent: Friday, March 11, 2011 4:23 PM
To: Quichocho, Jessie
Cc: LIA01 Hoc
Subject: POTENTIAL release of Radiation from Japanese Nuclear Power Plant

FYI

Potential repeat **Potential** release of radiological material from Japanese nuclear power plant.

Press release from TEPCO (Japanese utility) that they may need to release pressure from reactor containment .

To our (NRC) understanding, there has been no release of radiation at this time.

This information came from TEPCO press release from website www.tepco.co.jp/en/press/corp-com/release/11031208

Ned Wright
NRC Operations Center
Federal Liaison Officer
301-816-5210

From: LIA08 Hoc
Sent: Friday, April 29, 2011 3:16 PM
To: Freeman, Scott
Subject: RE: Request for Blackberry Numbers for NRC Team Japan

Categories: FOIA Forwarded

Ok. I hope things improve and they get you all out soon.

Safe travels and please let us know you made it safely.

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

From: Freeman, Scott
Sent: Friday, April 29, 2011 3:08 PM
To: Mitchell, Matthew; Jones, Andrea; Peterson, Hironori; Miller, Mark; Plasse, Richard; Lynch, James
Cc: Young, Francis; Temps, Robert; LIA08 Hoc
Subject: Re: Request for Blackberry Numbers for NRC Team Japan

Mine is correct as well.

I will be delayed in arriving due to mechanical problems. First it was cockpit ventilation, now it's fueling and crew work hours. We have boarded and unloaded twice. Now slated to depart Dallas at 5pm CDT.

From: Mitchell, Matthew
To: Jones, Andrea; Peterson, Hironori; Miller, Mark; Plasse, Richard; Freeman, Scott; Lynch, James
Cc: Young, Francis; Temps, Robert; LIA08 Hoc
Sent: Fri Apr 29 11:35:51 2011
Subject: RE: Request for Blackberry Numbers for NRC Team Japan

Andrea,

Please see the table in the e-mail below from Debra Reyes.

I can confirm that the Blackberry number listed for me is correct and I believe the rest are as well.

Matt Mitchell

From: Reyes, Debra
Sent: Tuesday, April 26, 2011 12:16 PM
To: Schwartzman, Jennifer; ET02 Hoc
Cc: Heard, Robert; Reyes, Debra
Subject: RE: OOU-Travel to Japan

Below are the BB Numbers

Name	Wireless Number
Temps, Robert	(b)(6)
Freeman, Scott	
Plasse, Richard	
Miller, Mark	
Peterson, Hironori	
Lynch, James	
Mitchell, Matthew	

From: Jones, Andrea
Sent: Friday, April 29, 2011 11:31 AM
To: Peterson, Hironori; Miller, Mark; Plasse, Richard; Freeman, Scott; Lynch, James; Mitchell, Matthew
Cc: Young, Francis; Temps, Robert; LIA08 Hoc
Subject: Request for Blackberry Numbers for NRC Team Japan

Hello,

I'm the OIP staff on duty for the Ops Center. We are trying to gather blackberry numbers or cell numbers that work internationally for Peterson, Miller, Plasse, Freeman, Lynch and Mitchell so that we can update our travel information.

Could you please send me blackberry numbers? Skip, if you could assist if you have any of these numbers, that would be great.

Andrea R. Jones
 International Relations Officer
 Office of International Programs
 U.S. Nuclear Regulatory Commission
 301-415-2309

From: Droggitis, Spiros
Sent: Friday, April 29, 2011 4:07 PM
To: Temple, Jeffrey
Subject: Fw: USNRC Emergency Operations Center Status Update 04292011 1200 EDT
Attachments: USNRC Earthquake-Tsunami Update 042911 1200 EDT.pdf

This is what I got.

From: LIA08 Hoc
To: Droggitis, Spiros; Riley (OCA), Timothy
Sent: Fri Apr 29 15:09:40 2011
Subject: USNRC Emergency Operations Center Status Update 04292011 1200 EDT

Good Afternoon,

Attached is the updated status report for Friday, April 29, 2011. As a reminder, this information is **Official USE Only**.

The next USNRC Status Update will be distributed at 1200 EDT on Monday, May 2, 2011.

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

From: LIA08 Hoc
Sent: Friday, April 29, 2011 1:52 PM
To: Bollow, Keith R MSgt PACOM JIOC
Subject: RE: USNRC Emergency Operations Center Status Update Distro

Categories: FOIA Forwarded

Good Afternoon,

Both names have been added.

Thanks

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

From: Bollow, Keith R MSgt PACOM JIOC [mailto:(b)(6)]
Sent: Friday, April 29, 2011 1:38 PM
To: LIA08 Hoc
Subject: USNRC Emergency Operations Center Status Update Distro

Can you please add the following people to the morning USNRC Emergency Operations Center Status Update distro:

(b)(6)

Thank you for your support in this matter.

MSgt Keith R. Bollow
Directorate for Operations
Joint Intelligence Operations Center Pacific
SEA Marine Element
SIPR: (b)(6)
JWICS: (b)(6)
Comm: 808-473-6396
DSN: 315-473-6396
BlackBerry: (b)(6)

Semper Fidelis, Semper Fortis

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From: Hoc, PMT12
Sent: Friday, April 29, 2011 1:42 PM
To: Wright, Lisa (Gibney)
Subject: RE: NREP Trish Milligan PAR Presentation.pptx

Thanks.

From: Wright, Lisa (Gibney)
Sent: Friday, April 29, 2011 1:22 PM
To: LIA08 Hoc; Hoc, PMT12; RST02 Hoc
Subject: NREP Trish Milligan PAR Presentation.pptx

Kathryn—

Here you go...(its slide #5 that you probably want)

From: Ballam, Nick
Sent: Friday, April 29, 2011 2:49 PM
To: Brown, Cris
Subject: RE: Japan Event Shift Stand Down this Weekend - On Call Only

Yeah. It was quite the experience last night. We'll talk about it more in person.

P.S. Thanks for being such a supportive supervisor! I really appreciate it!

From: Brown, Cris
Sent: Friday, April 29, 2011 2:46 PM
To: Ballam, Nick
Subject: RE: Japan Event Shift Stand Down this Weekend - On Call Only

At least you were able to work last night. Thanks for the heads up.

Cris Brown
IT Branch Chief
Program Management, Policy Development and Analysis Staff
Office of Nuclear Security and Incident Response
Office: 301-415-5768
BlackBerry: (b)(6)

From: Ballam, Nick
Sent: Friday, April 29, 2011 2:36 PM
To: Brown, Cris
Subject: FW: Japan Event Shift Stand Down this Weekend - On Call Only

Looks like they won't be having me come in tonight afterall. I will just be working from home tonight on regular work.

From: Skeen, David
Sent: Friday, April 29, 2011 11:47 AM
To: Andrukat, Dennis; Ballam, Nick; Dorsey, Cynthia; Kowalczyk, Jeffrey; Larson, Emily; Turtill, Richard; Wright, Lisa (Gibney); Temple, Jeffrey; Casto, Greg; Foster, Jack; Harris, Tim; Iyengar, Raj; Arndt, Steven; Wong, See-Meng; Kugler, Andrew; Brown, Eva; Vick, Lawrence; Brown, Eva; Hasselberg, Rick; Brandon, Lou; Temple, Jeffrey; Stone, Rebecca; Grant, Jeffery; Alter, Peter; Brock, Kathryn; Jackson, Karen; Khan, Omar; Stransky, Robert; Kozal, Jason; Collins, Frank; Dudek, Michael; Jessie, Janelle; Kratchman, Jessica; Cheok, Michael; Holian, Brian; HOO Hoc
Cc: Evans, Michele; McDermott, Brian; Morris, Scott; Marshall, Jane; Gott, William; Wiggins, Jim; Tracy, Glenn; Correia, Richard; OST01 HOC; Tracy, Glenn; Correia, Richard; Hiland, Patrick; Holian, Brian; Cheok, Michael; Virgilio, Martin
Subject: Japan Event Shift Stand Down this Weekend - On Call Only

All,

A decision has been made for Japan event responders to be in an ON CALL STATUS only this weekend. The Operations Center will not be staffed from the end of day shift today (1500 EDT Friday) until the beginning of day shift on Monday, May 2 (at 0700 EDT).

PLEASE DO NOT REPORT TO THE OPERATIONS CENTER if you were scheduled to work between Friday evening and Monday morning. However, you may be called to the Ops Center over the weekend if the situation in Japan changes, so please ensure the Headquarters Operations Officers (301-816-5100) have your up-to-date contact information.

For your awareness, the NRC Status Update will not be issued on Saturday or Sunday, but will resume on Monday. The one-pagers will continue to be updated and uploaded to the Japan SharePoint page (<http://nsir-ops.nrc.gov/>) which can be accessed over CITRIX.

If you have any questions, please contact 301-816-5100. Please forward this information to your respective supervisors as necessary for any time and labor issues. Thank you for your continued support and flexibility.

Dave Skeen
On-Shift ET Director

From: LIA08 Hoc
Sent: Friday, April 29, 2011 12:01 PM
To: Wittick, Brian
Cc: LIA08 Hoc
Subject: JAPAN TRAVELER-ContactInfolist.doc (Contains PII)
Attachments: #5 NRC TEAM Japan Site Team and their Contact Info.doc

Categories: FOIA Forwarded

Hi Brian

Here is the updated list of NRC Travelers and their contact info.

Thanks

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

From: LIA08 Hoc
Sent: Friday, April 29, 2011 2:01 AM
To: Wittick, Brian
Subject: RE: JAPAN TRAVELER-ContactInfolist.doc

Txs

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

From: Wittick, Brian
Sent: Friday, April 29, 2011 2:00 AM
To: LIA08 Hoc
Cc: Young, Francis
Subject: FW: JAPAN TRAVELER-ContactInfolist.doc

Here is the last list I had, which should save you some recreation time.

Thanks

#5 NRC TEAM in Japan - NRC TRAVELERS IN JAPAN – April 27-May 20, 2011

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Hironori Peterson	(b)(6) (bb)	Hironori.Peterson@nrc.gov	April 30 2:15 pm	May 20 8:55 am	(b)(6)
Mark Miller	(b)(6) (bb)	Mark.Miller@nrc.gov	April 30 2:15pm	May 20 4:40pm	(b)(6)
Robert Temps	(b)(6) (bb)	Robert.Temps@nrc.gov	April 28 3:10 pm	May 19 3:37pm	(b)(6) (b)(6)

Richard Plasse	(b)(6) (bb)	Richard.Plasse@nrc.gov	April 28 3:10 pm	May 19 3:37pm	(b)(6)
Scott Freeman	(b)(6) (bb)	Scott.Freeman@nrc.gov	April 30 1:05pm	May 20 1:15 pm	(b)(6)
Jim Lynch	(b)(6) (bb)	James.Lynch@nrc.gov	April 30 2:15 pm	May 20 8:55 am	(b)(6)
Skip Young, OIP Senior Program Manager	(b)(6) (bb)	Francis.Young@nrc.gov	Apr 28 3:10 pm	Thurs, May 19 A 3:37pm (Dulles)	(b)(6)
Matthew Mitchell	(b)(6) (bb)	Matthew.mitchell@nrc.gov	Apr 28 3:10 pm	Thurs, May 19 A 3:37pm (Dulles)	(b)(6)

From: LIA08 Hoc
Sent: Friday, April 29, 2011 11:09 AM
To: Jones, Andrea; Emche, Danielle
Subject: RE: Response Requested: Please Update the attached Japan Traveler Contact Info List

Categories: FOIA Forwarded

Thanks so much!

Yes, please send an email or use whatever other means you have to get bb numbers (or cell phone numbers) for the remaining travelers.

JJ

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

From: Jones, Andrea
Sent: Friday, April 29, 2011 10:45 AM
To: LIA08 Hoc; Emche, Danielle
Subject: RE: Response Requested: Please Update the attached Japan Traveler Contact Info List

Hi, I've updated.

However, I only have bb numbers for Temps and Young. Do you want me to send emails to remaining travelers to get their bb numbers? Some of the others have cell phone numbers.

From: LIA08 Hoc
Sent: Friday, April 29, 2011 9:40 AM
To: Jones, Andrea; Emche, Danielle
Cc: LIA08 Hoc
Subject: Response Requested: Please Update the attached Japan Traveler Contact Info List

Good Morning Ladies,

Attached is the latest version of the Japan Traveler Contact List that we have here in the LT at HQ. Please use this list to reflect the updates requested below.

Additionally, there is one correction. In the email below, I stated that the four additional members are expected to leave the States on Saturday for Japan. Well, I miscommunicated this information as these individuals are already in Japan. I apologize for any confusion.

Thanks again for your help.

Please send the updated Japan Traveler Contact Info List to us as soon as you can.

Thanks a bunch!

JJ

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

From: LIA08 Hoc
Sent: Friday, April 29, 2011 9:12 AM
To: Jones, Andrea; Emche, Danielle
Cc: LIA08 Hoc
Subject: Response Requested: Japan Traveler Contact Info List Needed for Next Wave of Japan Site Team

Good Morning Ladies,

I understand that one half of the next wave of the Japan Site Team has arrived and are conducting turnover. Those individuals are as follows:

Skip Young-Liaison and Emergency Response Coordinator ((b)(6))
Matt Mitchell- RST Team Leader ((b)(6))
Rob Temps-RST Team Member ((b)(6))
Richard Plasse-RST Team Member ((b)(6))

I also understand that four additional members are expected to leave the States on Saturday so that they can start on Sunday. Those individuals are as follows:

Sean Meighan
Tony Huffert
Don Norwood
Tim Lupold

Could either of you assist me by providing an updated Contact Info List for this wave of the Japan Site Team to include: their estimated date of departure, who their relief will be, their estimated date of return and an emergency contact number for each team member?

Please feel free to contact me with any questions regarding this request.

Thanks

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

#4 NRC TEAM in Japan - Leaving Week of April 9, 2011 - NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Steve Garchow Region IV Senior Operations Engineer	(b)(6)	Steve.Garchow@nrc.gov	Apr 13, 3:15 pm	May 3, 10:45 am	(b)(6)
Heather Gepford Region II Technical Assistant	(b)(6)	Heather.Gepford@nrc.gov	Apr 13, 4:15 pm	May 3, 1:15 pm	
Anthony (Tony) Huffert RES Sr. Health Physicist	(b)(6)	Anthony.Huffert@nrc.gov	Apr 13, 3:10 pm	May 3, 3:37 pm	
Jeff Mitman NRR Sr. Reliability & Risk Analyst	Cell - (b)(6) (b)(6) (B) (b)(6)	Jeffrey.Mitman@nrc.gov	April 13, 3:10 pm	May 3, 3:37 pm	
Carl Moore Region III Operations Engineer	(b)(6)	Carl.Moore@nrc.gov	Apr 13, 4:15 pm	May 3, 8:55 am	
Steve Reynolds Region III Executive Level – Team Lead To replace Elmo Collins	(b)(6)	Steven.Reynolds@nrc.gov	April 13, 4:15 pm	May 3, 4:05 pm	
Tim Lupold NRR		Timothy.Lupold@nrc.gov	Apr 15 3:10 p.m.	May 3 3:37 p.m.	
Sean Meighan	(B) (b)(6)	Sean.meighan@nrc.gov (b)(6)	April 15 3:10 p.m.	May 3 3:37 p.m.	
Donald Norwood	(b)(6)	Donald.norwood@nrc.gov	April 16 2:21 p.m.	May 3 3:37 p.m.	
Brian Wittick, OIP Licensing Officer	(b)(6)	Brian.Wittick@nrc.gov	Sun, Apr 9 3:55 p.m.	Sat, April 30 3:37 p.m.	

#3 NRC TEAM in Japan - Leaving April 2/3 and Return on April 16, 2011 - NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Vince Holahan, FSME Sr. level Advisor Departure with Navy Honolulu, HI			March 28 9:35 p.m.		

TEAM #1 - NRC TRAVELER INFORMATION IN JAPAN

Name	Phone Number	Email	Flight Arrival (Japan Time)	Flight Arrival (EDT)	Return Date to U.S.
Chuck Casto – Will remain in Japan Deputy Regional Administrator, Region II Executive Level – Team Lead Interface with the Ambassador, military, Japan cabinet and regulators	(b)(6)	Chuck.casto@nrc.gov	1:30 PM Wed., 3/16		April 12, 2011

EVERYBODY IS STAYING AT HOTEL IN TOKYO

(b)(6)

From: Temple, Jeffrey
Sent: Friday, April 29, 2011 10:16 AM
To: LIA08 Hoc
Subject: RE: Follow-up to Request: NRC EOC Earthquake/Tsunami Status Update

Thanks JJ. You are the best. Hope you have a good day. Jeff

From: LIA08 Hoc
Sent: Friday, April 29, 2011 9:20 AM
To: Temple, Jeffrey
Cc: Grant, Jeffery; Marshall, Jane
Subject: Follow-up to Request: NRC EOC Earthquake/Tsunami Status Update

Good Morning,

As a follow up...

Mr. Russo has been added to the "External 2" Contact list at the LIA08 station.

Thanks

Janelle

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

From: Temple, Jeffrey
Sent: Thursday, April 28, 2011 8:59 AM
To: Russo, Mark
Cc: LIA08 Hoc; Grant, Jeffery; Marshall, Jane
Subject: RE: NRC EOC Earthquake/Tsunami Status Update

Mark. Will be glad to put you on the distribution list for this daily update. You should get one around noon or 1 PM today. Please let me know if you do not receive it. Jeff Temple

From: Russo, Mark [<mailto:Mark.Russo@fda.hhs.gov>]
Sent: Thursday, April 28, 2011 8:23 AM
To: Temple, Jeffrey
Subject: NRC EOC Earthquake/Tsunami Status Update
Importance: High

Jeff:

I am the Agency Incident Coordinator for FDA's response to the Japan earthquake and tsunami. Over the course of the Japan EQ response, I had been receiving NRC's Daily Status Updates through the HHS Secretary's Operations Center, however, their operational status for the earthquake has reverted to steady state and they are no longer posting the reports.

The reports provide valuable information for FDA preparedness and contingency planning.

Would it be possible to get added to your distribution list for these reports?

If so, my e-mail address is: mark.russo@fda.hhs.gov

Thanks.

--Mark

*Mark R. Russo
Director, Office of Emergency Operations
Office of Crisis Management
U.S. Food and Drug Administration
10903 New Hampshire Avenue, Bldg 32, Room 1384
Silver Spring, MD. 20993
Desk: 301-796-9655
Blackberry: (b)(6)
Cell: (b)(6)
Fax: 301-847-8545
24 hour Emergency Number: 1-866-300-4374*

From: LIA08 Hoc
Sent: Friday, April 29, 2011 8:42 AM
To: Skeen, David; Temple, Jeffrey; Harrington, Holly; Burnell, Scott; Billings, Sally; Kozal, Jason
Cc: FOIA Response.hoc Resource
Subject: FYI: Discovery Channel: "Nuclear Nightmare: Japan in Crisis"
Categories: FOIA Forwarded

Good Morning Everyone,

Sam Keith, the CDC Liaison here in the Ops Center, sent this to the LT, PMT and RST and I thought I'd pass it along.

Thanks

Janelle

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

From: Keith, Sam (ATSDR/DTEM/ATB) [mailto:ldk4@cdc.gov]
Sent: Friday, April 29, 2011 8:31 AM
To: Hoc, PMT12; LIA08 Hoc; RST01 Hoc
Subject: Discovery Channel: "Nuclear Nightmare: Japan in Crisis"

FYI. The message below addresses a Discovery Channel presentation last night and link to information on rebroadcasts.

Sam Keith
CDC Liaison

From: Whitcomb, Robert C. (CDC/ONDIEH/NCEH)
Sent: Friday, April 29, 2011 08:15 AM
To: Andres Espinosa-Bode <aespinosa@scimetrica.com>; Armstrong, Katherine (Kitty) (CDC/ONDIEH/NCEH); Brooks, Michael (ATSDR/DHAC/SRAB); Burden, Bernadette (CDC/OD/OADC); Chang, Arthur (Art) (CDC/ONDIEH/NCEH); Charp, Paul (ATSDR/DHAC/SRAB); Connell, Carol (ATSDR/DHAC/SRAB); Jones, Robert L. (CDC/ONDIEH/NCEH); Jones, Thomas (CDC/OPHPR/DEO); Keith, Sam (ATSDR/DTEM/ATB); Law, Royal K. (CDC/ONDIEH/NCEH) (CTR); Martin, Colleen (CDC/ONDIEH/NCEH); Roebuck, Von (CDC/OD/OADC); Allen, Leeanna (CDC/ONDIEH/NCEH) (CTR); Ansari, Armin (CDC/ONDIEH/NCEH); Buzzell, Jennifer (CDC/ONDIEH/NCEH); Caspary, Kevin <Kevin.Caspary@orise.orau.gov>; Dixon, Iris H. (CDC/ONDIEH/NCEH); Dixon, John E. (CDC/ONDIEH/NCEH); Donnelly, Elizabeth (CDC/ONDIEH/NCEH); Evans, Lynn (CDC/ONDIEH/NCEH); Friday, Natasha (CDC/ONDIEH/NCEH); Gooden, Marlene (CDC/ONDIEH/NCEH) (CTR); Hale, Scott L. (CDC/ONDIEH/NCEH) (CTR); Holcombe, Maire F. (CDC/ONDIEH/NCEH); Hyacinth, Albert (CDC/ONDIEH/NCEH); Jim Smith <[REDACTED]>; Kazzi, Ziad (CDC/ONDIEH/NCEH) (CTR); Limor, Josef R. (CDC/OID/NCEZID); McCurley, Carol M. (CDC/ONDIEH/NCEH); Miller, Charles W. (CDC/ONDIEH/NCEH); Nemhauser, Jeffrey B. (CDC/ONDIEH/NCEH); Nguyen, Phillip (CDC/ONDIEH/NCEH) (CTR); Pollard, Katrina (CDC/ONDIEH/NCEH); Rosado, Dorimar (CDC/ONDIEH/NCEH); Smith, James M. (CDC/ONDIEH/NCEH) (CTR); Tucker, Florie (CDC orise.orau.gov); Tucker, Florie E. (CDC/ONDIEH/NCEH) (CTR); Vasconez, Rachel D. (CDC/ONDIEH/NCEH) (CTR)

Subject: Discovery Channel: "Nuclear Nightmare: Japan in Crisis"

All,

Last evening (Apr 28, 10:00 pm), the Discovery Channel aired a special "Nuclear Nightmare: Japan in Crisis." I was not able to see all of it but what I saw was well done. I did manage to record it for viewing in its entirety this weekend. In case you are also interested in seeing this show, the Discovery Channel website the following information about the episode and the schedule for a repeat broadcast.

<http://dsc.discovery.com/videos/japan-in-crisis-videos>

(60 minutes) Nuclear Nightmare: Japan in Crisis

A comprehensive timeline of the unthinkable natural disaster that triggered a nuclear crisis at Fukushima Daiichi. Paula Zahn takes us inside the dramatic story in Japan, and explores out what it will mean for nuclear power in the United States.

<http://dsc.discovery.com/tv-schedules/special.html?paid=1.14144.26383.0.0>

May 11, 11:00 am

I hope you find this helpful,

Bob

Robert C. Whitcomb, Jr., Ph.D., CHP

Radiation Studies Branch, EHHE, NCEH, CDC

4770 Buford Highway, NE (MS-F58)

Atlanta, GA 30341-3717

Phone: 770.488.3652

Fax: 770.488.1539

From: LIA08 Hoc
Sent: Friday, April 29, 2011 8:09 AM
To: RST01 Hoc; RST02 Hoc; Hoc, PMT12
Cc: LIA08 Hoc
Subject: Request for Status Update: USNRC Earthquake-Tsunami
Attachments: USNRC Earthquake-Tsunami Update 042911 Revision 0, 1200 EDT.docx

Categories: FOIA Forwarded

Good Morning Everyone,

Please provide all updates to me by 1000 (EDT) .

Thanks

Janelle

From: LIA08 Hoc
Sent: Friday, April 29, 2011 5:47 AM
To: Wittick, Brian
Subject: JAPAN TRAVELER-ContactInfolist 21APR.docx
Attachments: JAPAN TRAVELER-ContactInfolist 21APR.docx

Categories: FOIA Forwarded

Good evening Brian,
I (finally) located this one and will also obtain the next one for the current batch.

V/R Earl R Libby

#4 NRC TEAM in Japan - Leaving Week of April 9, 2011 - NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Steve Garchow Region IV Senior Operations Engineer	(b)(6)	Steve.Garchow@nrc.gov	Apr 13, 3:15 pm	May 3, 10:45 am	(b)(6)
Heather Gepford Region II Technical Assistant	(b)(6)	Heather.Gepford@nrc.gov	Apr 13, 4:15 pm	May 3, 1:15 pm	
Anthony (Tony) Huffert RES Sr. Health Physicist	(b)(6)	Anthony.Huffert@nrc.gov	Apr 13, 3:10 pm	May 3, 3:37 pm	
Jeff Mitman NRR Sr. Reliability & Risk Analyst	Cell (b)(6) (b)(6) (B) (b)(6)	Jeffrey.Mitman@nrc.gov	April 13, 3:10 pm	May 3, 3:37 pm	
Carl Moore Region III Operations Engineer	(b)(6)	Carl.Moore@nrc.gov	Apr 13, 4:15 pm	May 3, 8:55 am	
Steve Reynolds Region III Executive Level – Team Lead To replace Elmo Collins	(b)(6)	Steven.Reynolds@nrc.gov	April 13, 4:15 pm	May 3, 4:05 pm	
Tim Lupold NRR		Timothy.Lupold@nrc.gov	Apr 15 3:10 p.m.	May 3 3:37 p.m.	
Sean Meighan	(B) (b)(6)	Sean.meighan@nrc.gov (b)(6)	April 15 3:10 p.m.	May 3 3:37 p.m.	
Donald Norwood	(b)(6)	Donald.norwood@nrc.gov	April 16 2:21 p.m.	May 3 3:37 p.m.	
Brian Wittick, OIP Licensing Officer	(b)(6)	Brian.Wittick@nrc.gov	Sun, Apr 9 3:55 p.m.	Sat, April 30 3:37 p.m.	

#3 NRC TEAM in Japan - Leaving April 2/3 and Return on April 16, 2011 - NRC TRAVELERS IN JAPAN

Name	Phone Number (internal BB or cell)	Email/Other	Flight Arrival (Japan Time)	Return date to U.S.	Emergency contact
Vince Holahan, FSME Sr. level Advisor Departure with Navy Honolulu, HI			March 28 9:35 p.m.		

TEAM #1 - NRC TRAVELER INFORMATION IN JAPAN

Name	Phone Number	Email	Flight Arrival (Japan Time)	Flight Arrival (EDT)	Return Date to U.S.
Chuck Casto – Will remain in Japan Deputy Regional Administrator, Region II Executive Level – Team Lead Interface with the Ambassador, military, Japan cabinet and regulators	(b)(6)	Chuck.casto@nrc.gov	1:30 PM Wed., 3/16		April 12, 2011

EVERYBODY IS STAYING AT HOTEL IN TOKYO

(b)(6)

From: LIA08 Hoc
Sent: Thursday, April 28, 2011 11:12 PM
To: Paley, Robert M. (INPO)
Subject: RE: US-Japan Nuclear-Related Assistance Tracker - Request #34

Categories: FOIA Forwarded

Thanks
V/R Earl R. Libby

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

From: Paley, Robert M. (INPO) [mailto:PaleyRM@inpo.org]
Sent: Thursday, April 28, 2011 9:23 PM
To: LIA08 Hoc
Subject: RE: US-Japan Nuclear-Related Assistance Tracker - Request #34

Thanks. We will check status and call you back.

From: LIA08 Hoc [mailto:LIA08.Hoc@nrc.gov]
Sent: Thursday, April 28, 2011 9:15 PM
To: Paley, Robert M. (INPO)
Subject: US-Japan Nuclear-Related Assistance Tracker - Request #34

Rob,

In accordance with our discussion earlier tonight on the Consortium Call, I wanted to ensure that you were providing an update on the appropriate item.

#34 Request: List alternative flowpaths that can be used for purging, given accessibility challenges (RST request). GE to provide 3/29 list, INPO providing technical review, NISA will confirm whether any additional info is needed by 4/22.

Follow-Up: INPO to confirm that this information was provided to all appropriate stakeholders. Also ensure that the list and technical analysis are complete.

If you have any comments or concerns regarding this tasking, please do not hesitate to call.

Respectfully,
Michael I. Dudek

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

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Thank you.

From: Hoc, PMT12
Sent: Thursday, April 28, 2011 8:42 PM
To: Gepford, Heather; PMT_japan Resource
Cc: Milligan, Patricia; McDermott, Brian; FOIA Response.hoc Resource
Subject: HQ PMT Input: Bullet Train/ Route 4 Highway

Heather,

Below is the HQ PMT input for the Bullet Train/ Highway Route 4 issue. Hope this helps! If NSIR has input they should get back to you in the morning (EDT).

Thank you and good luck. Call if you need anything! And please remember there will be now HQ PMT on the night shift anymore, however we will be on call if you need anything.

-Jessie Kratchman
NRC HQ PMT

Bullet Train/ Route 4 Highway Travel Recommendations for US Citizens

Japanese Officials have reported that normal transportation between Tokyo and Sendai will resume within the next week. This includes two primary methods of transportation, the Bullet Train and the National Route 4 Highway. These travel routes have been deemed as essential thoroughfare between these two cities, without which travel between Tokyo and Sendai can take over 10 hours. As a precautionary note to US travelers, however, citizens should be aware that both transportation methods contain segments that are within the recommended US citizen 50 mile (80 km) evacuation zone, but outside 18.6 mi (30 km) zone.

The U.S. Department of Energy has performed radiation readings along these two transportation routes and has reported that measured external dose rates in the immediate areas are not high enough to warrant concern (highest AMS reading en route is between 0.03 and 0.25 mR/hr). It is the recommendation that American citizens that choose to use these forms of transportation do not stop in the evacuation zones and travel directly through the area to minimize the exposure. By minimizing the time spent in these zones, and exposure to radiation is minimal and well below U.S. Environmental Protection Agency limits and is not a major health concern.

American citizens should also heed Japanese warnings in these areas. If you have any questions or concerns regarding travel to/ from Tokyo and Sendai, please do not hesitate to call the U.S. Embassy at XXX-XXX-XXXX.

From: LIA08 Hoc
Sent: Thursday, April 28, 2011 5:57 PM
To: Hoc, PMT12
Subject: RE: Bullet train

Categories: FOIA Forwarded

Thanks Jessie.

Two pieces of critical information before we move forward, though: (1) How did we find out about the need for this "tasking" (i.e., from who); and (2) Who is the audience for the reply?

Thanks! 😊

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

From: Hoc, PMT12
Sent: Thursday, April 28, 2011 5:54 PM
To: LIA08 Hoc
Subject: Bullet train

Mike,

Here is my text for the Bullet Train issue so far. I will explain the last paragraph to you in a minute. Please remember this is rough! I will write the tracker now and send that to you as well.

-Jessie

Bullet train service between Tokyo and Sendai resumes within the next week. There is also a highway route from Tokyo to Sendai that runs essentially parallel to the bullet train. Both routes contain segments that are within the 50 mile (80 km) zone but outside 18.6 mi (30 km) zone. DOE has been performing radiation readings of the highway route and will be providing the data to the NRC Japan Protective Measures Team (PMT). This travel route is a major thoroughfare between these cities, without which travel between Tokyo and Sendai can take over 10 hours to travel between these two destinations.

AMS monitoring results in areas beyond 25 miles from the Fukushima Daiichi reactors show areas where dose rates are many times higher than historical background. However, DOE reports that the measured external dose rates in these areas are not high enough to warrant evacuation or relocation of the population.

Between the 80 km (50 mi) recommended evacuation zone established for American citizens in Japan and the 30 km (18.6 mi) Japanese zone, and based on DOE areal monitoring, the portion of travel route within these evacuation zones received at most only between 0.03 mR/hr and 0.25 mR/hr at the last reading (04-27-2011). It is the recommendation that American citizens that choose to use these forms of transportation do not stop in the evacuation zones and travel directly through the area to minimize the exposure. By minimizing the time spent

in these zones, and exposure to radiation is minimal and well below US EPA limits and is not a major health concern. American citizens should also heed Japanese warnings in the area.

From: Rivers, Joseph
Sent: Thursday, April 28, 2011 5:55 PM
To: LIA08 Hoc
Subject: Re: extended Liaison Team coverage

Sorry - must have been a typo.

Let's go with the following:

Friday, May 13
Thursday, May 19
Wednesday, May 25

Joe
Sent from NRC Blackberry
Joe Rivers
Senior Level Advisor on Security
NSIR/DSP
US NRC

(b)(6)

From: LIA08 Hoc
To: Rivers, Joseph
Sent: Thu Apr 28 17:51:40 2011
Subject: RE: extended Liaison Team coverage

Joe,

May 20th is not a Wednesday. Please clarify. Thanks!

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

From: Rivers, Joseph
Sent: Thursday, April 28, 2011 4:52 PM
To: LIA08 Hoc
Subject: Re: extended Liaison Team coverage

Jeff,

You can schedule me for the day shift on the following dates:

Friday, May 13
Thursday, May 19
Wednesday, May 20

Joe
Sent from NRC Blackberry
Joe Rivers
Senior Level Advisor on Security

NSIR/DSP
US NRC

(b)(6)

From: LIA08 Hoc

To: Wright, Lisa (Gibney); Ragland, Robert; Murray, Charles; Franovich, Rani; Chazell, Russell; Rivers, Joseph; Reed, Elizabeth; Jessie, Janelle; Kellum, Jim; Libby, Earl; Tabatabai, Omid; Lising, Jason; Smith, Theodore; Wright, Ned; Temple, Jeffrey; Dudek, Michael

Sent: Thu Apr 28 15:49:14 2011

Subject: extended Liaison Team coverage

We are still not sure how much longer we will be staffing the LT position for the Japanese earthquake response, but I have been asked to plan for perhaps a few more weeks of day shifts and evening shifts (no overnight shifts). Please let me know if you can help with any of these shifts. Again, if everyone can take 2-4 shifts, we can cover this with limited pain for everyone. Thanks for any help you can provide.

Jeff Temple

Liaison Team Coordinator

US Nuclear Regulatory Commission

email: lia08.hoc@nrc.gov

Desk Ph: 301-816-5185

From: LIA08 Hoc
Sent: Thursday, April 28, 2011 11:18 AM
To: Emche, Danielle
Subject: Update of Site Team Members

Categories: FOIA Forwarded

Danielle

Do you have an updated list with telephone numbers etc that will reflect the new staff enroute to Japan. We need to insure the State Department is aware of the shift changes.

Thanks

Ned Wright

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

From: LIA08 Hoc
Sent: Thursday, April 28, 2011 5:17 AM
To: CSC; Gepford, Heather
Subject: FW: Outlook Mailbox Storage

Categories: FOIA Forwarded

Good morning CSC, Please see below, thank you.

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

From: Gepford, Heather
Sent: Wednesday, April 27, 2011 9:02 PM
To: LIA08 Hoc
Subject: Outlook Mailbox Storage

Please increase the size of my mailbox.

Thanks,
Heather

From: Keith, Sam (ATSDR/DTEM/ATB) <ldk4@cdc.gov>
Sent: Thursday, April 28, 2011 7:09 AM
To: Brandon, Lou
Subject: RE: Special session on Fukushima at HPS annual meeting

This is sooooo embarrassing! Don't know why I didn't pick up on your last name earlier. Yes, let's talk.

From: Brandon, Lou [mailto:Lou.Brandon@nrc.gov]
Sent: Thursday, April 28, 2011 6:53 AM
To: Keith, Sam (ATSDR/DTEM/ATB)
Subject: RE: Special session on Fukushima at HPS annual meeting

Sam, I'm conducting the RASCAL training. Talk later today.

Lou

From: Keith, Sam (ATSDR/DTEM/ATB) [mailto:ldk4@cdc.gov]
Sent: Wednesday, April 27, 2011 5:51 PM
To: Brandon, Lou
Subject: Re: Special session on Fukushima at HPS annual meeting

That's good to know. Do you work at HQ? If so, perhaps we could meet this week. I'm working in the NRC HOC

Sam

(b)(6)

From: Brandon, Lou [mailto:Lou.Brandon@nrc.gov]
Sent: Wednesday, April 27, 2011 05:41 PM
To: Keith, Sam (ATSDR/DTEM/ATB)
Subject: RE: Special session on Fukushima at HPS annual meeting

Patricia will be available to speak generally and support other needs, I think.

From: Keith, Sam (ATSDR/DTEM/ATB) [mailto:ldk4@cdc.gov]
Sent: Wednesday, April 27, 2011 4:49 PM
To: Brandon, Lou
Subject: Re: Special session on Fukushima at HPS annual meeting

Thanks, Lou. I didn't read the thread the same way that Armin did in that it wasn't made clear whether Pat's presentation sent to Ed Maher would be placed in a general session or in the special one on Fukushima. What is your understanding?

Sam

From: Brandon, Lou [mailto:Lou.Brandon@nrc.gov]
Sent: Wednesday, April 27, 2011 04:44 PM
To: Keith, Sam (ATSDR/DTEM/ATB)

Subject: FW: Special session on Fukushima at HPS annual meeting

Sam, I messed up your email address on the 1st try.

From: Brandon, Lou
Sent: Wednesday, April 27, 2011 11:11 AM
To: 'ldk4@cdc.gov'; 'Ansari, Armin (CDC/ONDIEH/NCEH)'
Subject: FW: Special session on Fukushima at HPS annual meeting

Armin, Sam,

Looks like Patricia has this covered.

Lou

From: Milligan, Patricia
Sent: Wednesday, April 27, 2011 8:55 AM
To: Brandon, Lou; Jones, Cynthia
Cc: Grant, Jeffery; McDermott, Brian
Subject: RE: Special session on Fukushima at HPS annual meeting

I sent Ed Maher an abstract (the same presentation) from NREP at his request..

Patricia Milligan, CHP, RPh

Senior Technical Advisor for Preparedness & Response

Office of Nuclear Security and Incident Response

US NRC

MS T B46M

Washington, DC 20555

301-415-2223

Blackberry (b)(6)

From: Brandon, Lou
Sent: Wednesday, April 27, 2011 8:19 AM
To: Milligan, Patricia; Jones, Cynthia
Cc: Grant, Jeffery
Subject: FW: Special session on Fukushima at HPS annual meeting

Trish, Cyndi,

Have either of you been approached about this? If approved for travel, I could also do this. I also have an invitation to speak in MI at the same time, if approved, but would consider this a higher priority, if neither of you are available.

Lou

From: Keith, Sam (ATSDR/DTEM/ATB) [mailto:ldk4@cdc.gov]
Sent: Tuesday, April 26, 2011 9:54 PM
To: LIA08 Hoc
Cc: Ansari, Armin (CDC/ONDIEH/NCEH); Brandon, Lou; Hoc, PMT12; RST01 Hoc
Subject: RE: Special session on Fukushima at HPS annual meeting

Dear NRC Colleagues,

The request below is coming from Armin Ansari, the next President-Elect of the Health Physics Society (HPS). HPS is requesting NRC to participate in a special session on Fukushima at its upcoming June, 2011 Annual Meeting in West Palm Beach, FL. Since NRC is essentially the Lead Federal Agency for this response, having 1 or more NRC representatives contribute will enhance the event and help the health physics community clearly understand the outstanding contribution that NRC has made and continues to make to this international outreach.

Please help identify one or more colleagues who can represent NRC at this event. You might consider those from PMT, RST, ET, and NRR on each side of the Pacific and Hawaii, as well as those who have been active on the political front. I have worked with a number of your managers and staff as the CDC Liaison to NRC, and have found you all to be impressive representatives of the US Government, and would like you to have the opportunity to share your experiences and insights with those who will benefit professionally.

With the need to firm up the speaker list, I would appreciate at least tentative feedback by next Friday, May 5, 2011, even if it is to identify the individuals' positions with names to follow.

Best regards,
Sam Keith
CDC Liaison

(b)(6)

From: Ansari, Armin (CDC/ONDIEH/NCEH)
Sent: Tuesday, April 26, 2011 8:17 PM
To: 'Brandon, Lou (NRC)'; Keith, Sam (ATSDR/DTEM/ATB)
Subject: RE: Special session on Fukushima at HPS annual meeting

Lou, Sam

Sorry to bother you again, but did you get a chance to see if there is any interest to participate in this session? I think it will be a big hole in the program if there is no NRC representation.

Armin

From: Ansari, Armin (CDC/ONDIEH/NCEH)
Sent: Monday, April 25, 2011 12:38 PM
To: Brandon, Lou (NRC)
Cc: Keith, Sam (ATSDR/DTEM/ATB)
Subject: Special session on Fukushima at HPS annual meeting

Hi Lou,

I wanted to ask you if you or any other colleague at NRC would like to make a presentation at the HPS annual meeting this year. There is a special session being organized on Fukushima response, and to my knowledge, no NRC person has yet been asked or volunteered to speak at that session. Because this is short notice and the meeting is only 2 months away, we would need to know in the next few days if NRC would like to make a presentation.

It doesn't have to be anything "sensitive" just to say how many people supported the Japan government and in a bullet fashion describe what areas NRC assisted Japan and how they managed their overall response. I think it will be great to have NRC representation at that session.

Could you please confer with your NRC colleagues and let me know if there is interest. Also, if there are any questions, please let me know and I try to find the answer from HPS if I don't know it.

Thanks!

Armin

Armin Ansari, PhD, CHP
Radiation Studies Branch, EHHE, NCEH
Centers for Disease Control and Prevention; MS:F58
4770 Buford Highway NE
Atlanta, GA 30341-3717

Phone: 770-488-3654
FAX: 770-488-1539
AAnsari@cdc.gov

From: LIA08 Hoc
Sent: Wednesday, April 20, 2011 5:02 AM
To: Bowers, Anthony
Subject: FPL Hacked?

[http://www.computerworld.com/s/article/9215881/Wind power company sees no evidence of reported hack](http://www.computerworld.com/s/article/9215881/Wind_power_company_sees_no_evidence_of_reported_hack)

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

From: LIA08 Hoc
Sent: Wednesday, April 20, 2011 2:59 AM
To: (b)(6)
Subject: (b)(6) UM Bascom Palmer Van in Japan
Attachments: image001.jpg; image002.jpg



The eyes have it: The Vision Van mobile eye clinic from the University of Miami is parked at an evacuation center in Onagawa, Miyagi Prefecture, on Friday to provide free treatment. KYODO PHOTOS

Miami eye clinic van pitches in

Kyodo

ONAGAWA, Miyagi Pref. — A state-of-the-art mobile eye clinic, transported by air from Miami, began offering much-needed services Friday in the Tohoku region for people with eye diseases and ailments who had no access to care after the March 11 earthquake and tsunami.

Vision Van, a large vehicle equipped with a comprehensive examination room, three screening stations, a waiting room and advanced ophthalmic equipment, will tour the tsunami-devastated coastal communities for three months, as its owner, the University of Miami's Bascom Palmer Eye Institute, has agreed to lend it for free.

"I think these people here that I met today are really some of the most dignified people," said Richard Lee, associate professor at the institute, as specialists working in the clinic began seeing people in Onagawa, Miyagi Pref.

Lee arrived in Japan on Thursday to train Japanese doctors on how to use the self-contained eye clinic, aboard a special cargo plane that transported the 12-meter vehicle to Sendai Airport.

The airport, partially submerged by the March tsunami, resumed operations Wednesday but only for domestic flights. In light of the urgent need for the provision of eye care to tsunami victims, the plane was given special permission to land at the airport. "I was told that I was the first international passenger (since the resumption)," Lee said.

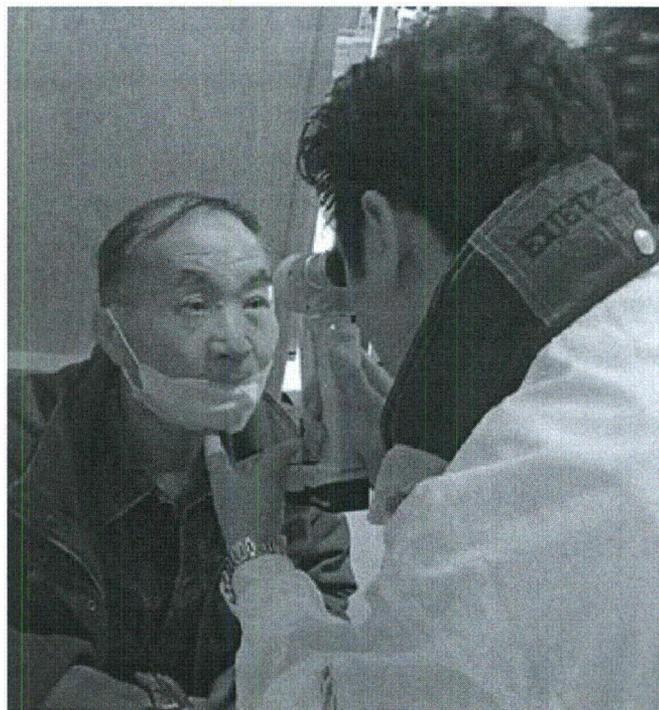
The vehicle was parked Friday afternoon in front of a gymnasium in Onagawa that has been serving as an evacuation center. During the roughly two hours it operated as an eye clinic, it received around 80 people, including those who lost their glasses in the disaster and a member of the Self-Defense Forces who hurt his eye while removing debris.

A man who received treatment Friday for glaucoma said: "This is a great help. I really appreciate it."

In addition to people who were suffering from eye diseases before the disaster, the van is expected to treat contact lens users who have developed problems with their corneas after wearing lenses for weeks without removing them in evacuation centers, eye experts said.

The van will tour evacuation centers in Iwate Prefecture from Monday through Thursday and in Miyagi Prefecture on Friday and Saturday. Doctors from Keio University, Tohoku University and Iwate Medical University are taking part in the operation, in addition to Tohoku eye doctors who lost their clinics and equipment due to the tsunami.

"I hope this small step in our help will lead to the recovery of the people in Japan," Lee said.



A doctor from Tohoku University examines a patient inside the van the same day.

The van, launched in 2004 at the University of Miami to provide early detection of eye diseases such as amblyopia, glaucoma and macular degeneration in underserved areas, was also used for the victims of Hurricane Katrina which hit Louisiana in 2005.

Milt Murray
Liaison Team Coordinator
US Nuclear Regulatory Commission
email: lia08.hoc@nrc.gov
Desk Ph: 301-816-5185

Full Name: Reid Tanaka
Last Name: Tanaka
First Name: Reid

E-mail:
E-mail Display As: Reid Tanaka

Contact Group Name:

Liaison Japan

Members:

Liaison Japan

Contact Group Name: Earthquake EXTERNAL

Members:

A Green
A Rock
Al Coons
Aleshia Duncan
alexancg
Anthony Herbold
Appleman Binkert
B Green
B Russo
Bill King
Bill King2
Bruce Howard
C Lay
C Noser
C Ops
Charles Burrows
Charles Donnell
Christopher Firman
Christopher Meadow
Conrad Burnside
D Drakeley
D May
D Murakami
D Webb
Damian Peko
Dan Feighert
Danielle Moen
Darrell Hammons
Devin Bush G LTJG RIA-Midwest MPLS.N47922

DHS Ops
DOE NIT
DOT
DTRA
DTRA
Dudek
E Wright
Elmer Naples
EOP
EPA
EPA2
Eric Sinibaldi
F Lewis
G Szeto
G Whitmire
George Higdon
gregopk
Gregory Simonson
Gretchen McCoy
H
Harry Sherwood

(b)(6)

albert.coons@dhs.gov
Aleshia.Duncan@nuclear.energy.gov
alexancg@dni.gov

(b)(6)

william.king@dhs.gov
weklbk@sbcglobal.net
HowardEB@state.gov

(b)(6)

opsctrsdogroup@ucia.gov

(b)(6)

conrad.burnside@dhs.gov

(b)(6)

dave.webb@dhs.gov
Damian.Peko@nuclear.energy.gov
dan.feighert@dhs.gov

(b)(6)
darrell.hammons@dhs.gov

(b)(6)

ops.cat@dhs.gov
nitops@nnsa.doe.gov
cmc-01@dot.gov

(b)(6)

veal.lee@epa.gov
poppell.sam@epa.gov

(b)(6)

georgsh@dni.gov
gregopk@ucia.gov

(b)(6)

mccoyga3@state.gov
haydenco@ucia.gov
harry.sherwood@dhs.gov

HHS
I Clark
Intel DIA
J Barnes
J Bartlett
J Moeller
J Noonkester
J Szymanski
J Tippets
James Purvis
Jason CIA
Jason Pepin
Jeremy Demott
Jeremy Morrow
Jeremyft1
Jim Kish
Johanna Berkey
John Holdren
Joyce Connery
K Donald
K Gonzalez
K Ousley
Karyn Keller
Kyle Viayra
L Mayer
Lee Nickel
Lisa
Lisa Hammond
Lukas McMichael
M Huchla
M Kerber
M Lansley
M Thon
M Thon2
maceck
MARFORPAC CAT All Hazards Div
MARFORPAC CAT G2
Mark Shaffer
markwb2
Marshall Shull
Michelle Ralston
Nan Calhoun
Navy
NICC
NMIC
NOC
NOC Duty Director
Nuclear SSA
P Gardner
pentagon
Peter Lyons
Phillip Barks
R Roesler

hhs.soc@hhs.gov

(b)(6)

james.purvis@dhs.gov
jasondh@ucia.gov

(b)(6)

jeremyft1@dni.gov
james.kish@dhs.gov
johanna.berkey@dhs.gov

(b)(6)
joyce.connery@hq.doe.gov

(b)(6)

lisam@ucia.gov
lisa.hammond@dhs.gov

(b)(6)

maceck@state.gov

(b)(6)

shaffermr@state.gov
markwb2@dni.gov

(b)(6)

michelle.ralston@dhs.gov
nan.calhoun@dhs.gov

(b)(6)
NICC@hq.dhs.gov

(b)(6)

noc.swo.restricted@dhs.gov
noc.ndd@hq.dhs.gov
nuclearssa@hq.dhs.gov
patricia.gardner@dhs.gov

(b)(6)

peter.lyons@hq.doe.gov

(b)(6)

R Schueneman
Rebecca Thomson
roberhh
Ron Cherry
Ron McCabe
S Buntman
S Levy
scotc1
Seamus O'Boyle
seiden
state
Stephen Trautman
Steve Colman
Steve Horwitz
T Roberts
Thomas Conran
Thomas Zerr
Tim Greten
Timothy Hitzelberger
Trent Hughes
Troy Heytens
USDA, John
USMC
Vanessa Quinn
Victoria Kinsey
W Cluff
W Young
Will Friese
William Webb

(b)(6)

rebecca.thomson@dhs.gov
roberhh@ucia.gov
cherryrc@state.gov
ron.mccabe@dhs.gov
steven.buntman@nnsa.doe.gov
samuelhl@dni.gov
scotc1@dni.gov
seamus.o'boyle@dhs.gov
seidenMD@state.gov
taskforce-1@state.gov

(b)(6)

steve.colman@dhs.gov
steve.horwitz@dhs.gov

(b)(6)

timothy.greten@dhs.gov

(b)(6)

opscenter@dm.usda.gov

(b)(6)

vanessa.quinn@dhs.gov

(b)(6)

warren.t.cluff@cbp.dhs.gov

(b)(6)

william.webb@dhs.gov

Full Name: Julie A Bentz
Last Name: Bentz
First Name: Julie
Job Title: Director for Nuclear Defense Policy
Company: National Security Staff

COL(P) Julie A Bentz
Director for Nuclear Defense Policy
National Security Staff
EEOB 379
1650 Pennsylvania Ave NW
Washington DC 20502

(b)(6)

Subject: GTCC Public Meeting
Start: Wed 5/25/2011 12:00 PM
End: Wed 5/25/2011 4:00 PM
Recurrence: (none)
Organizer: LIA08 Hoc

From: LIA08 Hoc
Sent: Tuesday, April 05, 2011 4:29 PM
To: [redacted] (b)(6)
Subject: [redacted] (b)(6)
Attachments: image001.jpg; image002.jpg; image003.gif; image004.gif

McDougal Newsletter

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Contact Group Name:

Consortium

Members:

Aaron Leong	(b)(6)
Al Hochevar	'hochevarar@inpo.org'
Aleshia Duncan	DuncanAD@state.gov
Alice Caponiti	Alice.caponiti@hq.doe.gov
Blake Crowe	(b)(6)
Blamey, Alan (Alan.Blamey@nrc.gov)	Alan.Blamey@nrc.gov
Brian Wittick	brian.wittick@nrc.gov
Bruce Boger	Bruce.Boger@nrc.gov
Bruce Howard	HowardEB@state.gov
CAPT Kenneth Spurlock, USN	(b)(6)
Casto, Chuck (Chuck.Casto@nrc.gov)	Chuck.Casto@nrc.gov
Christensen, Harold (Harold.Christensen@nrc.gov)	Harold.Christensen@nrc.gov
Christopher Green	GreenCL2@state.gov
Claire Berger	BergerMC@state.gov
Craig Gaddis	(b)(6)
Daniel Piccuta	Piccuta@state.gov
Daniel Piccuta	(b)(6)
Daniel Russel	(b)(6)
Devin Bush G LTJG RIA-Midwest MPLS, N47922	(b)(6)
DORLCAL Resource (DORLCAL.Resource@nrc.gov)	DORLCAL.Resource@nrc.gov
Dorman, Dan (Dan.Dorman@nrc.gov)	Dan.Dorman@nrc.gov
DprNrrCal Resource (DprNrrCal.Resource@nrc.gov)	DprNrrCal.Resource@nrc.gov
Emche, Danielle (Danielle.Emche@nrc.gov)	Danielle.Emche@nrc.gov
Eric Stahl	eric.stahl@nrc.gov
FOIA Response	FOIAResponse.hoc@nrc.gov
Geoffrey Wiggin	Geoffrey.Wiggin@fas.usda.gov
Giitter, Joseph (Joseph.Giitter@nrc.gov)	Joseph.Giitter@nrc.gov
Glenn Southern	(b)(6)
Heather Dresser	DresserHL@state.gov
HOO Hoc (HOO.Hoc@nrc.gov)	HOO.Hoc@nrc.gov
INPO	addyrj@inpo.org
INPO	bramblettjw@inpo.org
INPO	maddoxje@inpo.org
INPO	inpoercassistance@inpo.org
INPO	tropassort@inpo.org
INPO	lynchje@inpo.org
INPO	seguingc@inpo.org
James McKenna	(b)(6)
James White	TDYWhiteJR@state.gov
James Zumwalt	ZumwaltJP@state.gov
Jay Tilden	Jay.Tilden@nnsa.doe.gov
Jeffrey Bader	(b)(6)
Jeffrey Miller	Jeffrey.miller@pnl.gov
Jeremy Mears	MearsJM@state.gov
John Peters	john.peters@trade.gov

Joseph Donovan
Joseph Young
Justin Cooper
Kenneth R. Spurlock
Lee Gard
LIA08 Hoc (LIA08.Hoc@nrc.gov)
Marc M Wall
McDermott, Brian (Brian.McDermott@nrc.gov)

McGinty, Tim (Tim.McGinty@nrc.gov)
Michael Schiffer
Miller, Chris (Chris.Miller@nrc.gov)
Monninger, John (John.Monninger@nrc.gov)

Morris, Scott (Scott.Morris@nrc.gov)
NRC Liaison at USAID
OST02 HOC (OST02.HOC@nrc.gov)
PACOM Watch Officer
Pentagon Japan Crisis Team J-4 Desk
Peter Lyons
PMT12
Raymond Greene
Richard Webb
Rick Nielsen
Robert Gambone
Robert Luke
Robert Mercer
Ron Cherry
Ross-Lee, MaryJane (MaryJane.Ross-Lee@nrc.gov)

RST01 Hoc (RST01.Hoc@nrc.gov)
RST01B Hoc (RST01B.Hoc@nrc.gov)
Russell Morales
Rust Deming
Sal Golub
Sal Golub
Simon Schuchat
Stephen Town
Steve Aoki
Suzanne Basalla
Tim Cipullo
Tom Vavoso
US Forces Japan J4
Vincent Holahan
Virgilio, Martin (Martin.Virgilio@nrc.gov)

Weber, Michael (Michael.Weber@nrc.gov)

Wiggins, Jim (Jim.Wiggins@nrc.gov)
William Berger
William Webster
Zimmerman, Roy (Roy.Zimmerman@nrc.gov)

DonovanJR@state.gov
YoungJM@state.gov
CooperJD@state.gov
TDYSpurlockKR@state.gov
GardLA@INPO.org
LIA08.Hoc@nrc.gov
WallMM@state.gov

Brian.McDermott@nrc.gov
Tim.McGinty@nrc.gov
(b)(6)
Chris.Miller@nrc.gov

John.Monninger@nrc.gov
Scott.Morris@nrc.gov
RMTFACTSU_ELNRC@ofda.gov
OST02.HOC@nrc.gov

(b)(6)
peter.lyons@nuclear.energy.gov
PMT12.hoc@nrc.gov
GreeneRF2@state.gov
(b)(6)
NielsenFM@INPO.org
GamboneRL@INPO.org
LukeRS@state.gov
(b)(6)
CherryRC@state.gov

MaryJane.Ross-Lee@nrc.gov
RST01.Hoc@nrc.gov
RST01B.Hoc@nrc.gov
MoralesRA@state.gov
DemingRM@state.gov
sal.golub@nuclear.energy.gov
sal.golub@hq.doe.gov
SchuchatSJ@state.gov

(b)(6)
steven.aoki@nnsa.doe.gov
BasallaSI@state.gov
Cipullotl@state.gov

(b)(6)
Vincent.Holahan@nrc.gov

Martin.Virgilio@nrc.gov

Michael.Weber@nrc.gov
Jim.Wiggins@nrc.gov
wberger@usaid.gov
Websterwe@inpo.org

Roy.Zimmerman@nrc.gov

Contact Group Name: Earthquake EXTERNAL 2

Members:

- A Aviles
- A Brown
- A Estes
- A Hough
- A Tribble
- B goldberg
- B Moffat
- B Perry
- B Woo
- Beavers, Shane
- Brinser, Andrew
- Brooks, Andrae
- Brown, Michael
- C Fiore
- C Good
- C Kim
- Carlos Islas
- Christopher Firman
- CPF CATN5
- Craig Gaddis
- D Fletcher
- D Putthoff
- D Scully
- D Smith
- D Souza
- D Wade
- D Williams
- Danielle Moen
- David Graves
- DOE DART
- E Fiser
- E kaye
- E Price
- E Shelland
- E Train
- Elder, Troy M SGT MIL USA USARPAC
- Eric Wright
- F Bantell
- Floyd Lewis
- Fossum, Sgt Zachary
- Guathier, Ronald
- H Zito
- Hickam
- Hickam
- J Blankenburg
- J Kreykes
- J McCallister
- J Rhodes
- J Rivera
- J Scarbrough
- J Soderbeck

(b)(6)

GoldbergBR@state.gov

(b)(6)

michael.brown@nrc.gov

craig.fiore@dhs.gov

(b)(6)

chris.kim@dhs.gov

(b)(6)

DARTDOELiaison1@ofda.gov

(b)(6)

Ekaye@cpsc.gov

(b)(6)

Jon.Kreykes@in.doe.gov

(b)(6)

J Stewart
J Trussler
James Williams
JR Haley
JTF505-MAIN-JOC-J2
JTF505-MAIN-JOC-J2-INTEL-ANAY
K Bollow
K Bollow
K Tomlinson
Koluch, SSgt Eric
L Bolling
L Elkins
L Heinrich
L Walter
Laurel Steinhurst
Lay, Christopher
M Howsare
M Kabbur
M Nguyen
M Opfer
M Taafe
M Thon
Marina Llewellyn
Mark Russo
Michael Anderson
Micheael Eberlein
Monaghan, Dylan
N Albritton
N Albritton
NCMI Ops
Office of Secretary of Defense Watch Officer

Olson, Niels
OST01 (for uploading to sharepoint)
P Almquist
P Higginbotham
P Higgins
P Lyons
P Somboonpakron
PACOM
Pasit Sombookpakron
Powers, Jeffrey
R Backley
R Fisher
R Garrett
R Neff
R Stephenson
R Tashma
Reid Tanaka
Richard, Sgt William
Robert Duke
Robert P
RST01 Hoc

(b)(6)

James.Williams@dot.gov

(b)(6)

lloyd.bolling@dhs.gov

(b)(6)

HeinrichLW@state.gov

(b)(6)

(b)(6)

mhoware@cpsc.gov

(b)(6)

Mark.Russo@fda.hhs.gov

(b)(6)

(b)(6)

ost01.hoc@nrc.gov

AlmquistPB@state.gov

(b)(6)

Paul.Higgins@in.doe.gov

peter.lyons@nuclear.energy.gov

(b)(6)

roberbp@ucia.gov

RST01.Hoc@nrc.gov

RST01B Hoc
RST03 Hoc
S Aoki
S Jerabek
Shirey, Sgt Eric
Simmers, Keith
Spencer Nordgran
Spurlock, Kenneth
Stephen Greco
T Lowman
T Miller
T True
Thomas Vavoso
Tovar, SSgt Eric

(b)(6)

USFJ
USFJ Intel
V Raphael
Valerie Makino
Vaughn, Sgt Jerrod
Walter Hokett
Wanda Ayuso
William Brysacz

RST01B.Hoc@nrc.gov
RST03.Hoc@nrc.gov
steven.aoki@nnsa.doe.gov

(b)(6)

RaphaelVG@state.gov

(b)(6)

Contact Group Name:

Go Book Group

Members:

Batkin, Joshua	Joshua.Batkin@nrc.gov
Borchardt, Bill	Bill.Borchardt@nrc.gov
Bradford, Anna	anna.bradford@nrc.gov
Coggins, Angela	Angela.Coggins@nrc.gov
Cohen, Shari	Shari.Cohen@nrc.gov
Collins, Elmo	Elmo.Collins@nrc.gov
Cooper, LaToya	LaToya.Cooper@nrc.gov
ET07 Hoc	ET07.Hoc@nrc.gov
Flory, Shirley	Shirley.Flory@nrc.gov
Gibbs, Catina	Catina.Gibbs@nrc.gov
Haney, Catherine	Catherine.Haney@nrc.gov
Hudson, Sharon	Sharon.Hudson@nrc.gov
Jaczko, Gregory	Gregory.Jaczko@nrc.gov
Jim Dyer	Jim.Dyer@nrc.gov
Johnson, Michael	Michael.Johnson@nrc.gov
Leeds, Eric	Eric.Leeds@nrc.gov
Loyd, Susan	Susan.Loyd@nrc.gov
Monninger, John	John.Monninger@nrc.gov
Pace, Patti	Patti.Pace@nrc.gov
Schwarz, Sherry	Sherry.Schwarz@nrc.gov
Sheron, Brian	Brian.Sheron@nrc.gov
Speiser, Herald	Herald.Speiser@nrc.gov
Sprogeris, Patricia	Patricia.Sprogeris@nrc.gov
Taylor, Renee	renee.taylor@nrc.gov
Virgilio, Martin	Martin.Virgilio@nrc.gov
Walker, Dwight	Dwight.Walker@nrc.gov
Walls, Lorena	Lorena.Walls@nrc.gov
Weber, Michael	Michael.Weber@nrc.gov

From: LIA09 Hoc
Sent: Sunday, April 10, 2011 1:56 PM
To: LIA08 Hoc
Subject: FW: test lia09

Liaison Team
NRC Operations Center

From: LIA01 Hoc
Sent: Sunday, April 10, 2011 1:56 PM
To: LIA09 Hoc
Subject: test lia09

From: OST02 HOC
Sent: Tuesday, March 29, 2011 1:15 PM
To: LIA09 Hoc
Subject: FW: Maps for your review

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Tuesday, March 29, 2011 1:13 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Maps for your review

From: NITOPS[SMTP:NITOPS@NNSA.DOE.GOV]
Sent: Tuesday, March 29, 2011 1:13:07 PM
To: DL-Policy Working Group; CMHT; HOO Hoc; 'NARAC'
Cc: NITOPS
Subject: FW: Maps for your review
Auto forwarded by a Rule

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration
U.S. Department of Energy
nitops@nnsa.doe.gov
nit@doe.gov
202-586-8100

From: David L Saghy [mailto:dsaghy@usgs.gov]
Sent: Tuesday, March 29, 2011 12:43 PM
To: Szymanski, John
Cc: Stephen E Hammond; NITOPS
Subject: RE: Maps for your review

Dr. Szymanski:

Please click or copy the link below for a zipped file containing the five maps without the vegetation data.

<ftp://ftpext.usgs.gov/pub/nonvisible/other/Japan Radiation and Food Contamination Maps for Milk.zip>

v/r,
Dave

David L. Saghy
Senior Geospatial Analyst

Emergency Operations
National Geospatial Program
US Geological Survey

Ph: 703.648.7588

Ph: 703.648.5954

BB: (b)(6)

Email: dsaghy@usgs.gov

From: "Szymanski, John" (b)(6)

To: 'David L Saghy' <dsaghy@usgs.gov>

Date: 03/28/2011 08:15 PM

Subject: RE: Maps for your review

David:

Can you reproduce these plots, this time removing the information about the vegetation data?

Thanks, John

From: David L Saghy [<mailto:dsaghy@usgs.gov>]

Sent: Saturday, March 26, 2011 2:48 PM

To: Szymanski, John

Cc: Stephen E Hammond; NITOPS

Subject: RE: Maps for your review

As requested.

v/r,
Dave

David L. Saghy
Senior Geospatial Analyst
Emergency Operations
National Geospatial Program
US Geological Survey

Ph: 703.648.7588

Ph: 703.648.5954

BB: (b)(6)

Email: dsaghy@usgs.gov

From: "Szymanski, John" (b)(6)

To: David L Saghy <dsaghy@usgs.gov>

Cc: Stephen E Hammond <sehammon@usgs.gov>

Date: 03/26/2011 01:10 PM

Subject: RE: Maps for your review

Thanks, David.

Another task request:

The attached file has some data taken for radiation deposition (page 6). Could you please provide two images with the March 23-24 results – one for I-131 and another for Cs-127? I'd just like to get a general feel for the deposition as a function of location.

Thanks, John

From: David L Saghy [mailto:dsaghy@usgs.gov]
Sent: Saturday, March 26, 2011 1:03 PM
To: Szymanski, John
Cc: NITOPS; Stephen E Hammond
Subject: RE: Maps for your review

Sorry for the additional email....slight correction to the attached graphic.

My sincere apologies.

David L. Saghy
Senior Geospatial Analyst
Emergency Operations
National Geospatial Program
US Geological Survey

Ph: 703.648.7588

Ph: 703.648.5954

BB: (b)(6)

Email: dsaghy@usgs.gov

From: "Szymanski, John" <(b)(6)>
To: David L Saghy <dsaghy@usgs.gov>
Cc: Stephen E Hammond <sehammon@usgs.gov>, NITOPS <NITOPS@nnsa.doe.gov>
Date: 03/26/2011 11:58 AM
Subject: RE: Maps for your review

Dave and Steve:

The units on the vegetable contamination are Bq/Kg.

The plots look great. I'm going to show them to Dr. Holdren,

(b)(5)

(b)(5)

Can you provide a similar product for the ground-radiation measurements, if that image is available from NITOPS?

(Thanks Dave Hoagland)

Thanks, John

From: David L Saghy [<mailto:dsaghy@usgs.gov>]
Sent: Saturday, March 26, 2011 8:51 AM
To: Szymanski, John
Cc: Stephen E Hammond; NITOPS
Subject: Maps for your review

Dr. Szymanski:

Please find attached a set of DRAFT maps for your review. One thing pointed out by the folks at NITOPS is the absence of a unit of measure for the level of radionuclides. If you could please provide this information, we will update the map legend accordingly.

Thank you very much, and have a great weekend.

v/r,
Dave

David L. Saghy
Senior Geospatial Analyst
Emergency Operations
National Geospatial Program
US Geological Survey

Ph: 703.648.7588

Ph: 703.648.5954

BB: (b)(6)

Email: dsaghy@usgs.gov [attachment "Letter_-_Summary_of_reactor_unit_status_at_25-March_0500.UTC.PDF" deleted by David L Saghy/GEOG/USGS/DOI]

From: OST01 HOC
Sent: Sunday, March 27, 2011 11:06 AM
To: LIA09 Hoc
Cc: FOIA Response.hoc Resource
Attachments: FW: IAEA distributed documents; FW: IAEA distributed documents

From: OST01 HOC
Sent: Sunday, March 27, 2011 10:41 AM
To: LIA09 Hoc
Cc: FOIA Response.hoc Resource
Attachments: FW: IAEA distributed documents; FW: IAEA distributed documents; FW: IAEA distributed documents

From: OST02 HOC
Sent: Saturday, March 26, 2011 3:07 PM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: IAEA distributed documents
Attachments: NISA_METI_News_Release_No53_(Japanese).pdf;
Correction_of_error_of_dose_rate_unit(NISA_report_51,_52; Monitoring_data_the_20-30km_zone_around_Fukushima_site_March_25_(JP).pdf;
Survey_result_of_the_water_in_Turbine_building.pdf;
Survey_result_of_exposed_workers.pdf; NISA-METI_press_release_51_(English)_monitoring.pdf; Letter_-_Summary_of_reactor_unit_status_at_25-March_01800_UTC.pdf; SeaAreaMonitoringEnglish0325_rev1.pdf

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Saturday, March 26, 2011 2:53 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: NITOPS[SMTP:NITOPS@NNSA.DOE.GOV]
Sent: Saturday, March 26, 2011 2:52:47 PM
To: CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Subject: FW: IAEA distributed documents
Auto forwarded by a Rule

From: Craig Jackson [mailto:jacksonc@oem.doe.gov] **On Behalf Of** DOE HQ EOC
Sent: Saturday, March 26, 2011 2:49 PM
To: Aoki, Steven; Bowman, David; NITOPS; Poneman, Daniel; Krol, Joseph; Pavetto, Carl; Mustin, Tracy; Miller, Neile; Wilber, Deborah
Cc: 'wtchofc@oem.doe.gov'
Subject: FW: IAEA distributed documents

FYI,

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

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Saturday, March 26, 2011 2:04 PM
To: Kenagy, W David; vince.mcclelland@nnsa.doe.gov; veronica.rodriguez@nrc.gov; ann.heinrich@nnsa.doe.gov; hoo1@nrc.gov; hoo2@nrc.gov; wch@nrc.gov; decair.sara@epamail.epa.gov; timothy.greten@DHS.GOV; maria.marinissen@hhs.gov; (b)(6) doehqoc@oem.doe.gov; hhs.soc@hhs.gov; james.kish@DHS.GOV; hoo.hoc@nrc.gov; brooke.smith@nrc.gov; Zubarev, Jill E; Shaffer, Mark R; nitops@nnsa.doe.gov; Skypek, Thomas M; (b)(6); clark.ray@epamail.epa.gov; Stern, Warren
Subject: RE: IAEA distributed documents

Attachment Correction_of_error_of_dose_rate_unit(NISA_report_51,_
52(60899 bytes) cannot be converted to PDF format.

From: OST02 HOC
Sent: Saturday, March 26, 2011 3:07 PM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: IAEA distributed documents
Attachments: Plant_Parameter_Data.pdf

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Saturday, March 26, 2011 2:52 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: NITOPS [SMTP:NITOPS@NNSA.DOE.GOV]
Sent: Saturday, March 26, 2011 2:52:24 PM
To: CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Subject: FW: IAEA distributed documents
Auto forwarded by a Rule

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Saturday, March 26, 2011 2:33 PM
To: Kenagy, W David; McClelland, Vince; veronica.rodriquez@nrc.gov; Heinrich, Ann; hoo1@nrc.gov; hoo2@nrc.gov; wch@nrc.gov; decair,sara@epamail.epa.gov; timothy.greten@dhs.gov; maria.marinissen@hhs.gov; (b)(6); DOE HQ EOC; hhs.soc@hhs.gov; james.kish@dhs.gov; hoo.hoc@nrc.gov; brooke.smith@nrc.gov; Zubarev, Jill; Shaffer, Mark R; NITOPS; Skypek, Thomas M; (b)(6); clark.ray@epamail.epa.gov; Stern, Warren
Subject: RE: IAEA distributed documents

<http://www.nisa.meti.go.jp/english/index.html>

<http://www.mhlw.go.jp/english/index.html>

http://www.mext.go.jp/english/radioactivity_level/detail/1303986.htm

http://www.mext.go.jp/english/radioactivity_level/detail/1303962.htm

<http://www.jma.go.jp/jma/jma-eng/jma-center/rsmc-hp-pubeg/>

<http://www.jfa.maff.go.jp/j/kakou/kensa/index.html>

福島第一原子力発電所 プラント関連パラメータ

3月26日 14:00 現在

号機	1u	2u	3u	4u	5u	6u
注水状況	給水ポンプを用いた淡水注入中。 流量 120l/min (3/25 15:37) 仮設計番	消火系ポンプを用いた淡水注入中。 流量 310l/min (3/26 10:10) 仮設計番	消火系ポンプを用いた淡水注入中。 流量 230l/min (3/26 07:00) 仮設計番	停止中	停止中	停止中
原子炉水位	燃料域A: -1650mm 燃料域B: -1600mm (3/26 13:00 現在)	燃料域A: -1200mm (3/26 13:00 現在)	燃料域A: -1850mm 燃料域B: -2300mm (3/26 11:15 現在)	-	停止域 2123mm (3/26 14:00 現在)	停止域 2094mm (3/26 14:00 現在)
原子炉圧力	0.351MPa g (A) 0.380MPa g (B) (3/26 13:00 現在)	-0.027MPa g (A) -0.027MPa g (B) (3/26 13:00 現在)	0.038MPa g (A) -0.101MPa g (C) (3/26 11:15 現在)	-	0.007MPa g (3/26 14:00 現在)	0.003MPa g (3/26 14:00 現在)
原子炉水温度	-	-	-	-	43.8℃ (3/26 14:00 現在)	21.3℃ (3/26 14:00 現在)
原子炉圧力容器温度	給水ノズル温度: 212.3℃ 圧力容器下部温度: 146.9℃ (3/26 13:00 現在)	給水ノズル温度: 107℃ 圧力容器下部温度: 99℃ (3/26 13:00 現在)	給水ノズル温度: 33.7℃(異常中) 圧力容器下部温度: 100.4℃ (3/26 11:15 現在)	4u: 原子炉内に発熱体(燃料)なし 5,6u: 原子炉水温度にて監視中		
D/W・S/C圧力	D/W 0.275MPa abs S/C 0.275MPa abs (3/26 13:00 現在)	D/W 0.110MPa abs S/C ダウンスケール (3/26 13:00 現在)	D/W 0.1068MPa abs S/C 0.1836MPa abs (3/26 11:15 現在)	-		
CAMS	D/W 3.54×10 ⁴ Sv/h S/C 2.34×10 ⁴ Sv/h (3/26 13:00 現在)	D/W 4.32×10 ⁴ Sv/h S/C 1.48×10 ⁴ Sv/h (3/26 13:00 現在)	D/W 3.61×10 ⁴ Sv/h S/C 1.40×10 ⁴ Sv/h (3/26 11:15 現在)	-		
D/W 監視使用圧力	0.384MPa g (0.485MPa abs)	0.384MPa g (0.485MPa abs)	0.384MPa g (0.485MPa abs)	-		
D/W 監視使用圧力	0.427MPa g (0.528MPa abs)	0.427MPa g (0.528MPa abs)	0.427MPa g (0.528MPa abs)	-		
使用済燃料プール	-	57℃ (3/26 13:00 現在)	-	指示不良 (3/24 11:00)	42.8℃ (3/26 14:00 現在)	30.0℃ (3/26 14:00 現在)
FPC水位	-	5950mm (フロ-中) (3/26 13:00 現在)	-	5850mm (3/26 11:15 現在)	-	
電源	外部電源受電中 (P/C2C)		外部電源受電中 (P/C4D)		外部電源受電中	
その他情報	3号機 原子炉圧力容器温度について、データ採取を行い、状況推移を継続調査中。			共用プール: 46℃程度 (3/26 08:30)		

圧力換算 ゲージ圧(MPa g) = 絶対圧(MPa abs) - 大気圧(標準大気圧 0.1013 MPa)
 絶対圧(MPa abs) = ゲージ圧(MPa g) + 大気圧(標準大気圧 0.1013 MPa)

From: OST02 HOC
Sent: Thursday, March 24, 2011 7:47 PM
To: LIA09 Hoc; LIA08 Hoc
Subject: FW: Fax from 81355105111
Attachments: File1.PDF

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

From: HOO Hoc
Sent: Thursday, March 24, 2011 7:39 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Fax from 81355105111

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

From: hoo1 [mailto:hoo1.hoc@nrc.gov]
Sent: Thursday, March 24, 2011 7:29 PM
To: HOO Hoc
Subject: Fax from 81355105111

RECEIVE NOTIFICATION FOR JOB 00017837

Notice for: HOO1

Remote ID: 81355105111

Received at: 03/24/2011 19:28

Pages: 4

Routed by:

Routed at: 03/24/2011 19:28

1～3号炉心の冷却方法の検討について(案)

平成 23 年 3 月 23 日

合同対策チーム

1. はじめに

1～3号炉について、消防ポンプにより海水注入を継続して行うことによって冷却性を保持しているところであるが、格納容器ドライベントまで水位が上昇し、ベント口を閉塞すると外部注水が不能となる。その限度は、プラントメーカーによれば2号炉、3号炉が最も早く、3月25日と予想されている。

また、炉心損傷により水の放射線分解が促進され、格納容器、圧力容器ともに水素爆発を誘引する懸念があることから、注意する必要がある。

このため、電源復旧による既存の海水ポンプ、残留熱除去系などの冷却設備を活用して冷却する方法を基本としながらも、地震及び津波による影響を踏まえ、代替冷却手法を速やかに検討し、所要の対策を速やかに行い、冷温停止状態に移行させる必要がある。

2. 基本方針

- ① 水位を管理して、格納容器ベントを閉塞しない範囲で外部から注水して冷却する。
- ② 注水を海水から淡水へ速やかに変更する。
- ③ 常に水素爆発について注意を払う。その一環として、格納容器内の雰囲気の水素爆発しない窒素に置換する。
- ④ 水位が格納容器ベントを超える前に注水を停止し、沸騰による潜熱による冷却を行う。蒸気はベント口から放出し、蒸発した水は外部から給水する「Feed and Breed」で当座をしのぐ。
- ⑤ 追加の代替冷却方法として、格納容器上部の給水による冷却、換気空調系による冷却を検討する。
- ⑥ RHR 復旧まで、既存の配管を活用して内部循環配管を設置し、代替ヒートシンクによる冷却を行う。
- ⑦ 作業の計画に当たっては、環境への放射能低減、従業員被ばく量の低減、作業効率性を考慮する。

3. 準備作業

3.1. 概略計画の策定

冷温停止までの全体プロセスを明確にするとともに、個別プロセスの期限、当該プロセスの責任者を決定する。

工程	～3月26日	～3月末	～4月	4月以降
計画策定				
外部注水の継続				
水位監視				
Feed and Breed への切替				
海水注水				
淡水への切替				
窒素ローリー手配				
窒素置換				
資材調達				
各種検討				
C/V 耐衝撃圧耐力				
炉水放射線強度				
代替冷却法の検討				
放射線強度マップ				
RHR, 海水系ポンプの復旧				▼

3.2. 資材調達

RHR が使用できないことを前提に、代替冷却のための資材調達計画を策定する。

- ① 気化器付窒素タンクローリー仕様の明確化及び手配 (TEPCO/NISA)
- ② 仮設海水ポンプ 3 台 (TEPCO)
- ③ 代替冷却配管 (TEPCO)
- ④ 熱交換器 (TEPCO)
- ⑤ 一次遮蔽等放射線防護対策 (TEPCO)

3.3. 検討事項

- ① 格納容器の耐衝撃圧耐力 (プラントメーカー)
- ② 水素爆発対策手順書の作成 (プラントメーカー)
- ③ 格納容器、炉水の放射線強度の評価 (NISA/JNES)
- ④ 原子炉建屋内放射線強度マップの作成 (TEPCO)

4. 注意事項

4.1. 水素爆発の危険性の回避

炉心はスクラムしたが、炉心損傷により、水の放射線分解が加速し、解析結果によれば、現時点では、1号炉で1200kg/h、2、3号炉で1700kg/hの水素が発生していると推定される。また、海水中の溶存酸素の析出により、現在の格納容器内は、水素、酸素、水蒸気の3相となっていることが考えられる。このため、高温時は水蒸気分圧が高く、水素爆発の懸念は低くなるが、温度低下により水蒸気分圧が下がると、水素爆発の危険性が高くなる。

現在、1号炉の格納容器下部で300℃となっている。この状態で不用意にベントを行うと爆発を起こす懸念が生じるため、注意を要する。

上記のとおり、格納容器内に水素、酸素の占める割合が高い状況であることから、不活性ガスとして使用される窒素で置換することが必要である。

いずれにせよ、水素爆発対策手順書をあらかじめ作成し、関係者に周知させることが必須となる。

(1) サプレッションチェンパでの燃焼

サプレッションチェンパ内での水素燃焼リスクはあるため注意を要する。万一水素燃焼が発生し、サプレッションチェンパが破損しても原子炉建屋におけるプールスクラビングが期待できる。

(2) ドライウエルでの燃焼

ドライウエルベントを行っていることから回避されるものと考えられるが注意を要する。しかしながら、格納容器スプレイ等による上部からの雰囲気冷却すると酸素濃度が上昇し、燃焼のリスクが高まるためこうした冷却方法は行うべきではない。(水蒸気濃度が5%以下となると燃焼のリスクがある。)

(3) 建屋内での燃焼

建屋側壁が解放されていることから、リスクは低いものと考えられるが、注意を要する。

4.2. 水蒸気爆発のリスク

TMI 事故のときのように、圧力容器内に溶融プールが保持されていた場合、これがドライウエル中の海水へ流下し、水蒸気爆発を引き起こす可能性がある。

ただし、圧力容器下部鏡板内外には制御棒駆動や炉内計装配管などの構造物が多数存在することから、溶融した燃料は緩慢かつ分散した流下となることが考えられ、水蒸気爆発のリスクは低いものと考えられる。

4.3. 塩析出による冷却性阻害のリスク

沸騰による塩分濃縮により、塩分が析出し、炉心下部に析出すると冷却性を阻害する。これまでの冷却履歴を考慮すると、崩壊熱を上回る注水を行っているので、炉内での濃縮は少ないものと考えられるが、この点は、注意を要する。

4.4. ベント作業における周辺への影響について

すべての交流電源がなくなり、放射性物質の放出を想定した解析のケースでは、敷地境界で、約 34mSv/hr となり、8.5km 離れた地点で、約 3mSv/hr となる

現状の事故と比較した場合、事故後 9 日間が経っていることにより、半減期の短い核種は急激に減衰している。また、圧力抑制室からの放出が断続的に行われ、揮発性の放射性物質はほとんど放出されている。

現状において、格納容器から放出されても、上記の 1 / 10 以下の敷地境界で約 3.4mSv/hr、8.5km 地点で約 0.3mSv/hr と考えられる。

上記の計算は、16 方位の内の最大値を拾っているので、管理放出をするベントの場合、風向きを考えると、方位によっては、ほとんど影響がないと考えられる。(特に遠距離の場合)

From: OST02 HOC
Sent: Thursday, March 24, 2011 3:44 PM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: IAEA distributed documents
Attachments: Plant_Parameter_1800_23March.pdf; Photos_Fukushima_Daiichi_J.pdf;
NISA_MEXT_News_Release_No46_(japanese).pdf; Plant_parameter(japanese).pdf;
Plant_Environmetal_Monitoring_data(Japanese)_2011_03_23.pdf;
Plant_status_(japanese).pdf; NISA_METI_Press_Release__45_(Japanese).pdf;
Letter_-_Summary_of_reactor_unit_status_at_1600_23-March.UTC.pdf

From: HOO Hoc
Sent: Thursday, March 24, 2011 9:19 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: NITOPS [mailto:NITOPS@nnsa.doe.gov]
Sent: Thursday, March 24, 2011 9:17 AM
To: DL-Policy Working Group; Blumenthal, Daniel; Brown, Courtney M (NST); Buntman, Steven;
dartdoeliasion1@ofda.gov; dblumenthal@ofda.gov; Debbie Wilber; DOE LNO to USAID; Froh, William; Haley, Billy;
McClelland, Vince; Johnson, Steven; Thompson, Roger (NEV); [redacted (b)(6)]; Wilber, Deborah; CMHT; HOO Hoc;
NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Subject: FW: IAEA distributed documents

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Thursday, March 24, 2011 9:00 AM
To: Kenagy, W David; McClelland, Vince; veronica.rodriquez@nrc.gov; Heinrich, Ann; hoo1@nrc.gov; hoo2@nrc.gov;
wch@nrc.gov; decair.sara@epamail.epa.gov; timothy.greten@dhs.gov; maria.marinissen@hhs.gov;
[redacted (b)(6)]; DOE HQ EOC; hhs.soc@hhs.gov; james.kish@dhs.gov; hoo.hoc@nrc.gov;
brooke.smith@nrc.gov; Zubarev, Jill; Shaffer, Mark R; NITOPS; Skypek, Thomas M; [redacted (b)(6)]
clark.ray@epamail.epa.gov; Stern, Warren
Subject: RE: IAEA distributed documents

From: OST02 HOC
Sent: Thursday, March 24, 2011 3:43 PM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: IAEA distributed documents
Attachments: Radiation_Monitoring_Data(Japanese).pdf;
NISA_METI_News_Release_No.48(japanese).pdf;
NISA_METI_News_Release_No47(English).pdf;
Letter_-_Summary_of_reactor_unit_status_at_0600_24-March.UTC.pdf

From: HOO Hoc
Sent: Thursday, March 24, 2011 9:10 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Thursday, March 24, 2011 9:06 AM
To: Kenagy, W David; vince.mcclelland@nnsa.doe.gov; Rodriguez, Veronica; ann.heinrich@nnsa.doe.gov; HOO Hoc; HOO2 Hoc; Huffman, William; decair.sara@epamail.epa.gov; timothy.greten@dhs.gov; maria.marinissen@hhs.gov; (b)(6); doehqeoc@oem.doe.gov; hhs.soc@hhs.gov; james.kish@dhs.gov; HOO Hoc; Smith, Brooke; Zubarev, Jill E; Shaffer, Mark R; nitops@nnsa.doe.gov; Skypek, Thomas M; (b)(6); clark.ray@epamail.epa.gov; Stern, Warren
Subject: RE: IAEA distributed documents

From: OST02 HOC
Sent: Thursday, March 24, 2011 3:43 PM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: IAEA distributed documents
Attachments: Monitoring_data_(Japanese).pdf; plant_parameters_japanese.pdf;
NISA_MEXT_News_Release_No47(japanese).pdf; plant_status_japanese.pdf;
plant_status.pdf; Photos_Fukushima_Daiichi_E.pdf;
NISA_MEXT_News_Release_No46(English).pdf; Monitoring_data_(Japanese)1800_
23March.pdf

From: HOO Hoc
Sent: Thursday, March 24, 2011 9:10 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: Kenagy, W David [mailto:KenagyWD@state.gov]
Sent: Thursday, March 24, 2011 9:03 AM
To: Kenagy, W David; vince.mcclelland@nnsa.doe.gov; Rodriguez, Veronica; ann.heinrich@nnsa.doe.gov; HOO Hoc; HOO2 Hoc; Huffman, William; decair.sara@epamail.epa.gov; timothy.greten@dhs.gov; maria.marinissen@hhs.gov; [redacted] (b)(6); doehqeoc@oem.doe.gov; hhs.soc@hhs.gov; james.kish@dhs.gov; HOO Hoc; Smith, Brooke; Zubarev, Jill E; Shaffer, Mark R; nitops@nnsa.doe.gov; Skypek, Thomas M; [redacted] (b)(6); clark.ray@epamail.epa.gov; Stern, Warren
Subject: RE: IAEA distributed documents

3月24日

福島第一(1F) 測定場所

①事務本館北(2号機より北西約0.5キ口) ②体育館付近(MP-5東側)(2号機より北西約0.9キ口)
③西門付近(MP-5付近)(2号機より西約1.1キ口) ④正門付近前(MP-6付近)(2号機より西南西約1.0キ口)

測定場所	④																							
モニタリングカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値($\mu\text{Sv/h}$)	222.3	222.0	221.8	221.5	221.7	221.0	220.6	220.4	220.0	219.7	219.2	219.2	218.9	218.7	217.5	217.2	216.8	216.6	216.6	216.5	216.2	215.5	215.7	215.4
中性子	ND																							
風向	北西	南	北	西	西北西	西北西	西北西	西北西	北西	北	北西	西	西北西	西北西	西北西	西北西	西	西南西	西	西南西	南西	南西	西	西
風速(m/s)	0.3	0.4	0.5	1.2	1.3	1.4	1.6	1.6	1.3	0.8	0.6	0.8	1.3	1.7	1.6	1.2	1.0	0.5	1.0	0.9	0.5	0.7	0.9	1.0

測定場所	④																							
モニタリングカー	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値($\mu\text{Sv/h}$)	215.1	215.0	214.7	214.5	214.7	214.3	214.4	214.0	213.6	213.8	216.2	213.6	212.8	212.8	214.7	230.9	213.7	212.3	212.2	212.0	211.8	211.9	211.9	211.7
中性子	ND																							
風向	西北西	北	南	北	北北西	西	南東	南南東	南	東南東	南西	西	北	北	南南東	東南東	西南西	西北西	北西	西	西	南東	南	南
風速(m/s)	0.5	0.6	0.3	0.2	1.2	1.2	0.9	0.7	0.6	0.8	0.8	0.7	0.4	0.7	0.5	0.8	0.7	0.7	0.9	1.1	0.8	1.2	1.0	0.8

測定場所	④																							
モニタリングカー	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値($\mu\text{Sv/h}$)	211.6	211.6	211.6	211.2																				
中性子	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
風向	南西	南	南	南東																				
風速(m/s)	0.8	1.2	1.2	1.7																				

3月23日

福島第一(1F) 測定場所

- ①事務本館北(2号機より北西約0.5キ口)
- ②体育館付近(MP-5東側)(2号機より北西約0.9キ口)
- ③西門付近(MP-5付近)(2号機より西約1.1キ口)
- ④正門付近前(MP-6付近)(2号機より西南西約1.0キ口)

測定場所	④																							
モニタリングカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値(μSv/h)	233.4	233.3	232.3	231.6	230.1	229.4	227.5	227.4	227.2	226.8	226.8	226.7	226.7	226.9	227.1	227.1	227.2	227.3	227.6	228.5	228.7	228.8	228.8	229.0
中性子	N.D																							
風向	北西	北西	北北西	西	北西	北東	北	北東	北北西	北北西	北北西	北	北	北	北西	北	北	北西	北北西	北	北北西	北北西	北	北西
風速(m/s)	1.8	1.8	2.6	4.3	2.5	5.5	2.4	6.5	6.0	4.2	3.4	3.3	3.2	2.8	2.8	2.9	3.0	3.1	2.9	2.2	2.3	2.3	2.6	2.2

測定場所	④																							
モニタリングカー	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値(μSv/h)	229.1	229.1	229.4	229.3	229.5	229.5	229.5	229.3	229.6	229.5	229.5	229.7	229.6	229.6	229.4	229.6	229.5	229.5	229.3	229.5	229.3	229.5	229.0	229.3
中性子	N.D																							
風向	北	北西	北北西	北西	北北西	北	北	北	北北西	北西	北北西	北西	北北西	北北西	北西	北北西	北西	北北西	北北西	北北西	北北西	北北西	北	北
風速(m/s)	2.1	2.1	2.4	1.7	1.8	2.1	2.1	1.8	2.2	2.1	2.2	2.4	2.5	2.5	2.6	2.7	2.4	2.1	2.7	2.4	2.6	2.8	3.0	2.5

測定場所	④																							
モニタリングカー	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値(μSv/h)	229.4	229.5	229.2	229.4	229.1	229.1	229.1	228.7	227.6	226.9	228.6	227.6	211.4	227.7	227.2	227.3	227.1	227.2	227.0	226.8	226.8	226.3	225.7	226.3
中性子	N.D																							
風向	北	北	北北西	北北西	北北西	北北西	北	北北東	北	北	北北東	北北東	北	北	北北東	北	北北西	北	北北西	北	北北東	北北東	北	北
風速(m/s)	3.1	3.2	3.5	3.9	4.4	3.1	3.5	3.3	2.9	3.4	2.5	3.1	2.6	2.7	3.1	2.9	2.9	3.1	3.0	2.6	2.5	2.1	2.2	1.5

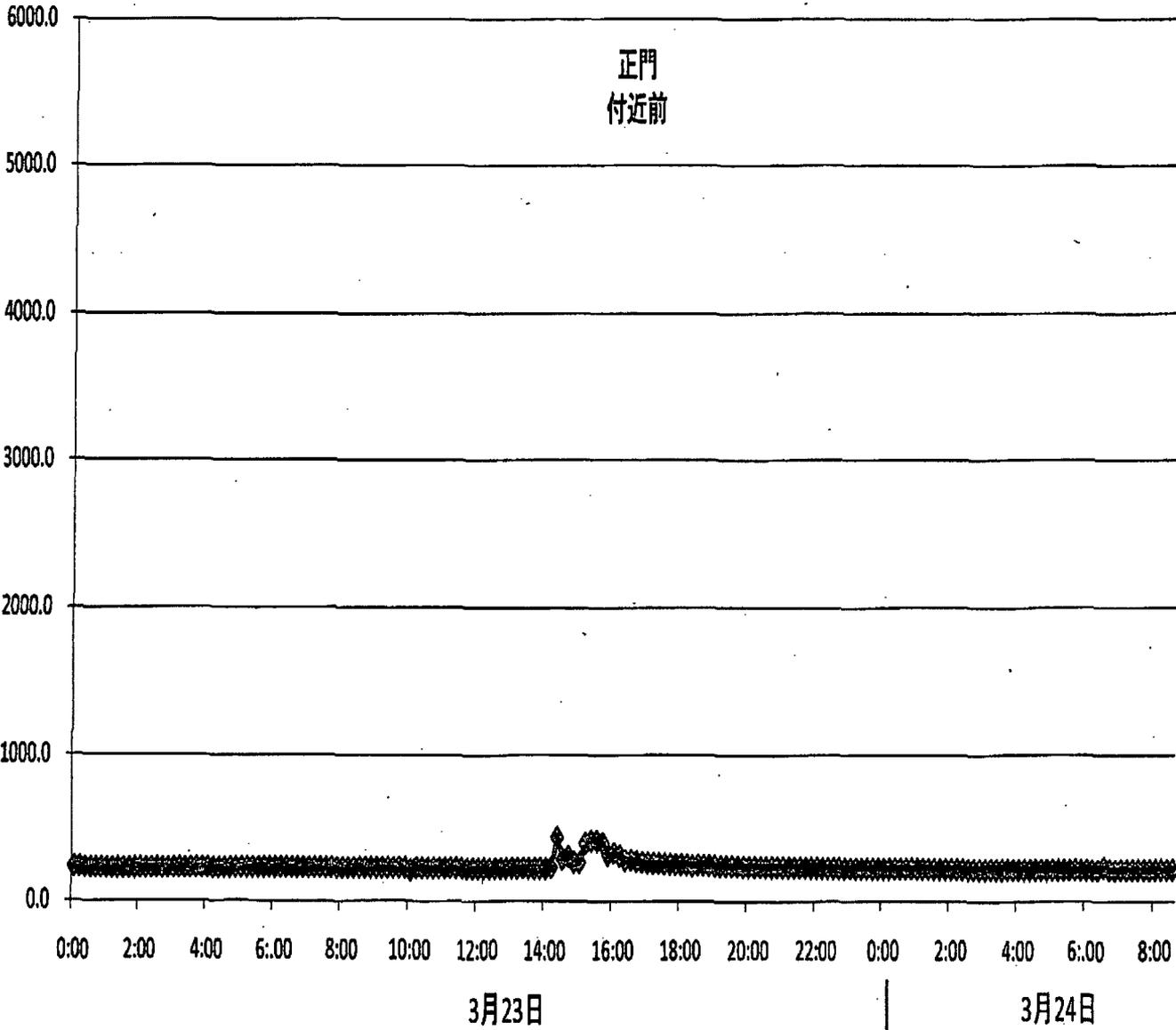
測定場所	④																							
モニタリングカー	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
測定値(μSv/h)	225.2	226.0	224.8	224.9	224.7	224.8	225.4	224.8	225.7	224.1	223.7	222.7	222.4	231.1	435.0	288.7	309.7	267.8	265.4	396.0	415.6	414.7	401.6	318.4
中性子	N.D																							
風向	北北西	北北東	西	西	西北西	東	東	東南東	北	北	北東	北西	北	北東	東南東	東	東南東	東南東	北東	北	東	東南東	東南東	東南東
風速(m/s)	1.6	2.6	1.6	1.6	1.5	1.4	1.2	1.9	2.0	1.5	1.3	1.2	1.4	1.0	1.6	0.9	1.6	1.7	1.6	1.5	1.3	1.0	1.1	0.7

測定場所	④																							
モニタリングカー	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
測定値(μSv/h)	331.5	313.4	280.9	283.7	274.4	269.3	265.1	262.1	259.5	257.0	255.8	254.2	253.0	251.3	241.2	249.0	246.9	245.8	244.6	243.5	242.1	241.0	240.2	237.6
中性子	N.D																							
風向	東	南	南東	南南西	南南東	南西	北	東	北北西	北西	西	西北西	北西	北北西	北	北西	北北西	北東	北	北	北	北北東	西	西南西
風速(m/s)	0.9	0.9	1.3	1.0	0.8	0.9	0.5	0.6	2.1	2.2	2.7	2.0	1.5	0.9	2.3	2.1	2.3	1.7	1.2	1.4	0.8	0.4	0.4	0.8

測定場所	④																							
モニタリングカー	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値(μSv/h)	236.5	235.8	235.3	234.3	233.2	232.8	232.3	231.5	230.6	230.2	229.5	228.8	228.3	227.3	226.8	226.5	225.8	225.4	224.9	224.7	224.3	224.0	223.0	223.0
中性子	N.D																							
風向	北北東	東	南西	南西	東	東	西南西	南東	南南東	南西	西	西南西	西	西	西	西	西北西	西北西	西	北西	西	西	南西	南東
風速(m/s)	0.2	0.2	0.3	0.3	0.5	0.3	0.3	0.5	0.3	0.4	0.4	0.4	0.5	0.4	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.4

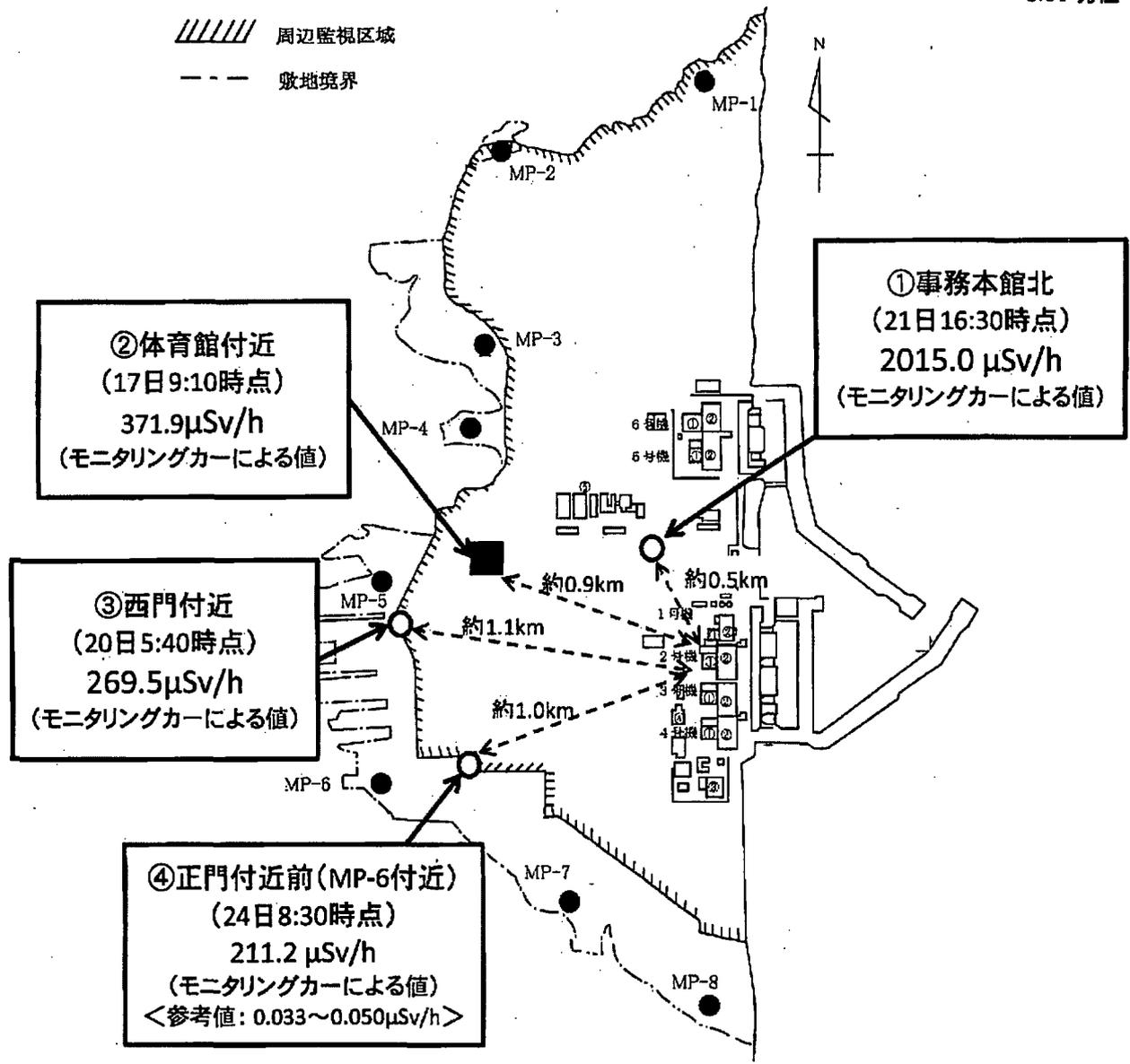
福島第一原子力発電所敷地内の線量率

$\mu\text{Sv/h}$



福島第一原子力発電所

2011/3/24
8:30現在



島第二(2F) (事業者のモニタリングポスト)

3月24日																									
モニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	
MP1(μSv/h)	13.693	13.730	13.647	13.653	13.610	13.613	13.583	13.630	13.580	13.600	13.527	13.540	13.540	13.473	13.480	13.513	13.497	13.487	13.473	13.427	13.393	13.410	13.417	13.337	
MP2(μSv/h)	8.103	8.047	8.117	8.117	8.070	8.080	8.050	8.007	8.047	8.027	8.017	8.040	7.997	7.993	7.973	7.967	7.987	7.987	7.973	7.967	7.943	7.927	7.920	7.927	
MP3(μSv/h)	13.350	13.320	13.300	13.323	13.287	13.257	13.257	13.207	13.230	13.217	13.257	13.177	13.160	13.127	13.097	13.143	13.103	13.107	13.123	13.120	13.087	13.017	13.073	13.037	
MP4(μSv/h)	10.477	10.460	10.460	10.463	10.420	10.443	10.433	10.403	10.410	10.377	10.403	10.390	10.347	10.350	10.323	10.327	10.303	10.263	10.267	10.297	10.250	10.277	10.267	10.250	
MP5(μSv/h)	9.827	9.800	9.800	9.800	9.800	9.800	9.700	9.800	9.747	9.700	9.700	9.693	9.720	9.700	9.700	9.700	9.680	9.600	9.653	9.607	9.600	9.600	9.607	9.600	
MP6(μSv/h)	11.013	11.017	10.940	10.970	10.943	10.927	10.910	10.917	10.940	10.863	10.860	10.860	10.827	10.827	10.853	10.837	10.797	10.810	10.750	10.770	10.773	10.747	10.690	10.740	
MP7(μSv/h)	欠測																								
風向	北西	西北西	北西	西北西	西北西	西北西	北西	北北西	北北西	北北西	北西	西北西	西北西	北西	北北西	北北西	北西	西北西							
風速(m/s)	5.0	3.6	3.0	3.0	5.3	6.9	4.7	4.1	3.8	2.8	2.9	4.6	3.2	1.8	4.1	4.4	3.7	3.1	2.6	2.0	3.0	3.2	2.6	3.4	

3月24日																									
モニタリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50	
MP1(μSv/h)	13.407	13.360	13.367	13.323	13.353	13.303	13.307	13.323	13.283	13.253	13.253	13.237	13.240	13.193	13.257	13.240	13.200	13.177	13.210	13.200	13.143	13.127	13.163	13.157	
MP2(μSv/h)	7.913	7.897	7.883	7.880	7.900	7.873	7.860	7.837	7.837	7.833	7.827	7.790	7.823	7.810	7.843	7.803	7.757	7.807	7.777	7.793	7.770	7.777	7.763	7.723	
MP3(μSv/h)	13.023	13.013	13.007	12.997	12.967	12.947	12.978	12.987	12.957	12.923	12.963	12.923	12.950	12.880	12.857	12.883	12.897	12.867	12.817	12.823	12.847	12.810	12.807	12.810	
MP4(μSv/h)	10.230	10.230	10.227	10.230	10.170	10.187	10.190	10.153	10.133	10.193	10.143	10.133	10.100	10.127	10.093	10.110	10.100	10.053	10.053	10.037	10.050	10.050	10.040	10.023	
MP5(μSv/h)	9.600	9.607	9.580	9.547	9.547	9.600	9.507	9.500	9.507	9.507	9.507	9.507	9.427	9.507	9.400	9.407	9.407	9.407	9.407	9.407	9.407	9.407	9.407	9.407	
MP6(μSv/h)	10.717	10.727	10.687	10.677	10.680	10.650	10.667	10.640	10.650	10.630	10.603	10.603	10.617	10.610	10.560	10.587	10.560	10.560	10.527	10.540	10.553	10.523	10.510	10.517	
MP7(μSv/h)	欠測																								
風向	北西	北西	北西	北	北西	西	北北西	南	南西	南西	南西	南南西	西南西	西	西北西	西北西	北	北北西	西	西	西	南南西	南西	南南西	
風速(m/s)	3.3	2.4	1.9	1.9	1.1	0.6	0.1	0.4	1.2	1.9	2.2	1.9	2.7	1.1	1.0	1.2	0.4	0.4	3.0	9.4	3.3	0.6	2.1	1.6	

3月24日																									
モニタリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	
MP1(μSv/h)	13.127	13.137	13.137	13.093																					
MP2(μSv/h)	7.747	7.753	7.750	7.740																					
MP3(μSv/h)	12.810	12.737	12.773	12.730																					
MP4(μSv/h)	10.013	10.007	9.980	9.967																					
MP5(μSv/h)	9.407	9.313	9.380	9.313																					
MP6(μSv/h)	10.497	10.490	10.470	10.480																					
MP7(μSv/h)	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	欠測	
風向	南西	南南西	南南西	南																					
風速(m/s)	2.1	1.5	2.3	2.5																					

島第二(2F)(事業者のモニタリングポスト)

3月23日																								
二タリグポスト	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
MP1(μSv/h)	15.023	14.927	14.853	14.873	15.750	20.500	17.983	20.920	17.483	17.703	17.797	17.530	17.373	17.117	16.940	16.823	16.710	16.590	16.517	16.447	16.133	16.013	15.907	15.813
MP2(μSv/h)	8.987	8.927	8.900	8.980	9.303	11.683	10.363	12.877	9.973	10.347	10.447	10.313	10.077	9.867	9.800	9.720	9.697	9.613	9.570	9.910	9.357	9.317	9.240	9.207
MP3(μSv/h)	15.070	15.007	14.930	14.987	15.350	17.373	16.193	17.070	16.417	16.213	16.297	16.117	16.047	15.883	16.010	15.663	15.630	15.617	15.513	15.763	15.167	15.083	15.050	14.963
MP4(μSv/h)	11.590	11.550	11.513	11.633	11.950	12.763	12.863	13.457	12.787	12.677	12.847	12.803	12.650	12.523	12.497	12.357	12.320	12.307	12.320	12.373	12.050	11.957	11.860	11.807
MP5(μSv/h)	10.973	10.973	10.880	10.913	11.140	12.053	12.287	12.300	12.127	11.853	12.147	12.093	12.000	11.853	11.760	11.660	11.660	11.660	11.660	11.660	11.393	11.213	11.167	11.073
MP6(μSv/h)	11.943	11.873	11.870	11.867	12.090	12.903	14.307	14.193	13.990	13.533	13.860	13.837	13.637	13.510	13.370	13.247	13.173	13.187	13.083	12.963	12.843	12.727	12.613	12.570
MP7(μSv/h)	欠測																							
風向	北	北	北	北北西	北	北東	北北東	北北東	北北東	北北東	北東	北東	北東	北東	北北東	北北東	北東	東北東	東北東	東北東	北東	北東	北東	北北東
風速(m/s)	6.0	6.2	4.7	3.1	2.5	2.5	4.7	4.4	3.8	5.7	8.6	7.6	7.2	6.6	5.9	3.6	3.2	3.5	2.9	4.0	5.0	4.1	4.4	3.7

3月23日																								
二タリグポスト	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
MP1(μSv/h)	15.727	15.600	15.443	15.383	15.313	15.277	15.267	15.210	15.163	15.110	15.030	14.883	14.830	14.773	14.653	14.730	14.613	14.563	14.547	14.513	14.443	14.437	14.403	14.337
MP2(μSv/h)	9.160	9.070	9.090	9.047	9.020	9.000	9.067	8.977	8.983	8.903	8.833	8.767	8.723	8.677	8.657	8.680	8.620	8.610	8.530	8.567	8.540	8.510	8.493	8.460
MP3(μSv/h)	14.920	14.833	14.773	14.657	14.733	14.707	14.760	14.770	14.557	14.497	14.397	14.343	14.257	14.260	14.173	14.157	14.103	14.087	13.990	14.007	13.940	13.933	13.860	13.867
MP4(μSv/h)	11.720	11.720	11.647	11.617	11.577	11.620	11.657	11.583	11.490	11.447	11.343	11.333	11.273	11.190	11.167	11.143	11.127	11.063	11.037	11.007	11.010	10.970	10.963	10.900
MP5(μSv/h)	11.047	11.067	10.973	10.920	10.880	10.873	10.900	10.873	10.860	10.827	10.707	10.587	10.587	10.527	10.487	10.433	10.420	10.380	10.387	10.387	10.367	10.293	10.287	10.233
MP6(μSv/h)	12.490	12.453	12.370	12.343	12.303	12.283	12.170	12.127	12.030	12.007	12.017	11.940	11.857	11.800	11.763	11.757	11.737	11.673	11.660	11.597	11.567	11.503	11.510	11.517
MP7(μSv/h)	欠測																							
風向	北東	北東	北北東	北東	北東	北北東	北北東	北	北	北北東	北北西	北	北北西	北西	北北西	北西								
風速(m/s)	2.1	2.5	4.1	2.0	1.6	0.7	0.9	0.4	0.5	2.3	2.6	5.5	6.9	6.1	5.8	6.1	5.2	5.2	4.2	5.8	6.0	4.2	3.6	3.8

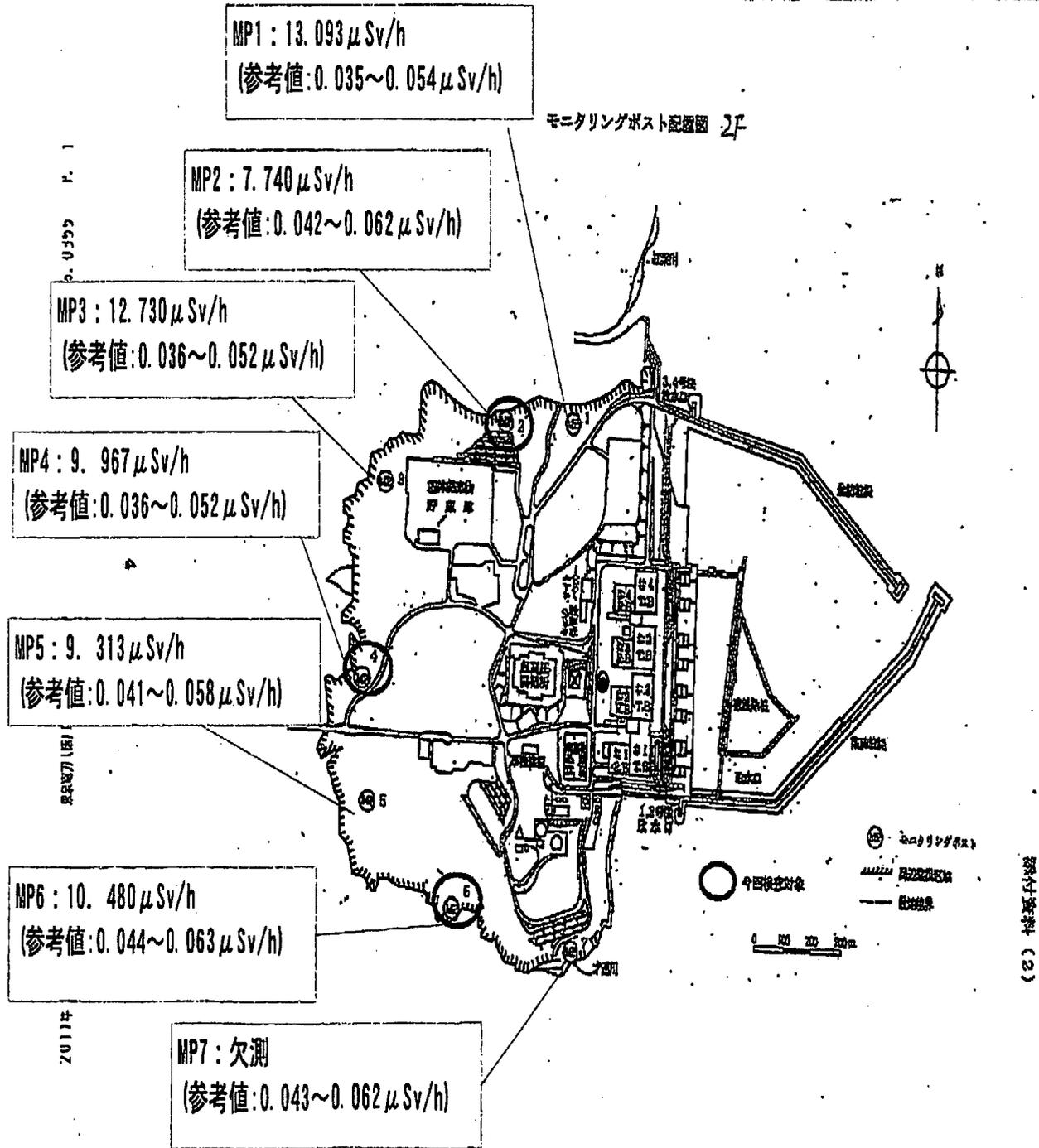
3月23日																								
二タリグポスト	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
MP1(μSv/h)	14.277	14.263	14.220	14.240	14.183	14.130	14.113	14.093	14.047	14.037	13.967	13.963	13.967	13.987	13.920	13.903	13.873	13.860	13.800	13.810	13.773	13.773	13.783	13.737
MP2(μSv/h)	8.437	8.423	8.367	8.380	8.357	8.380	8.357	8.323	8.310	8.300	8.293	8.287	8.233	8.253	8.237	8.220	8.203	8.220	8.207	8.140	8.170	8.120	8.157	8.137
MP3(μSv/h)	13.867	13.793	13.740	13.763	13.763	13.707	13.700	13.693	13.587	13.623	13.587	13.553	13.583	13.490	13.603	13.473	13.470	13.473	13.440	13.410	13.380	13.397	13.367	13.357
MP4(μSv/h)	10.897	10.883	10.843	10.830	10.797	10.820	10.763	10.733	10.737	10.703	10.707	10.667	10.700	10.640	10.633	10.610	10.577	10.570	10.543	10.557	10.533	10.523	10.480	10.507
MP5(μSv/h)	10.213	10.187	10.187	10.187	10.160	10.093	10.093	10.093	10.040	10.040	10.000	10.000	9.993	10.000	9.993	9.993	9.973	9.893	9.920	9.900	9.893	9.900	9.840	9.847
MP6(μSv/h)	11.447	11.443	11.420	11.407	11.363	11.330	11.280	11.280	11.293	11.230	11.217	11.233	11.197	11.180	11.170	11.170	11.147	11.123	11.107	11.077	11.053	11.040	11.007	11.007
MP7(μSv/h)	欠測																							
風向	北西	北北西	北北西	北北西	北北西	北西	北西	北北西	北西	北北西	北西	西北西	北西	北西	北西									
風速(m/s)	5.0	6.6	8.5	8.3	7.5	6.1	6.7	6.9	5.5	4.0	3.3	4.7	6.5	7.2	6.1	6.4	6.6	6.5	6.7	7.1	4.7	7.0	6.4	6.7

島第二(2F)(事業者のモニタリングポスト)

3月23日																								
ニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
MP1(μSv/h)	16.337	16.260	16.067	16.060	15.887	15.700	15.660	15.570	15.537	15.470	15.393	15.410	15.290	15.243	15.180	15.190	15.103	15.083	15.000	14.953	14.953	14.953	14.907	14.873
MP2(μSv/h)	9.703	9.627	9.560	9.447	9.333	9.233	9.193	9.177	9.113	9.080	9.043	8.973	8.960	8.960	8.960	8.907	8.897	8.877	8.867	8.837	8.837	8.837	8.797	8.803
MP3(μSv/h)	15.347	15.200	15.130	15.047	14.967	14.833	14.790	14.803	14.737	14.650	14.603	14.570	14.540	14.500	14.490	14.517	14.477	14.433	14.383	14.350	14.350	14.310	14.360	
MP4(μSv/h)	12.243	12.123	12.060	11.937	11.847	11.797	11.750	11.723	11.667	11.650	11.557	11.547	11.527	11.453	11.487	11.460	11.417	11.413	11.403	11.367	11.367	11.367	11.307	11.340
MP5(μSv/h)	11.467	11.367	11.267	11.167	11.040	10.973	10.880	10.873	10.873	10.780	10.760	10.680	10.680	10.680	10.680	10.673	10.627	10.593	10.580	10.580	10.580	10.580	10.587	
MP6(μSv/h)	12.620	12.503	12.407	12.297	12.187	12.103	12.053	12.007	11.930	11.900	11.810	11.820	11.793	11.823	11.770	11.763	11.713	11.743	11.703	11.697	11.697	11.697	11.687	11.667
MP7(μSv/h)	欠測																							
風向	北北西	北西	北北西	北西	北西	北北西	北北西	北	北	北	北	北	北	北	北	北北西	北	北	北	北	北	北	北北西	
風速(m/s)	2.7	3.9	5.0	4.8	4.4	4.3	4.5	5.7	6.6	8.2	8.2	7.4	9.1	8.6	9.9	8.4	9.7	9.0	9.9	7.7	7.7	7.7	8.6	8.3

3月23日																								
ニタリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
MP1(μSv/h)	14.860	14.797	14.773	14.723	14.740	14.713	14.630	14.670	14.593	14.577	14.553	14.423	14.520	14.507	14.460	14.450	14.467	14.400	14.403	14.380	14.347	14.390	14.343	14.337
MP2(μSv/h)	8.813	8.787	8.790	8.803	8.773	8.737	8.740	8.713	8.723	8.700	8.683	8.680	8.640	8.657	8.653	8.643	8.620	8.603	8.593	8.570	8.603	8.570	8.570	8.563
MP3(μSv/h)	14.293	14.317	14.250	14.260	14.260	14.213	14.227	14.223	14.170	14.117	14.173	14.167	14.123	14.133	14.093	14.080	14.060	14.027	14.057	14.053	13.987	14.007	14.017	13.983
MP4(μSv/h)	11.313	11.313	11.273	11.253	11.260	11.263	11.237	11.220	11.193	11.193	11.197	11.153	11.173	11.170	11.133	11.153	11.127	11.130	11.113	11.080	11.097	11.117	11.050	11.053
MP5(μSv/h)	10.587	10.587	10.587	10.587	10.480	10.520	10.480	10.480	10.480	10.487	10.480	10.433	10.480	10.480	10.427	10.387	10.407	10.380	10.387	10.387	10.387	10.387	10.380	10.387
MP6(μSv/h)	11.630	11.643	11.620	11.600	11.623	11.597	11.580	11.550	11.607	11.580	11.533	11.577	11.567	11.510	11.487	11.497	11.480	11.487	11.480	11.480	11.450	11.423	11.417	11.467
MP7(μSv/h)	欠測																							
風向	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北
風速(m/s)	8.6	8.5	8.0	7.8	8.3	7.7	7.5	7.1	7.6	7.5	8.7	8.6	8.2	8.7	9.1	8.5	9.9	8.9	9.6	8.6	8.6	8.0	9.4	8.1

3月23日																								
ニタリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
MP1(μSv/h)	14.307	15.697	16.200	19.693	17.380	17.463	16.780	16.483	16.347	16.143	16.010	15.917	15.783	15.657	15.590	15.533	15.453	15.407	15.323	15.187	15.380	15.260	15.133	15.077
MP2(μSv/h)	8.573	8.923	9.273	11.147	10.563	10.817	9.570	9.350	9.277	9.197	9.190	9.097	9.057	9.067	9.067	9.027	8.983	8.943	8.903	8.917	9.307	9.120	9.077	8.967
MP3(μSv/h)	13.953	13.980	14.407	15.590	17.423	18.627	17.130	16.520	16.220	16.110	15.933	15.813	15.693	15.613	15.510	15.453	15.397	15.447	15.227	15.357	15.853	15.540	15.277	15.167
MP4(μSv/h)	11.060	11.077	11.377	13.130	13.253	13.147	12.330	12.273	12.070	12.013	11.920	11.873	11.780	11.750	11.770	11.667	11.737	11.787	11.657	11.693	11.933	12.607	11.713	11.707
MP5(μSv/h)	10.380	10.380	10.613	13.813	12.420	12.147	11.567	11.620	11.367	11.367	11.213	11.167	11.153	11.113	11.073	11.073	11.053	11.173	10.920	11.220	11.287	11.713	11.153	11.067
MP6(μSv/h)	11.443	11.463	12.017	14.217	13.800	12.843	12.550	12.540	12.447	12.383	12.273	12.233	12.183	12.117	12.127	12.083	12.073	11.997	11.940	11.970	12.023	12.107	11.987	11.977
MP7(μSv/h)	欠測																							
風向	北	北	北	北	北	北北東																		
風速(m/s)	7.7	8.1	7.9	7.4	7.2	7.7	9.0	8.9	10.2	10.3	8.2	8.2	9.2	10.1	7.5	7.0	7.7	8.0	7.4	7.1	8.6	6.0	5.4	6.1



各発電所等の環境モニタリング結果

単位: $\mu\text{Sv/h}$

通常の平常値の範囲	会社名	発電所名	3月23日											
			0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
0.023~0.027	北海道電力	泊発電所	0.029	0.027	0.025	0.026	0.025	0.034	0.029	0.027	0.027	0.029	0.026	0.030
0.024~0.060	東北電力	女川原子力発電所	1.300	1.300	1.300	1.300	1.300	1.200	1.200	1.200	1.200	1.200	1.200	
0.012~0.060		東通原子力発電所	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.019	0.018	0.019	
0.033~0.050	東京電力	福島第一原子力発電所*	233.4	227.5	226.7	227.5	229.1	229.5	229.6	229.3	229.4	229.1	211.4	227.0
0.036~0.052		福島第二原子力発電所	15.347	14.790	14.540	14.383	14.293	14.227	14.123	14.057	13.953	17.130	15.693	15.227
0.011~0.159		柏崎刈羽原子力発電所	0.077	0.077	0.077	0.083	0.073	0.067	0.067	0.065	0.064	0.066	0.063	0.063
0.036~0.053	日本原子力発電	東海第二発電所	1.093	1.081	1.072	1.063	1.058	1.050	1.047	1.047	1.044	1.039	1.043	1.095
0.039~0.110		敦賀発電所	0.073	0.073	0.075	0.074	0.073	0.073	0.075	0.072	0.073	0.073	0.075	0.074
0.064~0.108	中部電力	浜岡原子力発電所	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.086	0.086	0.086	0.086	0.085
0.0207~0.132	北陸電力	志賀原子力発電所	0.034	0.033	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.031	0.032	0.032
0.028~0.130	中国電力	島根原子力発電所	0.030	0.030	0.030	0.031	0.031	0.030	0.031	0.030	0.030	0.032	0.030	0.029
0.070~0.077	関西電力	美浜発電所	0.073	0.072	0.072	0.072	0.073	0.072	0.072	0.072	0.072	0.073	0.071	0.074
0.045~0.047		高浜発電所	0.043	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.043	0.043	0.043
0.036~0.040		大飯発電所	0.036	0.035	0.034	0.035	0.034	0.034	0.034	0.035	0.033	0.035	0.000	0.000
0.011~0.080	四国電力	伊方発電所	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015	0.015
0.023~0.087	九州電力	玄海原子力発電所	0.027	0.027	0.025	0.026	0.027	0.026	0.026	0.026	0.026	0.027	0.026	0.026
0.034~0.120		川内原子力発電所	0.038	0.035	0.038	0.036	0.038	0.037	0.037	0.036	0.037	0.037	0.040	0.037
0.009~0.069	日本原燃(株)	六ヶ所 再処理事業所	0.016	0.016	0.016	0.017	0.016	0.016	0.016	0.016	0.017	0.017	0.018	0.017
0.009~0.071		六ヶ所 埋設事業所	0.020	0.019	0.019	0.020	0.020	0.020	0.019	0.020	0.022	0.021	0.021	0.020

*福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

通常の平常値の範囲	会社名	発電所名	3月23日											
			12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0.023~0.027	北海道電力	泊発電所	0.028	0.026	0.026	0.026	0.025	0.024	0.025	0.026	0.026	0.030		
0.024~0.060	東北電力	女川原子力発電所	1.300	1.300	1.300	1.300	1.200	1.200	1.200	1.200	1.200	1.200		
0.012~0.060		東通原子力発電所	0.021	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.017	0.017		
0.033~0.050	東京電力	福島第一原子力発電所*	225.2	225.4	222.4	265.4	331.5	265.1	253.0	244.6	236.5	232.3		
0.036~0.052		福島第二原子力発電所	15.070	16.193	16.047	15.513	14.920	14.760	14.257	13.990	13.867	13.700		
0.011~0.159		柏崎刈羽原子力発電所	0.064	0.065	0.064	0.065	0.065	0.066	0.066	0.064	0.064	0.064		
0.036~0.053	日本原子力発電	東海第二発電所	1.149	1.113	1.123	1.109	1.085	1.076	1.055	1.037	1.034	1.031		
0.039~0.110		敦賀発電所	0.073	0.073	0.072	0.073	0.073	0.072	0.072	0.073	0.073	0.074		
0.064~0.108	中部電力	浜岡原子力発電所	0.085	0.084	0.084	0.084	0.084	0.084	0.083	0.084	0.084	0.084		
0.0207~0.132	北陸電力	志賀原子力発電所	0.032	0.032	0.032	0.032	0.032	0.033	0.032	0.033	0.032	0.032		
0.028~0.130	中国電力	島根原子力発電所	0.030	0.030	0.030	0.031	0.031	0.029	0.029	0.029	0.030	0.030		
0.070~0.077	関西電力	美浜発電所	0.073	0.072	0.071	0.071	0.074	0.071	0.072	0.073	0.073	0.072		
0.045~0.047		高浜発電所	0.042	0.043	0.043	0.042	0.043	0.042	0.043	0.043	0.042	0.042		
0.036~0.040		大飯発電所	0.000	0.000	0.000	0.000	0.000	0.000	0.034	0.035	0.033	0.034		
0.011~0.080	四国電力	伊方発電所	0.014	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.014	0.014		
0.023~0.087	九州電力	玄海原子力発電所	0.026	0.026	0.026	0.026	0.026	0.025	0.026	0.026	0.026	0.026		
0.034~0.120		川内原子力発電所	0.037	0.038	0.038	0.038	0.037	0.039	0.034	0.036	0.039	0.039		
0.009~0.069	日本原燃(株)	六ヶ所 再処理事業所	0.018	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.016		
0.009~0.071		六ヶ所 埋設事業所	0.022	0.021	0.020	0.020	0.019	0.020	0.020	0.020	0.020	0.020		

*福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

東京電力福島第一原子力発電所敷地内の核種分析結果

採取方法:モニタリングカーにてダスト採取

測定方法:試料を2Fに持ち込みGe半導体型核種分析装置にて分析(1日1回測定)

測定時間:500秒

核種	3月19日			3月20日			3月21日			③放射線業務 従事者の呼吸 する空气中の 濃度限度 (Bq/cm ³)※	
	事務本館北側			事務本館北側			事務本館北側				
	採取時間(11:53~12:13)*放水前			採取時間(1:41~2:01)			採取時間(10:19~10:39)				
	測定時間(14:12~)			測定時間(13:28~)			測定時間(13:28~)				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)		
揮発性	I-131	5.940E-03	3.374E-05	5.94	2.303E-03	1.256E-05	2.30	1.516E-03	1.134E-05	1.52	1.0E-03
	I-132	2.203E-03	8.816E-05	0.03	N.D	/	/	2.539E-04	2.702E-05	0.00	7.0E-02
	I-133	3.773E-05	2.861E-05	0.01	N.D	/	/	N.D	/	/	5.0E-03
粒子状	Cs-134	2.165E-05	1.692E-05	0.01	2.840E-05	4.755E-06	0.01	3.383E-05	5.364E-06	0.02	2.0E-03
	Cs-136	N.D	/	/	5.629E-06	5.447E-06	0.001	4.529E-06	3.321E-06	0.0005	1.0E-02
	Cs-137	2.437E-05	1.771E-05	0.01	2.892E-05	5.003E-06	0.01	3.801E-05	4.671E-06	0.01	3.0E-03

核種	3月22日			3月23日			③放射線業務 従事者の呼吸 する空气中の 濃度限度 (Bq/cm ³)※	
	正門			正門				
	採取時間(1:10~1:30)			採取時間(2:01~2:21)				
	測定時間(14:50~)			測定時間(14:54~)				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)		
揮発性	I-131	2.2E-03	1.569E-05	2.24	6.7E-04	9.6E-06	0.67	1.0E-03
	I-132	N.D	/	/	3.0E-04	8.8E-06	0.00	7.0E-02
	I-133	N.D	/	/	/	/	/	5.0E-03
粒子状	Co-58	N.D	/	/	5.1E-06	5.1E-06	0.00	1.0E-02
	Cs-134	1.591E-05	5.853E-06	0.01	1.7E-05	4.2E-06	0.01	2.0E-03
	Cs-136	N.D	/	/	3.0E-06	2.7E-06	0.00	1.0E-02
	Cs-137	1.889E-05	5.295E-06	0.01	1.3E-05	4.2E-06	0.00	3.0E-03
その他	Te-129	N.D	/	/	2.3E-01	1.2E-01	0.58	4.0E-01
	Te-132	6.680E-05	1.116E-05	0.01	4.3E-04	4.5E-06	0.06	7.0E-03
	Ce-144	6.680E-05	1.116E-05	0.10	1.3E-03	3.7E-04	1.86	7.0E-04

※人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

採取方法:海水を汲みあげ採取

測定方法:試料500mlを福島第二に運搬し、Ge半導体検出器で測定

測定時間:1,000秒

核種	3月21日 14:30			3月22日 6:30			3月23日 8:50			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	1F南放水口付近(1~4u放水口から南側約330m地点)			1F南放水口付近(1~4u放水口から南側約330m地点)			1F南放水口付近(1~4u放水口から南側約330m地点)			
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	
Co-58	5.955E-02	3.349E-02	0.1	1.668E-02	2.138E-02	0.0	5.0E-02	2.6E-02	-	1E+00
I-131	5.066E+00	4.245E-02	126.7	1.190E+00	2.293E-02	29.8	5.9E+00	3.6E-02	146.9	4E-02
I-132	2.136E+00	1.925E-01	0.7	1.362E+00	7.721E-02	0.5	5.4E+00	1.4E-01	1.8	3E+00
Cs-134	1.486E+00	4.030E-02	24.8	1.504E-01	1.769E-02	2.5	2.5E-01	2.7E-02	4.2	6E-02
Cs-136	2.132E-01	2.358E-02	0.7	2.350E-02	1.056E-02	0.1	2.5E-02	2.4E-02	0.1	3E-01
Cs-137	1.484E+00	4.204E-02	16.5	1.535E-01	1.626E-02	1.7	2.6E-01	2.7E-02	2.8	9E-02
Zr-95							2.9E-01	7.8E-02	0.3	9E-01
Ru-105							6.7E-01	6.2E-01	0.3	3E+00
Ru-106							3.7E-01	2.0E-01	3.7	1E-01
Te-129							4.0E+00	3.9E+00	0.4	1E+01
Te-132							4.0E+01	3.6E-02	200.5	2E-01
La-140							1.3E-02	1.0E-02	0.0	4E-01

東京電力福島第二原子力発電所敷地内の核種分析結果

採取方法:モニタリングカーにてダスト採取

測定方法:試料を2Fに持ち込みGe半導体型核種分析装置にて分析(1日2回測定)

核種	3月16日 情報棟東側			3月16日 免震建屋1階入口			3月17日 MP-1			③放射線業務 従事者の呼吸 する空気中の 濃度限度 (Bq/cm ³)※	
	採取時間(7:56~8:06)			採取時間(10:00~10:10)			採取時間(13:50~14:00)				
	測定時間(8:47~)			測定時間(11:59~)			測定時間(22:01~)				
	500秒			500秒			1000秒				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)		
揮発性	I-131	3.432E-04	2.559E-05	0.34	6.889E-04	1.268E-05	0.69	9.432E-05	3.351E-06	0.09	1.0E-03
	I-132	1.149E-03	2.812E-05	0.02	7.528E-04	1.986E-05	0.01	N.D			7.0E-02
	I-133	3.448E-05	2.687E-05	0.01	4.395E-05	1.497E-05	0.01	3.304E-06	4.478E-06	0.00	5.0E-03
粒子状	Co-58	N.D			4.943E-05	2.685E-05	0.00	2.494E-05	2.061E-05	0.00	1.0E-02
	Cs-134	1.237E-04	1.449E-05	0.06	4.163E-04	2.459E-05	0.21	3.314E-04	1.680E-05	0.17	2.0E-03
	Cs-136	2.689E-05	9.412E-06	0.00	7.504E-05	1.495E-05	0.01	6.107E-05	1.296E-05	0.01	1.0E-02
	Cs-137	1.227E-04	1.311E-05	0.04	3.861E-04	2.057E-05	0.13	3.232E-04	1.702E-05	0.11	3.0E-03

核種	3月18日 MP-1			3月18日 MP-1			3月19日 MP-1			③放射線業務 従事者の呼吸 する空気中の 濃度限度 (Bq/cm ³)※	
	採取時間(8:22~8:32)			採取時間(15:09~15:19)			採取時間(9:15~9:25)				
	測定時間(9:40~)			測定時間(17:12~)			測定時間(10:39~)				
	1000秒			1000秒			1000秒				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)		
揮発性	I-131	8.630E-04	3.145E-05	0.86	4.298E-03	4.993E-05	4.30	2.695E-04	5.585E-05	0.27	1.0E-03
	I-132	1.720E-03	3.821E-05	0.02	2.625E-03	9.359E-05	0.04	N.D			7.0E-02
	I-133	N.D			5.246E-05	4.213E-05	0.01	N.D			5.0E-03
粒子状	Co-58	3.080E-05	2.048E-05	0.00	1.578E-04	1.435E-05	0.02	N.D			1.0E-02
	Cs-134	3.345E-04	1.666E-05	0.17	4.863E-04	1.538E-05	0.24	N.D			2.0E-03
	Cs-136	5.882E-05	1.012E-05	0.01	8.416E-05	1.436E-05	0.01	N.D			1.0E-02
	Cs-137	3.147E-04	1.683E-05	0.10	4.306E-04	1.715E-05	0.14	N.D			3.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種	3月19日			3月20日			3月20日			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm ³)※	
	MP-1			MP-1			MP-1				
	採取時間(18:18~18:28)			採取時間(11:27~11:37)			採取時間(17:10~17:20)				
	測定時間(19:08~)			測定時間(16:17~)			測定時間(21:11~)				
	1000秒			500秒			500秒				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		
揮発性	I-131	2.513E-04	5.665E-05	0.25	5.254E-05	1.155E-05	0.05	2.230E-04	4.286E-05	0.22	1.0E-03
	I-132	1.229E-04	1.226E-04	0.00	N.D	/	/	N.D	/	/	7.0E-02
	I-133	N.D	/	/	N.D	/	/	N.D	/	/	5.0E-03
粒子状	Co-58	N.D	/	/	N.D	/	/	N.D	/	/	1.0E-02
	Cs-134	N.D	/	/	N.D	/	/	N.D	/	/	2.0E-03
	Cs-136	N.D	/	/	N.D	/	/	N.D	/	/	1.0E-02
	Cs-137	N.D	/	/	N.D	/	/	N.D	/	/	3.0E-03

核種	3月21日			3月21日			3月23日			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm ³)※	
	MP-1			MP-1			MP-1				
	採取時間(10:40~10:50)			採取時間(18:11~18:19)			採取時間(16:06~16:14)				
	測定時間(12:15~)			測定時間(19:00~)			測定時間(17:38~)				
	500秒			500秒			500秒				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		
揮発性	I-131	2.250E-04	1.687E-05	0.23	1.580E-04	1.931E-05	0.16	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	2.420E-04	2.401E-05	0.00	8.097E-04	1.937E-05	0.01	2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	N.D	/	/	N.D	/	/	N.D	/	/	5.0E-03
粒子状	Co-58	1.065E-05	1.138E-05	0.00	1.341E-05	9.886E-06	0.00	N.D	/	/	1.0E-02
	Cs-134	4.410E-05	9.294E-06	0.02	3.017E-05	1.005E-05	0.02	1.7E-06	8.5E-06	0.01	2.0E-03
	Cs-136	N.D	/	/	N.D	/	/	3.7E-06	5.2E-06	0.00	1.0E-02
	Cs-137	4.711E-05	7.959E-06	0.02	3.306E-05	9.703E-06	0.01	1.7E-05	6.9E-06	0.01	3.0E-03
その他の検出核種	Te-129	/	/	/	/	/	/	9.3E-04	2.6E-04	0.93	1.0E-03
	Te-132	/	/	/	/	/	/	7.1E-04	6.5E-06	0.10	7.0E-03
	Ru-106	/	/	/	/	/	/	8.2E-05	5.7E-05	0.14	6.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種	3月22日			3月22日			3月23日			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm ³)※	
	MP-1			MP-1			MP-1				
	採取時間(10:02~10:10)			採取時間(16:43~16:51)			採取時間(16:06~16:14)				
	測定時間(11:53~)			測定時間(17:32~)			測定時間(17:38~)				
	500秒			500秒			500秒				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		
揮発性	I-131	1.416E-04	2.272E-05	0.14	1.349E-04	2.216E-05	0.13	2.1E-04	1.4E-05	0.21	1.0E-03
	I-132	N.D			N.D			2.8E-04	2.8E-05	0.00	7.0E-02
	I-133	N.D			N.D			N.D			5.0E-03
粒子状	Co-58	N.D			N.D			N.D			1.0E-02
	Cs-134	1.293E-05	9.476E-06	0.01	1.353E-05	9.812E-06	0.01	1.7E-05	8.5E-06	0.01	2.0E-03
	Cs-136	N.D			N.D			3.7E-06	5.2E-06	0.00	1.0E-02
	Cs-137	1.024E-05	8.838E-06	0.003	1.369E-05	8.361E-06	0.005	1.7E-05	6.9E-06	0.01	3.0E-03
その他	Te-129	2.316E-03	1.784E-03	0.01	N.D			9.3E-04	2.6E-04	0.00	4.0E-01
	Te-132	2.191E-05	1.649E-05	0.003	N.D			7.1E-04	6.5E-06	0.10	7.0E-03
	Ru-106	N.D			N.D			8.2E-05	5.7E-05	0.14	6.0E-04

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

採取方法:海水をくみ上げ採取
 測定方法:試料500mlをGe半導体検出器で測定
 測定時間:1,000秒

核種	3月21日 23:15			3月22日 15:06			3月22日 0:38			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	2F北放水口付近(3,4号放水口付近)			2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)			2F富岡川河口付近(3,4号放水口から北側に約2,000m地点)			
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	
Co-58	5.704E-03	7.570E-03	0.0	N.D	1.301E-02	/	1.028E-02	1.253E-02	0.0	1.0E+00
I-131	1.085E+00	1.284E-02	27.1	6.664E-01	1.862E-02	16.7	3.211E+00	1.694E-02	80.3	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	N.D	7.915E-02	/	8.761E-01	4.236E-02	0.3	3.0E+00
Cs-134	4.815E-02	9.213E-03	0.8	3.925E-02	1.135E-02	0.7	7.535E-02	1.102E-02	1.3	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	N.D	6.784E-03	/	1.159E-02	7.718E-02	0.0	3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	4.361E-02	1.129E-02	0.5	7.760E-02	1.186E-02	0.9	9.0E-02

核種	3月22日 14:28			3月23日 13:51			3月23日 14:25			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	2F北放水口付近(3,4号放水口付近)			2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)			2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)			
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	
Co-58	N.D	1.526E-02	/	/	/	/	/	/	/	/
Ru-105	/	/	/	3.4E-02	2.5E-02	/	3.3E-02	2.8E-02	0.01	3E+00
Ru-106	/	/	/	/	/	/	1.2E-01	1.2E-01	1.25	1E-01
I-131	1.138E+00	1.993E-02	28.5	7.4E-01	2.7E-02	16.7	7.6E-01	2.7E-02	19.1	4E-02
I-132	N.D	8.791E-02	/	2.0E-01	5.8E-02	/	3.3E-01	5.3E-02	0.1	3E+00
Cs-134	4.631E-02	1.350E-02	0.8	5.1E-02	2.0E-02	0.7	3.3E-02	2.1E-02	0.5	6E-02
Cs-136	N.D	7.849E-03	/	/	/	/	/	/	/	/
Cs-137	3.962E-02	1.406E-02	0.4	5.5E-02	2.0E-02	0.5	4.3E-02	2.1E-02	0.5	9E-02

3月23日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キロ)
- ②体育館付近(MP-5東側)(2号機より北西約0.9キロ)
- ③西門付近(MP-5付近)(2号機より西約1.1キロ)
- ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	④																							
Eニタリングカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値(μSv/h)	233.4	233.3	232.3	231.6	230.1	229.4	227.5	227.4	227.2	226.8	226.8	226.7	226.7	226.9	227.1	227.1	227.2	227.3	227.6	228.5	228.7	228.8	228.8	229.0
p性子	ND																							
風向	北西	北西	北北西	西	北西	北東	北	北東	北北西	北北西	北北西	北	北	北	北西	北	北	北西	北北西	北	北北西	北北西	北	北西
風速(m/s)	1.8	1.8	2.8	4.3	2.5	5.5	2.4	6.5	6.0	4.2	3.4	3.3	3.2	2.8	2.8	2.9	3.0	3.1	2.9	2.2	2.3	2.3	2.6	2.2

測定場所	④																							
Eニタリングカー	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値(μSv/h)	229.1	229.1	229.4	229.3	229.5	229.5	229.5	229.3	229.6	229.5	229.5	229.7	229.6	229.6	229.4	229.6	229.5	229.5	229.3	229.5	229.3	229.5	229.0	229.3
p性子	ND																							
風向	北	北西	北北西	北西	北北西	北	北	北	北北西	北西	北北西	北西	北北西	北北西	北西	北北西	北西	北北西	北北西	北北西	北北西	北北西	北	北
風速(m/s)	2.1	2.1	2.4	1.7	1.8	2.1	2.1	1.8	2.2	2.1	2.2	2.4	2.5	2.5	2.8	2.7	2.4	2.1	2.7	2.4	2.8	2.8	3.0	2.5

測定場所	④																							
Eニタリングカー	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値(μSv/h)	229.4	229.5	229.2	229.4	229.1	229.1	229.1	228.7	227.6	226.9	228.6	227.6	211.4	227.7	227.2	227.3	227.1	227.2	227.0	228.8	228.8	226.3	225.7	226.3
p性子	ND																							
風向	北	北	北北西	北北西	北北西	北北西	北	北北東	北	北	北北東	北北東	北	北	北北東	北	北北西	北	北北西	北	北北東	北北東	北	北
風速(m/s)	3.1	3.2	3.5	3.9	4.4	3.1	3.5	3.3	2.9	3.4	2.5	3.1	2.8	2.7	3.1	2.9	2.9	3.1	3.0	2.6	2.5	2.1	2.2	1.5

測定場所	④																							
Eニタリングカー	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
測定値(μSv/h)	225.2	226.0	224.8	224.9	224.7	224.8	225.4	224.8	225.7	224.1	223.7	222.7	222.4	231.1	435.0	288.7	309.7	267.8	265.4	396.0	415.6	414.7	401.6	318.4
p性子	ND																							
風向	北北西	北北東	西	西	西北西	東	東	東南東	北	北	北東	北西	北	北東	東南東	東	東南東	東南東	北東	北	東	東南東	東南東	東南東
風速(m/s)	1.8	2.6	1.6	1.6	1.5	1.4	1.2	1.9	2.0	1.5	1.3	1.2	1.4	1.0	1.8	0.9	1.8	1.7	1.6	1.5	1.3	1.0	1.1	0.7

測定場所	④																							
Eニタリングカー	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
測定値(μSv/h)	331.5	313.4	280.9	283.7	274.4	269.3	265.1	262.1	259.5	257.0	255.8	254.2	253.0											
p性子	ND																							
風向	東	南	南東	南南西	南南東	南西	北	東	北北西	北西	西	西北西	北西											
風速(m/s)	0.9	0.9	1.3	1.0	0.8	0.9	0.5	0.8	2.1	2.2	2.7	2.0	1.5											

測定場所	④																							
Eニタリングカー	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値(μSv/h)																								
p性子																								
風向																								
風速(m/s)																								

3月22日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キロ)
- ②体育館付近(MP-5東側)(2号機より北西約0.9キロ)
- ③西門付近(MP-5付近)(2号機より西約1.1キロ)
- ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)

測定場所	④																							
E=タリソグカー	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値(μSv/h)	331.8	329.3	327.5	325.8	323.9	320.8	314.8	313.0	311.3	308.9	308.4	305.9	304.5	303.2	301.3	299.7	298.0	296.2	294.9	293.8	293.6	291.6	291.1	290.0
中性子	ND																							
風向	南東	南西	西南西	西南西	西	西南西	西北西	西	西	西	西北西	西北西	西	西	西	西北西	西北西	北北西	北西	西北西	北西	西北西	西北西	西北西
風速(m/s)	0.4	0.4	0.4	0.4	0.3	0.4	0.6	0.5	0.4	0.7	0.8	1.0	1.1	1.3	1.1	0.8	1.0	1.0	0.9	1.0	0.9	0.9	0.8	0.8

測定場所	④																							
E=タリソグカー	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値(μSv/h)	288.9	288.1	287.0	286.0	283.6	280.1	273.9	271.0	268.0	267.4	265.8	265.3	264.6	264.3	265.5	263.7	262.6	262.1	261.9	261.8	261.7	261.6	261.2	261.0
中性子	ND																							
風向	西北西	西	北西	北北西	北	北西	北西	北西	北西	西	北西	西	西	北	北西	西	西北西	西北西	北西	西北西	北西	西北西	北西	西北西
風速(m/s)	0.8	0.6	0.5	0.4	2.1	1.1	2.0	1.8	1.6	1.9	1.7	1.6	1.3	1.3	1.5	1.8	2.3	2.3	1.8	2.0	1.9	1.8	2.2	2.4

測定場所	④																							
E=タリソグカー	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値(μSv/h)	260.9	260.8	260.5	260.3	260.4	260.2	260.2	260.1	260.0	259.9	259.4	259.5	260.2	259.4	258.9	258.7	258.4	257.3	257.5	257.1	256.9	256.5	256.5	256.4
中性子	ND																							
風向	西北西	西	西	西	北西	西	西	北西	西北西	北西	西	西北西	西北西	北西	西北西	北西	北	北北西	北北西	北	北北西	西	北北西	北北西
風速(m/s)	1.8	1.4	1.5	1.4	1.2	1.1	1.5	1.3	1.1	1.5	1.7	1.8	1.8	1.3	1.4	1.6	1.5	1.6	1.7	2.2	1.3	1.7	1.5	2.3

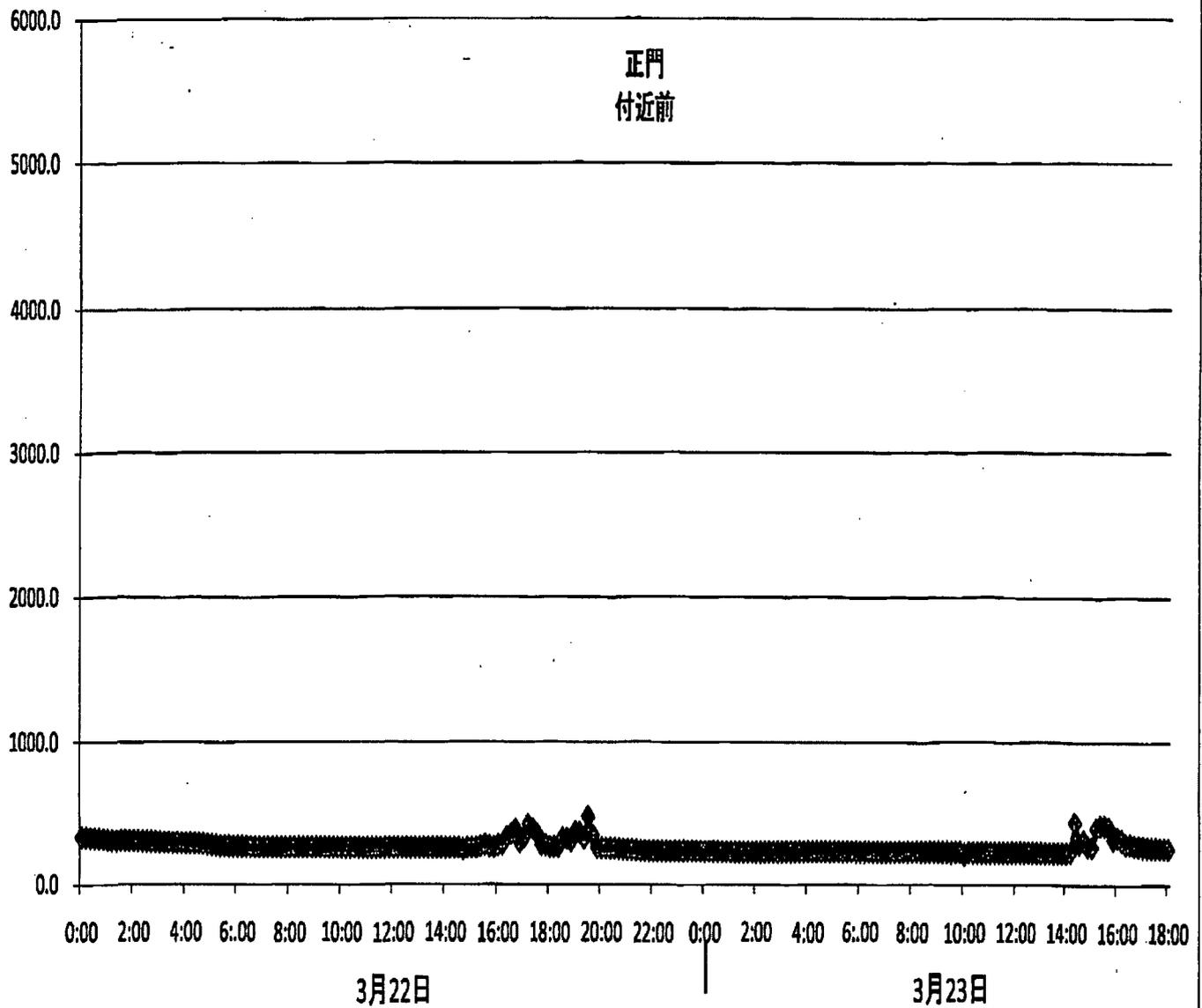
測定場所	④																							
E=タリソグカー	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
測定値(μSv/h)	256.3	256.0	258.1	256.3	255.8	255.8	255.6	255.7	255.2	254.8	254.8	254.5	254.6	254.3	254.4	254.3	244.3	254.4	254.1	255.3	265.7	277.5	265.2	258.8
中性子	ND																							
風向	北	北	北	北西	北	北北西	北	北	北	北東	北北西	北	北	北西	北西	北	北	西北西	北	北東	北西	北	東南東	東
風速(m/s)	1.5	1.4	1.3	1.3	1.7	1.4	1.8	1.6	1.4	1.5	2.3	2.1	1.6	1.7	1.8	1.6	1.6	1.2	1.2	0.8	1.0	1.0	1.2	0.7

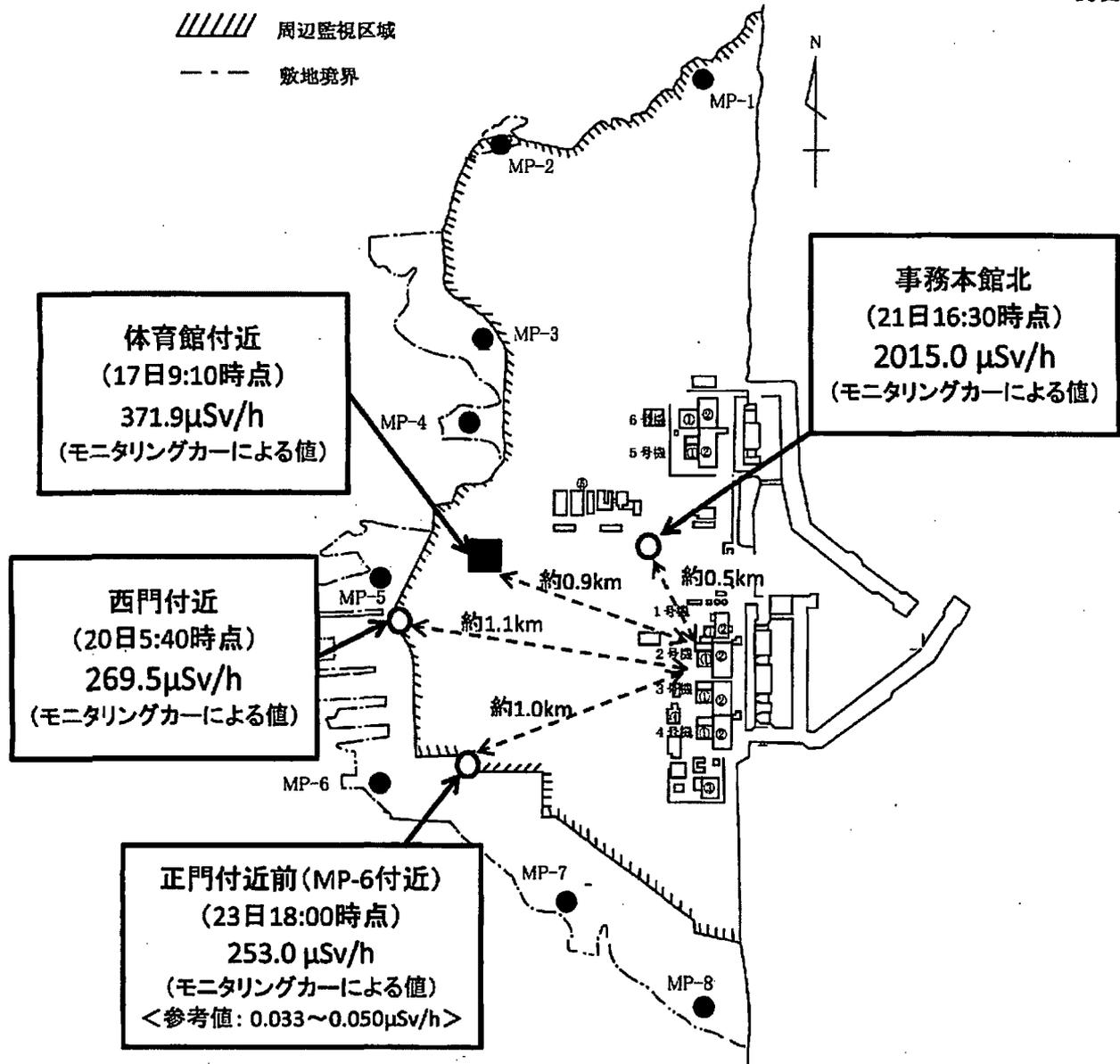
測定場所	④																							
E=タリソグカー	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
測定値(μSv/h)	274.0	280.6	330.6	352.3	384.2	294.0	330.8	420.4	388.7	351.6	278.9	275.2	265.5	264.1	261.5	324.6	322.8	303.8	367.9	363.1	320.9	472.7	340.7	258.0
中性子	ND																							
風向	東	南西	南西	西	北北東	北	南東	南東	北	北東	北北西	西北西	西	西北西	北西	西	西	北北西	南西	南西	西南西	南西	西	西北西
風速(m/s)	0.7	0.7	0.6	0.6	0.6	0.6	0.4	0.4	0.2	0.4	0.5	0.6	0.9	0.6	0.4	0.6	0.3	0.5	0.3	0.5	0.4	0.5	0.6	0.9

測定場所	④																							
E=タリソグカー	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
測定値(μSv/h)	254.1	253.4	252.5	251.5	250.5	249.1	248.1	244.4	242.8	241.0	240.6	239.5	239.3	237.0	237.4	236.2	235.7	235.8	235.9	235.9	235.5	234.8	234.1	233.8
中性子	ND																							
風向	西北西	西	西北西	北西	北西	西	西	南西	西	西	北西	西北西	西北西	西	西	西南西	西北西	西	西	西北西	西北西	西北西	西北西	北西
風速(m/s)	1.0	1.0	0.8	0.8	0.9	0.8	0.6	0.4	0.5	0.6	0.7	1.0	1.2	1.3	1.1	0.8	1.0	0.9	1.2	1.4	1.4	1.5	1.5	1.9

福島第一原子力発電所敷地内の線量率

$\mu\text{Sv/h}$





島第二(2F) (事業者のモニタリングポスト)

3月23日																								
モニタリングポスト	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
MP1(μSv/h)	15.023	14.927	14.853	14.873	15.750	20.500	17.983	20.920	17.483	17.703	17.797	17.530	17.373	17.117	16.940	16.823	16.710	16.590	16.517	16.447	16.133	16.013	15.907	15.8
MP2(μSv/h)	8.987	8.927	8.900	8.990	9.303	11.863	10.363	12.877	9.973	10.347	10.447	10.313	10.077	9.867	9.800	9.720	9.697	9.613	9.570	9.910	9.357	9.317	9.240	9.2
MP3(μSv/h)	15.070	15.007	14.930	14.987	15.350	17.373	16.193	17.070	16.417	16.213	16.297	16.117	16.047	15.883	16.010	15.863	15.630	15.617	15.513	15.763	15.167	15.083	15.050	14.9
MP4(μSv/h)	11.590	11.550	11.513	11.633	11.950	12.763	12.863	13.457	12.787	12.677	12.847	12.803	12.850	12.523	12.497	12.357	12.320	12.307	12.320	12.373	12.050	11.957	11.860	11.8
MP5(μSv/h)	10.973	10.973	10.880	10.913	11.140	12.053	12.287	12.300	12.127	11.853	12.147	12.093	12.000	11.853	11.780	11.660	11.660	11.660	11.660	11.660	11.393	11.213	11.167	11.0
MP6(μSv/h)	11.943	11.873	11.870	11.867	12.090	12.903	14.307	14.193	13.980	13.533	13.860	13.837	13.637	13.510	13.370	13.247	13.173	13.187	13.083	12.963	12.843	12.727	12.613	12.5
MP7(μSv/h)	欠測	欠測																						
風向	北	北	北	北北西	北	北東	北北東	北北東	北北東	北北東	北東	北東	北東	北北東	北北東	北東	東北東	東北東	東北東	北東	北東	北東	北北東	北北
風速(m/s)	6.0	6.2	4.7	3.1	2.5	2.5	4.7	4.4	3.8	5.7	8.6	7.6	7.2	6.6	5.9	3.6	3.2	3.5	2.9	4.0	5.0	4.1	4.4	

3月23日																								
モニタリングポスト	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
MP1(μSv/h)	15.727	15.600	15.443	15.383	15.313	15.277	15.267	15.210	15.163	15.110	15.030	14.883	14.830											
MP2(μSv/h)	9.160	9.070	9.090	9.047	9.020	9.000	9.067	8.977	8.983	8.903	8.833	8.787	8.723											
MP3(μSv/h)	14.920	14.833	14.773	14.657	14.733	14.707	14.760	14.770	14.557	14.497	14.397	14.343	14.257											
MP4(μSv/h)	11.720	11.720	11.647	11.617	11.577	11.620	11.657	11.583	11.490	11.447	11.343	11.333	11.273											
MP5(μSv/h)	11.047	11.067	10.973	10.920	10.880	10.873	10.900	10.873	10.860	10.827	10.707	10.587	10.587											
MP6(μSv/h)	12.490	12.453	12.370	12.343	12.303	12.283	12.170	12.127	12.030	12.007	12.017	11.940	11.857											
MP7(μSv/h)	欠測																							
風向	北東	北東	北北東	北東	北東	北北東	北北東	北	北	北北東	北北西	北	北北西											
風速(m/s)	2.1	2.5	4.1	2.0	1.6	0.7	0.9	0.4	0.5	2.3	2.6	5.5	6.9											

3月23日																								
モニタリングポスト	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
MP1(μSv/h)																								
MP2(μSv/h)																								
MP3(μSv/h)																								
MP4(μSv/h)																								
MP5(μSv/h)																								
MP6(μSv/h)																								
MP7(μSv/h)																								
風向																								
風速(m/s)																								

013114

島第二(2F)(事業者のモニタリングポスト)

3月23日																									
モニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	
MP1(μSv/h)	16.337	16.260	16.067	16.060	15.887	15.700	15.660	15.570	15.537	15.470	15.393	15.410	15.290	15.243	15.180	15.190	15.103	15.083	15.000	14.953	14.953	14.953	14.907	14.8	
MP2(μSv/h)	9.703	9.627	9.560	9.447	9.333	9.233	9.193	9.177	9.113	9.080	9.043	8.973	8.960	8.980	8.960	8.907	8.897	8.877	8.867	8.837	8.837	8.837	8.797	8.8	
MP3(μSv/h)	15.347	15.200	15.130	15.047	14.967	14.833	14.790	14.803	14.737	14.650	14.603	14.570	14.540	14.500	14.490	14.517	14.477	14.433	14.383	14.350	14.350	14.350	14.310	14.3	
MP4(μSv/h)	12.243	12.123	12.060	11.937	11.847	11.797	11.750	11.723	11.667	11.650	11.557	11.547	11.527	11.453	11.487	11.480	11.417	11.413	11.403	11.367	11.367	11.367	11.307	11.3	
MP5(μSv/h)	11.467	11.367	11.267	11.167	11.040	10.973	10.880	10.873	10.873	10.780	10.780	10.680	10.680	10.680	10.680	10.680	10.673	10.627	10.593	10.580	10.580	10.580	10.580	10.5	
MP6(μSv/h)	12.620	12.503	12.407	12.297	12.187	12.103	12.053	12.007	11.930	11.900	11.810	11.820	11.793	11.823	11.770	11.763	11.713	11.743	11.703	11.697	11.697	11.697	11.687	11.6	
MP7(μSv/h)	欠測	欠測																							
風向	北北西	北西	北北西	北西	北西	北北西	北北西	北	北	北	北	北	北	北	北	北北西	北	北	北	北	北	北	北北	北	
風速(m/s)	2.7	3.9	5.0	4.8	4.4	4.3	4.5	5.7	6.6	8.2	8.2	7.4	9.1	8.6	9.9	8.4	9.7	9.0	9.9	7.7	7.7	7.7	8.6		

3月23日																									
モニタリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50	
MP1(μSv/h)	14.860	14.797	14.773	14.723	14.740	14.713	14.630	14.670	14.593	14.577	14.553	14.423	14.520	14.507	14.460	14.450	14.467	14.400	14.403	14.380	14.347	14.390	14.343	14.3	
MP2(μSv/h)	8.813	8.787	8.790	8.803	8.773	8.737	8.740	8.713	8.723	8.700	8.683	8.680	8.640	8.657	8.653	8.643	8.620	8.603	8.593	8.570	8.603	8.570	8.570	8.5	
MP3(μSv/h)	14.293	14.317	14.250	14.260	14.260	14.213	14.227	14.223	14.170	14.117	14.173	14.167	14.123	14.133	14.093	14.080	14.060	14.027	14.057	14.053	13.987	14.007	14.017	13.9	
MP4(μSv/h)	11.313	11.313	11.273	11.253	11.260	11.263	11.237	11.220	11.193	11.193	11.197	11.153	11.173	11.170	11.133	11.153	11.127	11.130	11.113	11.080	11.097	11.117	11.050	11.0	
MP5(μSv/h)	10.587	10.587	10.587	10.587	10.480	10.520	10.480	10.480	10.480	10.480	10.487	10.480	10.433	10.480	10.480	10.427	10.387	10.407	10.380	10.387	10.387	10.387	10.380	10.3	
MP6(μSv/h)	11.630	11.643	11.620	11.600	11.623	11.597	11.580	11.550	11.607	11.580	11.533	11.577	11.567	11.510	11.487	11.497	11.480	11.487	11.480	11.480	11.450	11.423	11.417	11.4	
MP7(μSv/h)	欠測	欠測																							
風向	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	北	
風速(m/s)	8.6	8.5	8.0	7.8	8.3	7.7	7.5	7.1	7.6	7.5	8.7	8.6	8.2	8.7	9.1	8.5	9.9	8.9	9.6	8.6	8.6	8.0	9.4		

3月23日																									
モニタリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	
MP1(μSv/h)	14.307	15.697	16.200	16.693	17.380	17.463	16.780	16.483	16.347	16.143	16.010	15.917	15.783	15.657	15.590	15.533	15.453	15.407	15.323	15.187	15.380	15.260	15.133	15.0	
MP2(μSv/h)	8.573	8.923	9.273	11.147	10.583	10.817	9.570	9.350	9.277	9.197	9.190	9.097	9.057	9.087	9.067	9.027	8.983	8.943	8.903	8.917	8.307	9.120	9.077	8.9	
MP3(μSv/h)	13.953	13.980	14.407	15.590	17.423	18.627	17.130	16.520	16.220	16.110	15.933	15.813	15.693	15.613	15.510	15.453	15.397	15.447	15.227	15.357	15.853	15.540	15.277	15.1	
MP4(μSv/h)	11.080	11.077	11.377	13.130	13.253	13.147	12.330	12.273	12.070	12.013	11.920	11.873	11.780	11.750	11.770	11.667	11.737	11.787	11.657	11.693	11.933	12.607	11.713	11.7	
MP5(μSv/h)	10.380	10.380	10.613	13.813	12.420	12.147	11.567	11.620	11.367	11.367	11.213	11.167	11.153	11.113	11.073	11.073	11.053	11.173	10.920	11.220	11.287	11.713	11.153	11.0	
MP6(μSv/h)	11.443	11.463	12.017	14.217	13.800	12.843	12.550	12.540	12.447	12.383	12.273	12.233	12.183	12.117	12.127	12.083	12.073	11.997	11.940	11.970	12.023	12.107	11.987	11.8	
MP7(μSv/h)	欠測	欠測																							
風向	北	北	北	北	北	北北東	北北東																		
風速(m/s)	7.7	8.1	7.9	7.4	7.2	7.7	9.0	8.9	10.2	10.3	8.2	8.2	9.2	10.1	7.5	7.0	7.7	8.0	7.4	7.1	8.6	6.0	5.4		

島第二(2F) (事業者のモニタリングポスト)

3月22日		※																						
モニタリングポスト	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15
MP1(μSv/h)	15.103	15.147	15.120	15.067	15.027	15.040	14.980	14.947	14.977	14.970	15.043	17.023	27.080	37.954	50.240	49.404	42.264	43.274	49.137	35.667	34.847	33.027	32.030	31.0
MP2(μSv/h)	8.217	9.213	9.197	9.227	9.197	9.213	9.183	9.227	9.173	9.157	9.197	10.097	11.110	35.497	42.387	39.347	30.564	30.410	27.444	20.557	18.973	17.087	16.583	16.1
MP3(μSv/h)	14.983	14.973	15.007	14.977	14.987	14.977	14.900	14.933	14.960	14.917	14.880	14.883	15.180	15.433	33.410	37.620	35.400	35.664	30.900	33.897	28.187	24.477	23.590	23.0
MP4(μSv/h)	12.027	11.980	11.987	11.970	11.970	11.987	11.920	11.937	11.963	11.907	11.910	11.887	12.113	15.380	33.177	35.780	35.740	29.424	26.357	28.927	21.004	19.737	19.027	18.6
MP5(μSv/h)	11.373	11.413	11.407	11.373	11.373	11.367	11.360	11.367	11.373	11.300	11.307	11.307	11.467	17.693	33.207	37.767	36.960	28.980	26.987	28.667	20.473	19.000	18.293	17.8
MP6(μSv/h)	12.657	12.613	12.610	12.617	12.547	12.567	12.520	12.470	12.460	12.473	12.450	12.460	12.770	18.403	28.297	30.274	33.717	27.834	26.014	28.264	21.794	19.733	19.287	18.9
MP7(μSv/h)	欠測	22.200	欠測	欠測	欠測	欠測	欠測																	
風向	北北西	北	北	北	北	北北西	北	北	北	北	北北東	北	北	北北東	北北東	北北東	北北東	北東	北東	北東	北東	北北東	北東	北北
風速(m/s)	3.0	2.5	2.9	2.9	3.3	2.5	2.7	3.4	4.3	3.9	3.5	2.8	2.5	1.9	2.6	3.1	2.9	3.5	2.9	3.0	2.8	2.5	3.7	3.7

※:MP-7については、東電社員が測定結果(1日1回)

3月22日																									
モニタリングポスト	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19	
MP1(μSv/h)	30.194	29.330	28.520	27.770	27.084	26.500	25.877	25.320	24.860	24.367	23.884	23.410	23.047	22.627	22.197	21.837	21.500	21.197	20.874	20.630	20.287	20.010	19.763	19.6	
MP2(μSv/h)	15.743	15.413	15.080	14.743	14.447	14.173	13.870	13.667	13.443	13.183	13.010	12.800	12.597	12.487	12.297	12.100	11.967	11.820	11.683	11.543	11.457	11.283	11.190	11.1	
MP3(μSv/h)	22.657	22.204	21.840	21.460	21.134	20.777	20.493	20.263	19.883	19.713	19.417	19.180	18.933	18.823	18.627	18.357	18.187	18.027	17.870	17.700	17.607	17.433	17.290	17.1	
MP4(μSv/h)	18.280	17.893	17.583	17.303	17.030	16.783	16.483	16.317	16.057	15.803	15.623	15.420	15.250	15.040	14.913	14.727	14.607	14.487	14.340	14.173	14.023	13.947	13.830	13.7	
MP5(μSv/h)	17.500	17.200	16.820	16.520	16.227	15.927	15.680	15.487	15.307	15.053	14.860	14.667	14.467	14.287	14.173	13.980	13.880	13.680	13.587	13.433	13.293	13.193	13.113	13.0	
MP6(μSv/h)	16.600	16.307	15.973	15.680	15.433	15.183	14.973	14.667	14.460	14.240	14.057	13.850	13.667	13.480	13.310	13.230	13.023	12.897	12.793	12.640	12.507	12.393	12.287	12.1	
MP7(μSv/h)	欠測	欠測																							
風向	北東	北北東	北東	北東	北東	東北東	北東	北東	北北西	西北西	西	北北西	西	西	北	北	北	北	北	北	北西	北	北北西	北北	
風速(m/s)	3.3	3.3	2.7	2.7	2.2	1.9	1.8	0.4	0.5	0.5	4.6	1.0	4.8	0.4	0.7	1.1	0.8	1.1	1.2	1.1	0.9	1.1	0.8	1.1	

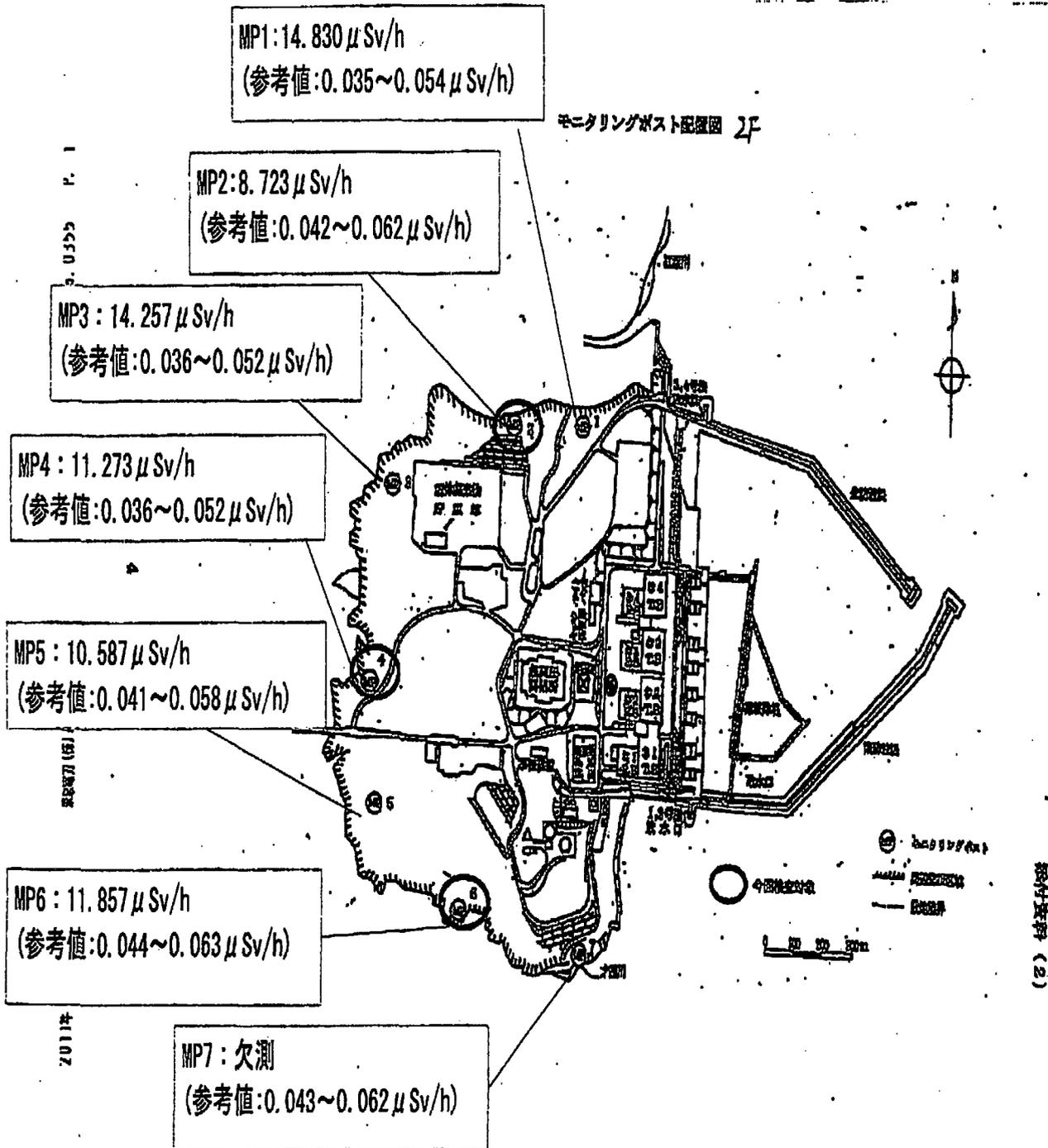
3月22日																									
モニタリングポスト	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23	
MP1(μSv/h)	19.557	19.463	19.583	19.733	19.363	19.537	19.217	19.027	18.700	18.907	18.427	18.840	18.320	18.220	17.957	17.563	17.307	17.107	16.927	16.773	16.727	16.667	16.560	16.4	
MP2(μSv/h)	11.127	11.187	11.370	11.503	11.463	11.633	11.477	11.300	11.140	11.340	10.900	11.167	11.003	10.987	10.757	10.447	10.250	10.150	10.013	9.917	9.903	9.840	9.820	9.7	
MP3(μSv/h)	17.057	17.000	17.090	17.240	17.183	16.990	17.300	16.850	16.700	16.787	16.760	16.457	16.520	16.523	16.363	16.127	16.037	15.893	15.777	15.667	15.603	15.523	15.537	15.3	
MP4(μSv/h)	13.637	13.550	13.850	13.823	13.770	13.820	13.877	13.723	13.543	13.483	13.500	13.163	13.297	13.167	13.100	13.003	12.883	12.727	12.590	12.517	12.427	12.420	12.373	12.3	
MP5(μSv/h)	12.900	12.800	12.900	13.100	13.100	13.253	13.327	13.387	12.967	12.853	12.800	12.507	12.527	12.347	12.413	12.347	12.147	11.953	11.907	11.753	11.680	11.620	11.573	11.6	
MP6(μSv/h)	14.057	13.970	13.943	14.077	14.117	14.160	14.080	14.197	13.910	13.867	13.717	13.680	13.523	13.470	13.437	13.400	13.247	13.113	13.003	12.917	12.827	12.760	12.730	12.7	
MP7(μSv/h)	欠測	欠測																							
風向	西北西	北西	北	北	西北西	西北西	北北西	北北西	北北西	北	北北西	北西	北北西	北西	北西	北西	北西	北西	西北西	北西	西南西	西北西	西	北北	
風速(m/s)	4.0	1.9	2.0	1.4	5.2	3.2	2.0	2.2	2.6	2.4	2.1	1.9	2.4	2.7	2.8	3.3	2.7	3.0	3.2	3.2	1.8	1.8	1.3	2.1	

島第二(2F) (事業者のモニタリングポスト)

3月22日																									
モニタリングポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3	
MP1(μSv/h)	18.187	17.870	17.880	17.917	17.953	18.153	18.277	18.007	17.667	17.497	17.463	17.847	17.840	17.403	17.263	16.903	16.943	16.653	16.497	16.440	16.373	16.323	16.243	16.1	
MP2(μSv/h)	11.920	11.883	11.673	11.567	11.743	11.840	12.010	11.733	11.423	11.327	11.247	11.480	11.787	11.397	11.183	10.850	10.817	10.643	10.500	10.420	10.357	10.340	10.233	10.2	
MP3(μSv/h)	17.570	17.423	17.453	17.397	17.437	17.643	17.587	17.437	17.240	17.110	17.057	17.077	17.330	17.393	17.010	16.920	16.670	16.637	16.450	16.380	16.340	16.313	16.247	16.1	
MP4(μSv/h)	14.283	14.293	14.587	14.500	14.577	14.530	14.503	14.527	14.400	14.090	13.870	13.793	13.983	14.387	13.973	13.903	13.507	13.600	13.300	13.250	13.143	13.110	13.090	13.0	
MP5(μSv/h)	14.573	14.367	14.860	14.567	14.667	14.653	14.513	14.473	14.567	14.207	13.920	13.713	13.833	14.367	13.880	13.820	13.293	13.467	13.000	12.900	12.800	12.753	12.700	12.6	
MP6(μSv/h)	14.930	14.730	14.793	14.837	14.793	14.723	14.670	14.740	14.607	14.467	14.173	14.033	14.193	14.560	14.147	14.113	13.717	13.893	13.570	13.460	13.413	13.387	13.333	13.3	
MP7(μSv/h)	欠測	欠測																							
風向	西	西北西	西	西	西	西	西北西	西	西	西南西	西	西南西	北北西	北	北北西	西	北北西	北北西	北北西	北北西	西	北北西	北	北	
風速(m/s)	6.3	1.6	2.9	1.5	8.8	8.2	1.8	4.4	4.6	1.1	4.1	2.0	0.9	2.3	0.8	2.6	1.7	2.7	1.1	4.4	1.1	1.9	2.2		

3月22日																									
モニタリングポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7	
MP1(μSv/h)	16.180	16.140	16.100	16.213	17.327	19.873	18.193	18.620	18.310	17.980	17.803	17.890	17.463	17.250	17.173	17.103	16.910	16.763	16.683	16.490	16.463	16.440	16.380	16.2	
MP2(μSv/h)	10.180	10.147	10.083	10.187	11.027	13.457	11.027	11.367	11.100	10.963	10.833	10.730	10.620	10.477	10.447	10.327	10.263	10.147	10.093	9.977	9.937	9.923	9.913	9.8	
MP3(μSv/h)	16.153	16.177	16.073	16.160	17.037	16.577	16.457	16.650	16.673	16.573	16.483	16.380	16.237	16.157	16.093	15.983	16.017	15.880	15.800	15.710	15.777	15.673	15.667	15.5	
MP4(μSv/h)	12.987	12.930	12.937	12.930	14.000	13.177	13.283	14.240	14.133	13.983	13.860	13.773	13.853	13.507	13.357	13.357	13.180	13.057	13.033	12.907	12.847	12.820	12.780	12.7	
MP5(μSv/h)	12.607	12.527	12.507	12.507	13.433	13.040	12.940	14.160	13.993	13.687	13.580	13.413	13.200	13.087	13.000	12.860	12.700	12.607	12.507	12.373	12.347	12.293	12.247	12.2	
MP6(μSv/h)	13.270	13.193	13.183	13.217	13.743	13.897	14.467	17.233	16.980	16.603	16.287	16.023	15.823	15.470	15.340	15.130	14.987	14.783	14.673	14.397	14.300	14.220	14.150	14.0	
MP7(μSv/h)	欠測	欠測																							
風向	北	北	北北東	北北東	北	北	北	北北西																	
風速(m/s)	1.5	0.8	2.2	3.7	4.3	4.6	4.9	6.1	7.1	7.3	6.8	8.0	5.8	5.7	5.5	6.6	7.2	5.9	6.8	7.8	6.8	6.9	6.9		

3月22日																									
モニタリングポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11	
MP1(μSv/h)	16.220	16.107	16.087	16.007	15.910	15.913	15.847	15.787	15.760	15.737	15.663	15.593	15.550	15.510	15.387	15.413	15.330	15.340	15.300	15.247	15.220	15.183	15.130	15.1	
MP2(μSv/h)	9.823	9.770	9.743	9.730	9.667	9.697	9.633	9.637	9.580	9.580	9.547	9.533	9.520	9.470	9.423	9.403	9.323	9.323	9.317	9.300	9.283	9.283	9.263	9.2	
MP3(μSv/h)	15.567	15.550	15.563	15.440	15.477	15.450	15.447	15.377	15.333	15.350	15.313	15.333	15.323	15.243	15.193	15.117	15.103	15.127	15.107	15.020	15.033	15.080	15.067	15.0	
MP4(μSv/h)	12.700	12.643	12.583	12.587	12.560	12.523	12.497	12.447	12.467	12.423	12.387	12.370	12.370	12.280	12.213	12.160	12.170	12.100	12.137	12.113	12.043	12.053	12.037	12.0	
MP5(μSv/h)	12.153	12.127	12.060	12.047	11.960	11.953	11.947	11.893	11.907	11.853	11.807	11.760	11.753	11.660	11.660	11.560	11.467	11.467	11.467	11.467	11.433	11.407	11.3		
MP6(μSv/h)	13.970	13.843	13.780	13.707	13.660	13.600	13.537	13.467	13.443	13.350	13.360	13.300	13.230	13.180	13.093	13.003	12.923	12.883	12.813	12.767	12.780	12.737	12.720	12.6	
MP7(μSv/h)	欠測	欠測																							
風向	北北西	北西	北西	北西	北西	北西	北西	北北西	北北西	北北西	北北西	北	北北西	北北西	北北西	北北西	南西	北	北北西	北	北	北	北北西		
風速(m/s)	6.5	6.5	6.8	6.6	5.4	4.9	3.8	4.7	4.2	3.6	3.9	4.0	2.8	2.1	3.3	3.8	1.4	3.0	3.3	2.9	3.0	3.5	2.5		



各発電所等の環境モニタリング結果

単位: $\mu\text{Sv/h}$

通常の平常値の範囲	会社名	発電所名	3月22日											
			12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00
0.023~0.027	北海道電力㈱	泊発電所	0.025	0.026	0.026	0.025	0.025	0.025	0.027	0.026	0.027	0.026	0.027	0.026
0.024~0.060	東北電力㈱	女川原子力発電所	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.30	1.30	1.30	1.30
0.012~0.060		東通原子力発電所	0.018	0.017	0.017	0.017	0.018	0.017	0.018	0.017	0.018	0.018	0.016	0.018
0.033~0.050	東京電力㈱	福島第一原子力発電所 [※]	258.3	255.6	254.6	254.1	274	330.8	265.5	367.9	254.1	246.1	239.3	235.9
0.036~0.052		福島第二原子力発電所	14.963	14.900	15.180	30.900	22.657	20.493	18.933	17.870	17.057	17.300	16.52	15.777
0.011~0.159		柏崎刈羽原子力発電所	0.086	0.086	0.086	0.066	0.086	0.066	0.086	0.087	0.087	0.089	0.069	0.072
0.036~0.053	日本原子力発電㈱	東海第二発電所	1.245	1.215	1.220	1.261	1.231	1.193	1.168	1.428	1.218	1.170	1.142	1.112
0.039~0.110		敦賀発電所	0.073	0.074	0.073	0.075	0.073	0.073	0.074	0.073	0.074	0.073	0.073	0.073
0.064~0.108	中部電力㈱	浜岡原子力発電所	0.094	0.095	0.092	0.091	0.088	0.088	0.088	0.088	0.088	0.088	0.087	0.086
0.0207~0.132	北陸電力㈱	志賀原子力発電所	0.033	0.032	0.032	0.032	0.042	0.037	0.045	0.037	0.037	0.035	0.036	0.035
0.028~0.130	中国電力㈱	島根原子力発電所	0.029	0.028	0.030	0.030	0.037	0.031	0.031	0.030	0.030	0.029	0.03	0.03
0.070~0.077		美浜発電所	0.071	0.072	0.072	0.073	0.073	0.072	0.072	0.072	0.072	0.071	0.076	0.075
0.045~0.047	関西電力㈱	高浜発電所	0.042	0.043	0.042	0.042	0.043	0.042	0.042	0.043	0.045	0.046	0.046	0.043
0.036~0.040		大飯発電所	0.034	0.034	0.035	0.034	0.034	0.034	0.035	0.034	0.035	0.038	0.038	0.036
0.011~0.080	四国電力㈱	伊方発電所	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.014	0.014	0.014
0.023~0.087	九州電力㈱	玄海原子力発電所	0.027	0.028	0.027	0.026	0.028	0.027	0.027	0.028	0.027	0.027	0.026	0.026
0.034~0.120		川内原子力発電所	0.038	0.037	0.039	0.036	0.038	0.036	0.039	0.038	0.038	0.038	0.039	0.037
0.009~0.069	日本原燃(株)	六ヶ所 再処理事業所	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
0.009~0.071		六ヶ所 埋設事業所	0.019	0.019	0.020	0.019	0.020	0.020	0.020	0.020	0.020	0.020	0.019	0.019

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

通常の平常値の範囲	会社名	発電所名	3月23日											
			0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00
0.023~0.027	北海道電力㈱	泊発電所	0.029	0.027	0.025	0.026	0.025	0.034	0.029	0.027	0.027	0.029		
0.024~0.060	東北電力㈱	女川原子力発電所	1.30	1.30	1.30	1.30	1.30	1.20	1.20	1.20	1.20	1.20		
0.012~0.060		東通原子力発電所	0.017	0.017	0.018	0.018	0.018	0.018	0.018	0.019	0.019	0.018		
0.033~0.050	東京電力㈱	福島第一原子力発電所 [※]	233.4	227.5	226.7	227.6	229.1	229.5	229.6	229.3	229.4	229.1		
0.036~0.052		福島第二原子力発電所	15.347	14.790	14.540	14.383	14.293	14.227	14.123	14.057	13.953	17.130		
0.011~0.159		柏崎刈羽原子力発電所	0.077	0.077	0.077	0.083	0.073	0.067	0.067	0.065	0.064	0.066		
0.036~0.053	日本原子力発電㈱	東海第二発電所	1.093	1.081	1.072	1.063	1.058	1.050	1.047	1.047	1.044	1.039		
0.039~0.110		敦賀発電所	0.073	0.073	0.075	0.074	0.073	0.073	0.075	0.072	0.073	0.073		
0.064~0.108	中部電力㈱	浜岡原子力発電所	0.087	0.087	0.087	0.087	0.087	0.087	0.087	0.088	0.088	0.088		
0.0207~0.132	北陸電力㈱	志賀原子力発電所	0.034	0.033	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.031		
0.028~0.130	中国電力㈱	島根原子力発電所	0.030	0.030	0.030	0.031	0.031	0.030	0.031	0.030	0.030	0.032		
0.070~0.077		美浜発電所	0.073	0.072	0.072	0.072	0.073	0.072	0.072	0.072	0.073	0.071		
0.045~0.047	関西電力㈱	高浜発電所	0.043	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.043	0.043	
0.036~0.040		大飯発電所	0.038	0.035	0.034	0.035	0.034	0.034	0.034	0.035	0.033	0.035		
0.011~0.080	四国電力㈱	伊方発電所	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.014	0.015	0.015		
0.023~0.087	九州電力㈱	玄海原子力発電所	0.027	0.027	0.025	0.026	0.027	0.026	0.026	0.026	0.026	0.027		
0.034~0.120		川内原子力発電所	0.038	0.035	0.038	0.036	0.038	0.037	0.037	0.036	0.037	0.037		
0.009~0.069	日本原燃(株)	六ヶ所 再処理事業所	0.018	0.016	0.016	0.017	0.016	0.016	0.016	0.017	0.017	0.017		
0.009~0.071		六ヶ所 埋設事業所	0.020	0.019	0.019	0.020	0.020	0.020	0.019	0.020	0.022	0.021		

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

東京電力福島第一原子力発電所敷地内の核種分析結果

採取方法: モニタリングカーにてダスト採取

測定方法: 試料を2Fに持ち込みGe半導体型核種分析装置にて分析(1日1回測定)

測定時間: 500秒

核種	3月19日 事務本館北側			3月20日 事務本館北側			3月21日 事務本館北側			③放射線業務 従事者の呼吸 する空気中の 濃度限度 (Bq/cm ³)※	
	採取時間(11:53~12:13)*放水前			採取時間(14:1~2:01)			採取時間(10:19~10:39)				
	測定時間(14:12~)			測定時間(13:28~)			測定時間(13:28~)				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)		
揮発性	I-131	5.940E-03	3.374E-05	5.94	2.303E-03	1.256E-05	2.30	1.518E-03	1.134E-05	1.52	1.0E-03
	I-132	2.203E-03	8.816E-05	0.03	N.D	/	/	2.539E-04	2.702E-05	0.00	7.0E-02
	I-133	3.773E-05	2.861E-05	0.01	N.D	/	/	N.D	/	/	5.0E-03
粒子状	Cs-134	2.165E-05	1.692E-05	0.01	2.840E-05	4.755E-06	0.01	3.383E-05	5.364E-06	0.02	2.0E-03
	Cs-136	N.D	/	/	5.629E-06	5.447E-06	0.001	4.529E-06	3.321E-06	0.0005	1.0E-02
	Cs-137	2.437E-05	1.771E-05	0.01	2.892E-05	5.003E-06	0.01	3.801E-05	4.671E-06	0.01	3.0E-03

核種	3月22日 正門			3月22日 正門			3月22日 正門			③放射線業務 従事者の呼吸 する空気中の 濃度限度 (Bq/cm ³)※	
	採取時間(1:10~1:30)			採取時間(1:10~1:30)			採取時間(1:10~1:30)				
	測定時間(14:50~)			測定時間(14:50~)			測定時間(14:50~)				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度 限度に対す る割合 (①/③)		
揮発性	I-131	2.239E-03	1.569E-05	2.24	/	/	/	/	/	/	1.0E-03
	I-132	N.D	/	/	/	/	/	/	/	/	7.0E-02
	I-133	N.D	/	/	/	/	/	/	/	/	5.0E-03
粒子状	Co-58	N.D	/	/	/	/	/	/	/	/	1.0E-02
	Cs-134	1.591E-05	5.853E-06	0.01	/	/	/	/	/	/	2.0E-03
	Cs-136	N.D	/	/	/	/	/	/	/	/	1.0E-02
その他	Cs-137	1.889E-05	5.295E-06	0.01	/	/	/	/	/	/	3.0E-03
	Te-129	N.D	/	/	/	/	/	/	/	/	4.0E-01
	Te-132	6.680E-05	1.116E-05	0.01	/	/	/	/	/	/	7.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

採取方法:海水を汲みあげ採取

測定方法:試料500mlを福島第二に運搬し、Ge半導体検出器で測定

測定時間:1,000秒

核種	3月21日 14:30			3月22日 6:30			③周辺監視区域外の水中の濃度限度 (Bq/cm ³)		
	1F南放水口付近(1~4号放水口から南側約330m地点)			1F南放水口付近(1~4号放水口から南側約330m地点)					
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度に対する割合 ((1)/(3))	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度に対する割合 ((1)/(3))			
Co-58	5.955E-02	3.349E-02	0.1	1.668E-02	2.138E-02	0.0			1.0E+00
I-131	5.066E+00	4.245E-02	126.7	1.190E+00	2.293E-02	29.8			4.0E-02
I-132	2.136E+00	1.925E-01	0.7	1.362E+00	7.721E-02	0.5			3.0E+00
Cs-134	1.486E+00	4.030E-02	24.8	1.504E-01	1.769E-02	2.5			6.0E-02
Cs-136	2.132E-01	2.358E-02	0.7	2.350E-02	1.056E-02	0.1			3.0E-01
Cs-137	1.484E+00	4.204E-02	16.5	1.535E-01	1.626E-02	1.7			9.0E-02

東京電力福島第二原子力発電所敷地内の核種分析結果

採取方法: モニタリングカーにてダスト採取

測定方法: 試料を2Fに持ち込みGe半導体型核種分析装置にて分析(1日2回測定)

核種	3月16日				3月16日				3月17日				③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm ³)※	
	情報棟東側				免震建屋1階入口				MP-1					
	採取時間(7:56~8:06)				採取時間(10:00~10:10)				採取時間(13:50~14:00)					
	測定時間(8:47~)				測定時間(11:59~)				測定時間(22:01~)					
	500秒				500秒				1000秒					
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)			
揮発性	I-131	3.432E-04	2.559E-05	0.34		6.889E-04	1.268E-05	0.69		9.432E-05	3.351E-06	0.09		1.0E-03
	I-132	1.149E-03	2.812E-05	0.02		7.528E-04	1.986E-05	0.01		N.D.	/	/		7.0E-02
	I-133	3.448E-05	2.687E-05	0.01		4.395E-05	1.497E-05	0.01		3.304E-06	4.478E-06	0.00		5.0E-03
粒子状	Co-58	N.D.	/	/		4.943E-05	2.685E-05	0.00		2.494E-05	2.061E-05	0.00		1.0E-02
	Cs-134	1.237E-04	1.449E-05	0.06		4.163E-04	2.459E-05	0.21		3.314E-04	1.680E-05	0.17		2.0E-03
	Cs-136	2.699E-05	9.412E-06	0.00		7.504E-05	1.495E-05	0.01		6.107E-05	1.296E-05	0.01		1.0E-02
	Cs-137	1.227E-04	1.311E-05	0.04		3.861E-04	2.057E-05	0.13		3.232E-04	1.702E-05	0.11		3.0E-03

核種	3月18日				3月18日				3月19日				③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm ³)※	
	MP-1				MP-1				MP-1					
	採取時間(8:22~8:32)				採取時間(15:09~15:19)				採取時間(9:15~9:25)					
	測定時間(9:40~)				測定時間(17:12~)				測定時間(10:39~)					
	1000秒				1000秒				1000秒					
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)			
揮発性	I-131	8.630E-04	3.145E-05	0.86		4.298E-03	4.993E-05	4.30		2.695E-04	5.585E-05	0.27		1.0E-03
	I-132	1.720E-03	3.821E-05	0.02		2.625E-03	9.359E-05	0.04		N.D.	/	/		7.0E-02
	I-133	N.D.	/	/		5.246E-05	4.213E-05	0.01		N.D.	/	/		5.0E-03
粒子状	Co-58	3.080E-05	2.048E-05	0.00		1.578E-04	1.435E-05	0.02		N.D.	/	/		1.0E-02
	Cs-134	3.345E-04	1.666E-05	0.17		4.863E-04	1.538E-05	0.24		N.D.	/	/		2.0E-03
	Cs-136	5.882E-05	1.012E-05	0.01		8.416E-05	1.436E-05	0.01		N.D.	/	/		1.0E-02
	Cs-137	3.147E-04	1.683E-05	0.10		4.306E-04	1.715E-05	0.14		N.D.	/	/		3.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種	3月19日			3月20日			3月20日			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm³)※	
	MP-1			MP-1			MP-1				
	採取時間(18:18~18:28)			採取時間(11:27~11:37)			採取時間(17:10~17:20)				
	測定時間(19:08~)			測定時間(16:17~)			測定時間(21:11~)				
	1000秒			500秒			500秒				
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空气中濃度限度に対する割合 (①/③)		
揮発性	I-131	2.513E-04	5.665E-05	0.25	5.254E-05	1.155E-05	0.05	2.230E-04	4.286E-05	0.22	1.0E-03
	I-132	1.229E-04	1.226E-04	0.00	N.D	/	/	N.D	/	/	7.0E-02
	I-133	N.D	/	/	N.D	/	/	N.D	/	/	5.0E-03
粒子状	Co-58	N.D	/	/	N.D	/	/	N.D	/	/	1.0E-02
	Cs-134	N.D	/	/	N.D	/	/	N.D	/	/	2.0E-03
	Cs-136	N.D	/	/	N.D	/	/	N.D	/	/	1.0E-02
	Cs-137	N.D	/	/	N.D	/	/	N.D	/	/	3.0E-03

核種	3月21日			3月21日						③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm³)※	
	MP-1			MP-1							
	採取時間(10:40~10:50)			採取時間(18:11~18:19)							
	測定時間(12:15~)			測定時間(19:00~)							
	500秒			500秒							
	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm³)	②検出限界濃度 (Bq/cm³)	空气中濃度限度に対する割合 (①/③)					
揮発性	I-131	2.250E-04	1.687E-05	0.23	1.580E-04	1.931E-05	0.16				1.0E-03
	I-132	2.420E-04	2.401E-05	0.00	8.097E-04	1.937E-05	0.01				7.0E-02
	I-133	N.D	/	/	N.D	/	/				5.0E-03
粒子状	Co-58	1.085E-05	1.138E-05	0.00	1.341E-05	9.886E-06	0.00				1.0E-02
	Cs-134	4.410E-05	9.294E-06	0.02	3.017E-05	1.005E-05	0.02				2.0E-03
	Cs-136	N.D	/	/	N.D	/	/				1.0E-02
	Cs-137	4.711E-05	7.959E-06	0.02	3.308E-05	9.703E-06	0.01				3.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

核種	3月22日			3月22日			③放射線業務従事者の呼吸する空気中の濃度限度 (Bq/cm ³)※	
	MP-1			MP-1				
	採取時間(10:02~10:10)			採取時間(16:43~16:51)				
	測定時間(11:53~)			測定時間(17:32~)				
	500秒			500秒				
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合 (①/③)		
揮発性	I-131	1.416E-04	2.272E-05	0.14	1.349E-04	2.216E-05	0.13	1.0E-03
	I-132	N.D			N.D			7.0E-02
	I-133	N.D			N.D			5.0E-03
粒子状	Co-58	N.D			N.D			1.0E-02
	Cs-134	1.293E-05	9.476E-06	0.01	1.353E-05	9.812E-06	0.01	2.0E-03
	Cs-136	N.D			N.D			1.0E-02
	Cs-137	1.024E-05	8.838E-06	0.003	1.369E-05	8.361E-06	0.005	3.0E-03
その他	Te-129	2.316E-03	1.784E-03	0.01	N.D			4.0E-01
	Te-132	2.191E-05	1.649E-05	0.003	N.D			7.0E-03

※人が呼吸する空気中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度

採取方法: 海水をくみ上げ採取
 測定方法: 試料500mlをGe半導体検出器で測定
 測定時間: 1,000秒

核種	3月22日 14:28			3月21日 23:45			3月22日 0:38			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	2F北放水口付近(3,4号放水口付近)			2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)			2F富岡川河口付近(3,4号放水口から北側に約2,000m地点)			
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	
Co-58	5.704E-03	7.570E-03	0.0	N.D	6.845E-03	/	1.028E-02	1.253E-02	0.0	1.0E+00
I-131	1.085E+00	1.284E-02	27.1	6.558E-01	1.226E-02	16.4	3.211E+00	1.694E-02	80.3	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	1.205E-01	4.146E-02	0.0	8.761E-01	4.236E-02	0.3	3.0E+00
Cs-134	4.815E-02	9.213E-03	0.8	3.110E-02	8.657E-03	0.5	7.535E-02	1.102E-02	1.3	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	5.474E-03	4.840E-03	0.0	1.159E-02	7.718E-02	0.0	3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	3.292E-02	8.303E-03	0.4	7.760E-02	1.186E-02	0.9	9.0E-02

核種	3月22日 14:28			3月22日 15:06						③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	2F北放水口付近(3,4号放水口付近)			2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)						
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)				
Co-58	N.D	1.526E-02	/	N.D	1.301E-02	/				1.0E+00
I-131	1.138E+00	1.993E-02	28.5	6.664E-01	1.862E-02	16.7				4.0E-02
I-132	N.D	8.791E-02	/	N.D	7.915E-02	/				3.0E+00
Cs-134	4.631E-02	1.350E-02	0.8	3.925E-02	1.195E-02	0.7				6.0E-02
Cs-136	N.D	7.849E-03	/	N.D	6.784E-03	/				3.0E-01
Cs-137	3.962E-02	1.406E-02	0.4	4.361E-02	1.129E-02	0.5				9.0E-02

March 23, 2011

Nuclear and Industrial Safety Agency

Seismic Damage Information (the 46th Release)

(As of 19:00 March 23rd, 2011)

Nuclear and Industrial Safety Agency (NISA) confirmed the current situation of Onagawa NPS, Tohoku Electric Power Co. Inc.; Fukushima Dai-ichi and Fukushima Dai-ni NPSs, Tokyo Electric Power Co. Inc. (TEPCO); Tokai Dai-ni NPS, Japan Atomic Power Co. Inc. as follows:

Major updates are as follows.

1. Nuclear Power Stations (NPSs)

● Fukushima Dai-ichi NPS

<Situation of Water Injection and Water Spray>

- Spray of around 130 t of water for Unit 4 by Concrete Pump Truck (50t/h) was carried out. (From 10:00 till 13:02 March 23rd)
- Injection of 35 t of seawater to the Spent Fuel Pool of Unit 3 via the Cooling and Purification Line was carried out. (From 11:03 till 13:20 March 23rd)
- Slightly blackish smoke generated from the reactor building of Unit 3. (Around 16:20 March 23rd)

< Fire Bureaus' Activities>

- From 8:30 till 9:30, and from 13:30 till 14:30 on March 23rd, Niigata City Fire Bureau and Hamamatsu City Fire Bureau gave guidance to TEPCO as to the operation of large decontamination system.

(Attached sheet)

1. The state of operation at NPS (Number of automatic shutdown units: 10)

● Fukushima Dai-ichi NPS, TEPCO

(Okuma Town and Futaba Town, Futaba County, Fukushima Prefecture)

(1) The state of operation

Unit 1 (460MWe):	automatic shutdown
Unit 2 (784MWe):	automatic shutdown
Unit 3 (784MWe):	automatic shutdown
Unit 4 (784MWe):	in periodic inspection outage
Unit 5 (784MWe):	in periodic inspection outage, cold shutdown at 14:30 March 20th
Unit 6 (1,100MWe):	in periodic inspection outage, cold shutdown at 19:27 March 20th

(2) Major Plant Parameters (As of 18:00 March 23rd)

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Reactor Pressure*1 [MPa]	0.481(A) 0.459(B)	0.065(A) 0.065(B)	-0.003(C) 0.135(A)	—	0.108	0.109
CV Pressure (D/W) [kPa]	360	110	100	—	—	—
Reactor Water Level*2 [mm]	-1,750(A) -1,700(B)	-1,250(A) Not available(B)	-1,800(A) -2,300(B)	—	1,723	2,758
Suppression Pool Water Temperature (S/C) [°C]	—	—	—	—	—	—
Suppression Pool Pressure (S/C) [kPa]	330	down scale	down scale	—	—	—
Spent Fuel Pool Water Temperature [°C]	—	51*4	—	Not available*3	41.1	19.0
Time of Measurement	16:00 March 23rd	14:00 March 23rd	09:10 March 23rd		18:00 March 23rd	18:00 March 23rd

- *1: Converted from reading value to absolute pressure
- *2: Distance from the top of fuel
- *3: As of 04:08 March 14th, 84°C
- *4: As of 04:20 March 23rd

(3) Situation of Each Unit

<Unit 1>

- TEPCO reported to NISA the event (Inability of water injection of the Emergency Core Cooling System) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness. (16:36 March 11th)
- Seawater injection to the Reactor Pressure Vessel (RPV) via the Fire Extinguish Line started. (20:20 March 12th)
→Temporary interruption of the injection (01:10 March 14th)
- The sound of explosion in Unit 1 occurred. (15:36 March 12th)
- The amount of injected water to the to the Reactor Core was increased by utilizing Water Supply Line in addition to the Fire Extinguish Line (2m³/h→18m³/h).(02:33 March 23rd) Later, minor adjustment was made. (around 11m³/h) (Around 11:00 March 23rd)
- Seawater is being injected. (As of 19:00 March 23rd)

<Unit 2>

- TEPCO reported to NISA the event (Inability of water injection of the Emergency Core Cooling System) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness. (16:36 March 11th)
- The Blow-out Panel of reactor building was opened due to the explosion in the reactor building of Unit 3. (After 11:00 March 14th)
- Reactor water level tended to decrease. (13:18 March 14th) TEPCO reported to NISA the event (Loss of reactor cooling functions) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness. (13:49 March 14th)
- Seawater injection to RPV via the Fire Extinguish line was ready. (19:20 March 14th)
- Water level in RPV tended to decrease. (22:50 March 14th)

- A sound of explosion was made in Unit 2. As the pressure in Suppression Chamber decreased (06:10 March 15th), there was a possibility that an incident occurred in the Chamber. (About 06:20 March 15th)
- Electric power receiving at the emergency power source transformer from the external transmission line was completed. The work for laying the electric cable from the facility to the load side was carried out. (As of 13:30 March 19th)
- Injection of 40t of Seawater to the Spent Fuel Pool was started.(from 15:00 till 17:20 March 20th)
- Power Center of Unit 2 received electricity (15:46 March 20th)
- White smoke generated from Unit 2. (18:22 March 21st)
- White smoke was died down and almost invisible. (As of 07:11 March 22nd)
- Injection of 18t of Seawater to the Spent Fuel Pool was carried out. (From 16:07 till 17:01 March 22nd)
- Seawater injection to RPV continues. (As of 19:00 March 23rd)

<Unit 3>

- Fresh water started to be injected to RPV via the Fire Extinguish Line. (11:55 March 13th)
- Seawater started to be injected to RPV via the Fire Extinguish Line. (13:12 March 13th)
- Seawater injection for Units 1 and 3 was interrupted due to the lack of seawater in pit. (01:10 March 14th)
- Seawater injection to RPV for Unit 3 was restarted. (03:20 March 14th)
- The pressure in Primary Containment Vessel (PCV) of Unit 3 rose unusually. (07:44 March 14th) TEPCO reported to NISA on the event falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness. (7:52 March 14th)
- In Unit 3, the explosion like Unit 1 occurred around the reactor building (11:01 March 14th)
- The white smoke like steam generated from Unit 3. (08:30 March 16th)
- Because of the possibility that PCV of Unit 3 was damaged, the workers evacuated from the main control room of Units 3 and 4 (common control room). (10:45 March 16th) Thereafter the operators returned to the

- room and restarted the operation of water injection. (11:30 March 16th)
- Seawater was discharged 4 times to Unit 3 by the helicopters of the Self-Defence Force. (9:48, 9:52, 9:58 and 10:01 March 17th)
 - The riot police arrived at the site for the water spray from the ground. (16:10 March 17th)
 - The Self-Defence Force started the water spray using a fire engine. (19:35 March 17th)
 - The water spray from the ground was carried out by the riot police. (From 19:05 till 19:13 March 17th)
 - The water spray from the ground was carried out by the Self-Defense Force using 5 fire engines. (19:35, 19:45, 19:53, 20:00 and 20:07 March 17th)
 - The water spray from the ground using 6 fire engines (6 tons of water spray per engine) was carried out by the Self-Defence Force. (From before 14:00 till 14:38 March 18th)
 - The water spray from the ground using a fire engine provided by the US Military was carried out. (Finished at 14:45 March 18th)
 - Hyper Rescue Unit of Tokyo Fire Department (14 vehicles) arrived at the Main Gate (23:10 March 18th) and 6 vehicles of them entered the NPS in order to spray water from the ground. (23:30 March 18th)
 - Hyper Rescue Unit of Tokyo Fire Department carried out the water spray. (Finished at 03:40 March 20th)
 - The pressure in PCV of Unit 3 rose (320 kPa as of 11:00 March 20th). Preparation to lower the pressure was carried. Judging from the situation, immediate pressure relief was not required. Monitoring the pressure continues (120 kPa at 12:15 March 21st).
 - On-site survey for leading electric cable (From 11:00 till 16:00 March 20th)
 - Water spray over the Spent Fuel Pool of Unit 3 by Hyper Rescue Unit of Tokyo Fire Department was carried out (From 21:39 March 20th till 03:58 March 21st).
 - Works for the recovery of external power supply is being carried out.
 - Grayish smoke generated from Unit 3. (At around 15:55 March 21st)
 - The smoke was confirmed to be died down. (17:55 March 21st)
 - Grayish smoke changed to be whitish and seems to be ceasing. (As of 07:11 March 22nd)

- Water spray (Around 180t) by Hyper Rescue Unit of Tokyo Fire Department was carried out. (from 15:10 till 15:59 March 22nd)
- Lighting was recovered in the Central Operation Room. (22:43 March 22nd)
- Injection of 35t of seawater to the Spent Fuel Pool via the Cooling and Purification Line was carried out. (From 11:03 till 13:20 March 23rd)
- Slightly blackish smoke generated from the reactor building. (Around 16:20 March 23rd)
- Seawater is being injected to RPV. (As of 19:00 March 23rd)

<Unit 4>

- Because of the replacement work of the Shroud of RPV, no fuel was inside the RPV.
- The temperature of water in the Spent Fuel Pool at Unit 4 had increased. (84 °C at 04:08 March 14th)
- It was confirmed that a part of wall in the operation area of Unit 4 was damaged. (06:14 March 15th)
- The fire at Unit 4 occurred. (09:38 March 15th) TEPCO reported that the fire was extinguished spontaneously. (11:00 March 15th)
- The fire occurred at Unit 4. (5:45 March 16th) TEPCO reported that no fire could be confirmed on the ground. (At around 06:15 March 16th)
- The Self-Defence Force started water spray over the Spent Fuel Pool of Unit 4 (09:43 March 20th).
- On-site survey for leading electric cable (From 11:00 till 16:00 March 20th)
- Water spray over the Spent Fuel Pool of Unit 4 by Self-Defence Force was started. (From around 18:30 till 19:46 March 20th).
- Water spray over the Spent Fuel Pool by Self-Defence Force using 13 fire engines was started (From 06:37 till 08:41 March 21st).
- Works for laying electricity cable to the Power Center was completed. (At around 15:00 March 21st)
- Power Center received electricity. (10:35 March 22nd)
- Spray of around 150t of water using Concrete Pump Truck (50t/h) was carried out. (from 17:17 till 20:32 March 22nd)
- Spray of around 130t of water using Concrete Pump Truck (50t/h) was carried out. (From 10:00 till 13:02 March 23rd)

<Units 5 and 6>

- The first unit of Emergency Diesel Generator (B) for Unit 6 is operating and supplying electricity. Water injection to RPV and the Spent Fuel Pool through the system of Make up Water Condensate (MUWC) is being carried out.
- The second unit of Emergency Diesel Generator (A) for Unit 6 started up. (04:22 March 19th)
- The pumps for Residual Heat Removal (RHR) (C) for Unit 5 (05:00 March 19th) and RHR (B) for Unit 6 (22:14 March 19th) started up and recovered heat removal function. It cools Spent Fuel Pool with priority. (Power supply : Emergency Diesel Generator for Unit 6) (05:00 March 19th)
- Unit 5 under cold shut down (14:30 March 20th)
- Unit 6 under cold shut down (19:27 March 20th)
- Receiving electricity reached to the transformer of starter. (19:52 March 20th)
- Power supply to Unit 5 was switched from the Emergency Diesel Generator to external power supply. (11:36 March 21st)
- Power supply to Unit 6 was switched from the Emergency Diesel Generator to external power supply. (19:17 March 22nd)

<Common Spent Fuel Pool>

- It was confirmed that the water level of Spent Fuel Pool was maintained full at after 06:00 March 18th.
- As of 09:00 March 19th, the water temperature in the pool is 57°C.
- Water spray over the Common Spent Fuel Pool was started (From 10:37 till 15:30 March 21st)
- As of 16:30 March 21st, water temperature of the pool was around 61°C.

● Fukushima Dai-ni NPS (TEPCO)

(Naraha Town / Tomioka Town, Futaba County, Fukushima Prefecture.)

(1) The state of operation

Unit1 (1,100MWe): automatic shutdown, cold shut down at 17:00,
March 14th

Unit2 (1,100MWe): automatic shutdown, cold shut down at 18:00,

March 14th
 Unit3 (1,100MWe): automatic shutdown, cold shut down at 12:15,
 March 12th
 Unit4 (1,100MWe): automatic shutdown, cold shut down at 07:15,
 March 15th

(2) Major plant parameters (As of 18:00 March 23rd)

	Unit	Unit 1	Unit 2	Unit 3	Unit 4
Reactor Pressure*1	MPa	0.15	0.13	0.11	0.15
Reactor water temperature	°C	30.8	28.0	34.0	30.1
Reactor water level*2	mm	9,146	10,296	8,409	8,785
Suppression pool water temperature	°C	25	24	26	25
Suppression pool pressure	kPa (abs)	108	106	104	104
Remarks		cold shutdown	cold shutdown	cold shutdown	cold shutdown

*1: Converted from reading value to absolute pressure

*2: Distance from the top of fuel

(3) Report concerning other incidents

- TEPCO reported to NISA the event in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Unit 1. (18:08 March 11th)
- TEPCO reported to NISA the events in accordance with the Article 10 regarding Units 1, 2 and 4. (18:33 March 11th)
- TEPCO reported to NISA the event (Loss of pressure suppression function) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Unit 1. (5:22 March 12th)
- TEPCO reported to NISA the event (Loss of pressure suppression function) falling under the Article 15 of the Act on Special Measures

Concerning Nuclear Emergency Preparedness regarding Unit 2. (5:32 March 12th)

- TEPCO reported to NISA the event (Loss of pressure suppression function) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Unit 4 of Fukushima Dai-ni NPS. (6:07 March 12th)

● Onagawa NPS (Tohoku Electric Power Co. Inc.)

(Onagawa Town, Oga County and Ishinomaki City, Miyagi Prefecture)

(1) The state of operation

Unit 1 (524MWe): automatic shutdown, cold shut down at 0:58, March 12th

Unit 2 (825MWe): automatic shutdown, cold shut down at earthquake

Unit 3 (825MWe): automatic shutdown, cold shut down at 1:17, March 12th

(2) Readings of monitoring post, etc.

MP2 (Monitoring at the North End of Site Boundary)

approx. 1.4 μ SV/h (16:00 March 22nd) → approx. 1.2 μ SV/h (16:00 March 23rd)

(3) Report concerning other incidents

- Fire Smoke on the first basement of the Turbine Building was confirmed to be extinguished. (22:55 on March 11th)
- Tohoku Electric Power Co. reported to NISA in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness. (13:09 March 13th)

2. Action taken by NISA

(March 11th)

14:46 Set up of the NISA Emergency Preparedness Headquarters (Tokyo) immediately after the earthquake

15:42 TEPCO reported to NISA in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.

16:36 TEPCO recognized the event (Inability of water injection of the

- Emergency Core Cooling System) in accordance with the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Units 1 and 2 of Fukushima Dai-ichi NPS. (Reported to NISA at 16:45)
- 18:08 Regarding Unit 1 of Fukushima Dai-ichi NPS, TEPCO reported to NISA in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 18:33 Regarding Units 1, 2 and 4 of Fukushima Dai-ichi NPS, TEPCO reported to NISA in accordance with the Article 10 of Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 19:03 The Government declared the state of nuclear emergency. (Establishment of Government Nuclear Emergency Response Headquarters and Local Emergency Response Headquarters)
- 20:50 Fukushima Prefecture's Emergency Response Headquarters issued a direction for the residents within 2 km radius from Unit 1 of Fukushima Dai-ichi NPS to evacuate. (The population of this area is 1,864.)
- 21:23 Directives from Prime Minister to the Governor of Fukushima Prefecture, the Mayor of Okuma Town and the Mayor of Futaba Town were issued regarding the event occurred at Fukushima Dai-ichi NPS, TEPCO, in accordance with the Paragraph 3, the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness as follows:
- Direction for the residents within 3km radius from Unit 1 of Fukushima Dai-ichi NPS to evacuate
 - Direction for the residents within 10km radius from Unit 1 of Fukushima Dai-ichi NPS to stay in-house
- 24:00 Vice Minister of Economy, Trade and Industry, Ikeda arrived at the Local Emergency Response Headquarters

(March 12th)

- 05:22 Regarding Unit 1 of Fukushima Dai-ichi NPS, TEPCO recognized the event (Loss of pressure suppression function) to fall under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness. (Reported to NISA at 06:27)
- 05:32 Regarding Unit 2 of Fukushima Dai-ichi NPS, TEPCO recognized the

- event (Loss of pressure suppression function) to fall under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 05:44 Residents within 10km radius from Unit 1 of Fukushima Dai-ichi NPS shall evacuate by the Prime Minister Directive.
- 06:07 Regarding of Unit 4 of Fukushima Dai-ni NPS, TEPCO recognized the event (Loss of pressure suppression function) to fall under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 06:50 In accordance with the Paragraph 3, the Article 64 of the Nuclear Regulation Act, the order was issued to control the internal pressure of PCV of Units 1 and 2 of Fukushima Dai-ichi NPS.
- 07:45 Directives from Prime Minister to the Governor of Fukushima Prefecture, the Mayors of Hirono Town, Naraha Town , Tomioka Town and Okuma Town were issued regarding the event occurred at Fukushima Dai-ni NPS, TEPCO, pursuant to the Paragraph 3, the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness as follows:
- Direction for the residents within 3km radius from Fukushima Dai-ni NPS to evacuate
 - Direction for the residents within 10km radius from Fukushima Dai-ni NPS to stay in-house
- 17:00 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 17:39 Prime Minister directed evacuation of the residents within the 10 km radius from Fukushima Dai-ni NPS.
- 18:25 Prime Minister directed evacuation of the residents within the 20km radius from Fukushima Dai-ichi NPS.
- 19:55 Directives from Prime Minister was issued regarding seawater injection to Unit 1 of Fukushima Dai-ichi NPS.
- 20:05 Considering the Directives from Prime Minister and pursuant to the Paragraph 3, the Article 64 of the Nuclear Regulation Act, the order was issued to inject seawater to Unit 1 of Fukushima Dai-ichi NPS and so on.

20:20 At Unit 1 of Fukushima Dai-ichi NPS, seawater injection started.

(March 13th)

- 05:38 TEPCO reported to NISA the event (Total loss of coolant injection function) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Unit 3 of Fukushima Dai-ichi NPS. Recovering efforts by TEPCO of the power source and coolant injection function and the work on venting were under way.
- 09:01 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 09:08 Pressure suppression and fresh water injection started for Unit 3 of Fukushima Dai-ichi NPS.
- 09:20 The Pressure Vent Valve of Unit 3 of Fukushima Dai-ichi NPS was opened.
- 09:30 Directive was issued for the Governor of Fukushima Prefecture, the Mayors of Okuma Town, Futaba Town, Tomioka Town and Namie Town in accordance with the Act on Special Measures Concerning Nuclear Emergency Preparedness on the contents of radioactivity decontamination screening.
- 09:38 TEPCO reported to NISA that Unit 1 of Fukushima Dai-ichi NPS reached a situation specified in the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 13:09 Tohoku Electric Power Co. reported to NISA that Onagawa NPS reached a situation specified in the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 13:12 Fresh water injection was switched to seawater injection for Unit 3 of Fukushima Dai-ichi NPS.
- 14:36 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.

(March 14th)

- 01:10 Seawater injection for Units 1 and 3 of Fukushima Dai-ichi NPS were temporarily interrupted due to the lack of seawater in pit.
- 03:20 Seawater injection for Unit 3 of Fukushima Dai-ichi NPS was restarted.
- 04:40 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 05:38 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 07:52 TEPCO reported to NISA the event (Unusual rise of the pressure in PCV) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Unit 3 of Fukushima Dai-ichi NPS.
- 13:25 Regarding Unit 2 of Fukushima Dai-ichi NPS, TEPCO recognised the event (Loss of reactor cooling function) to fall under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness.
- 22:13 TEPCO reported to NISA in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 22:35 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.

(March 15th)

- 00:00: The acceptance of experts from IAEA was decided. NISA agreed to accept the offer of dispatching of the expert on NPS damage from IAEA considering the intention by Mr. Amano, Director General of IAEA. Therefore, the schedule of expert acceptance will be planned from now on according to the situation.
- 00:00: NISA also decided the acceptance of experts dispatched from NRC.
- 07:21 TEPCO reported to NISA the event (Unusual increase of radiation

- dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 07:24 Incorporated Administration Agency, Japan Atomic Energy Agency (JAEA) reported to NISA in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Nuclear Fuel Cycle Engineering Laboratories, Tokai Research and Development Centre.
- 07:44 JAEA reported to NISA in accordance with the Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Nuclear Science Research Institute.
- 08:54 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 10:30 According to the Nuclear Regulation Act, Minister of Economy, Trade and Industry issued the directions as follows.
- For Unit 4: To extinguish fire and to prevent the occurrence of re-criticality
 - For Unit 2: To inject water to reactor vessel promptly and to vent Drywell.
- 10:59 Considering the possibility of lingering situation, it was decided that the function of the Local Emergency Response Headquarters was moved to the Fukushima Prefectural Office.
- 11:00 Prime Minister directed the in-house stay area.
- In-house stay was additionally directed to the residents in the area from 20 km to 30 km radius from Fukushima Dai-ichi NPS considering in-reactor situation.
- 16:30 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.
- 22:00 According to the Nuclear Regulation Act, Minister of Economy, Trade and Industry issued the following direction.
- For Unit 4: To implement the injection of water to the Spent Fuel Pool.

23:46 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.

(March 18th)

13:00 Ministry of Education, Culture, Sports, Science and Technology decided to reinforce the nation-wide monitoring survey in the emergency of Fukushima Dai-ichi and Dai-ni NPS.

15:55 TEPCO reported to NISA on the accidents and failure at Units 1, 2, 3 and 4 of Fukushima Dai-ichi NPS (Leakage of the radioactive materials inside of the reactor buildings to non-controlled area of radiation) pursuant to the Article 62-3 of the Nuclear Regulation Act.

16:48 Japan Atomic Power Co. reported to NISA accidents and failures in Tokai NPS (Failure of the seawater pump motor of the emergency diesel generator 2C) pursuant to the Article 62-3 of the Nuclear Regulation Act.

(March 19th)

07:44 The second unit of Emergency Diesel Generator (A) for Unit 6 started up.

TEPCO reported to NISA that the pump for RHR (C) for Unit 5 started up and started to cooling Spent Fuel Storage Pool. (Power supply: Emergency Diesel Generator for Unit 6)

08:58 TEPCO reported to NISA the event (Unusual increase of radiation dose at the site boundary) falling under the Article 15 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi NPS.

(March 20th)

23:30 Directive from Local Emergency Response Headquarters to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village) was issued

regarding the change of the reference value for the screening level for decontamination of radioactivity.

(March 21st)

- 07:45 Directive titled as “Administration of the stable Iodine” was issued from Local Emergency Response Headquarters to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village), which directs the above-mentioned governor and the heads to administer stable Iodine under the direction of the headquarters and in the presence of medical experts, and not to administer it on personal judgements.
- 16:45 Directive titled as “Ventilation for using heating equipments within the in-house evacuation zone” was issued from the Head of Local Emergency Response Headquarters to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village), which directs the above-mentioned governor and heads to publicly announce the guidance to the residents within the in-house evacuation zone, concerning the indoor use of heating equipments that require ventilation, in order to avoid poisoning from carbon monoxide and to reduce exposure.
- 17:50 Directive from the Head of Government Nuclear Emergency Response Headquarters to the Prefectural Governors of Fukushima, Ibaraki, Tochigi and Gunma was issued, which direct the above-mentioned governors to issue a request to relevant businesses and people to suspend shipment of spinach, *Kakina* (a green vegetable) and raw milk for the time being.

(March 22nd)

- 16:00 NISA received the response (Advice) from Nuclear Safety Commission Emergency Technical Advisory Body to the request for advice made by NISA, regarding the report from TEPCO titled as “The Results of Analysis of Seawater” dated March 22nd.

< Possibility on radiation exposure (As of 19:00 March 23rd) >

1. Exposure of residents

- (1) Including the about 60 evacuees from Futaba Public Welfare Hospital to Nihonmatsu City Fukushima Gender Equality Centre, as the result of measurement of 133 persons at the Centre, 23 persons counted more than 13,000 cpm were decontaminated.
- (2) The 35 residents transferred from Futaba Public Welfare Hospital to Kawamata Town Saiseikai Kawamata Hospital by private bus arranged by Fukushima Prefecture were judged to be not contaminated by the Prefectural Response Centre.
- (3) As for the about 100 residents in Futaba Town evacuated by bus, the results of measurement for 9 of the 100 residents were as follows. The evacuees, moving outside the Prefecture (Miyagi Prefecture), were divided into two groups, which joined later to Nihonmatsu City Fukushima Gender Equality Centre.

No. of Counts	No. of Persons
18,000cpm	1
30,000-36,000cpm	1
40,000cpm	1
little less than 40,000cpm*	1
very small counts	5

*(These results were measured without shoes, though the first measurement exceeded 100,000cpm)

- (4) The screening was started at the Off site Centre in Okuma Town from March 12th to 15th. 162 people received examination until now. At the beginning, the reference value was set at 6,000cpm. 110 people were at the level below 6,000 cpm and 41 people were at the level of 6,000 cpm or more. When the reference value was increased to 13,000 cpm afterward, 8 people were at the level below 13,000 cpm and 3 people are at the level of 13,000 cpm or more.

The 5 out of 162 people examined were transported to hospital after

being decontaminated.

- (5) The Fukushima Prefecture carried out the evacuation of patients and personnel of the hospitals located within 10km area. The screening of all the members showed that 3 persons have the high counting rate. These members were transported to the secondary medical institute of exposure. As a result of the screening on 60 fire fighting personnel involved in the transportation activities, the radioactivity higher than twice of the back ground was detected on 3 members. Therefore, all the 60 members were decontaminated.

2. Exposure of workers

- (1) As for the 18 workers conducting operations in Fukushima Dai-ichi NPS, results of measurements are as follows;

One worker: At the level of exposure as 106.3 mSv, no risk of internal exposure and no medical treatment required.

Other workers: At the level of no risk for health but concrete numerical value is unknown.

- (2) As for the 7 people working at the time of explosion at around the Unit 3 of Fukushima Dai-ichi NPS who were injured and conscious, 6 out of 7 people were decontaminated by an industrial doctor of the clinic in Fukushima Dai-ichi NPS, and confirmed to have no risk. The other one was decontaminated at the clinic and the medical treatment was completed.

3. Others

- (1) Fukushima Prefecture has started the screening from 13 March. It is carried out by rotating the evacuation sites and at the 12 places (set up permanently) such as health offices. The results of screening are being totalled up.

- (2) 5 members of Self-Defence Force who worked for water supply in Fukushima Dai-ichi NPS were exposed. After the work (March 12th), 30,000 cpm was counted by the measurement at Off site Centre. The counts after decontamination were between 5,000 and 10,000 cpm. One member was transferred to National Institute of Radiological Sciences. No other exposure of the Self-Defence Force member was confirmed at the Ministry of Defence.

- (3) As for policeman, the decontaminations of two policemen were confirmed by the National Police Agency. Nothing unusual was reported.

<Directive of screening levels for decontamination of radioactivity>

- (1) On March 20th, the Local Emergency Response Headquarters issued the directive to change the reference value for the screening level for decontamination of radioactivity as the following to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village).

Old : 40 Bq/cm² measured by a gamma-ray survey meter or 6,000 cpm

New : 1 μ Sv/hour (dose rate at 10cm distance) or 100,000cpm equivalent

<Directives of administrating stable Iodine during evacuation>

- (1) On March 16th, the Local Emergency Response Headquarters issued “Directive to administer the stable Iodine during evacuation from the evacuation area (20 km radius)” to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village).
- (2) On March 21st, the Local Emergency Response Headquarters issued Directive titled as “Administration of the stable Iodine” to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village), which directs the above-mentioned governor and heads to administer stable Iodine under the direction of the headquarters and in the presence of medical experts, and not to administer it on personal judgements.

<Situation of the injured (As of 19:00 March 23rd)>

1. Injury due to earthquake
 - Two employees (slightly)

- Two subcontract employees (one fracture in both legs)
 - Two missing (TEPCO's employee, missing in the turbine building of Unit 4)
 - One emergency patient (According to the local prefecture, one patient of cerebral infarction was transported by the ambulance).
 - Ambulance was requested for one employee complaining the pain at left chest outside of control area (conscious).
 - Two employees complaining discomfort wearing full-face mask in the main control room were transported to Fukushima Dai-ni NPS for a consultation with an industrial doctor.
2. Injury due to the explosion of Unit 1 of Fukushima Dai-ichi NPS
- Four employees were injured at the explosion and smoke of Unit 1 around turbine building (non-controlled area of radiation) and were examined by Kawauchi Clinic.
3. Injury due to the explosion of Unit 3 of Fukushima Dai-ichi NPS
- Four TEPCO's employees
 - Three subcontractor employees
 - Four members of Self-Defence Force (one of them was transported to National Institute of Radiological Sciences considering internal possible exposure. The examination resulted in no internal exposure. The member was discharged from the institute on March 16th.)
4. Other injuries
- A person who visited the clinic in Fukushima Dai-ni NPS from a transformer sub-station, claiming of a stomach ache, was transported to a clinic in Iwaki City, because the person was not contaminated.

<Situation of resident evacuation (As of 19:00 March 23rd)>

At 11:00 March 15th, Prime Minister directed in-house stay to the residents in the area from 20 km to 30 km radius from Fukushima Dai-ichi NPS. The directive was conveyed to Fukushima Prefecture and related municipalities.

Regarding the evacuation as far as 20-km from Fukushima Dai-ichi NPS and 10-km from Fukushima Dai-ni NPS, necessary measures have already been taken.

- The in-house stay in the area from 20 km to 30 km from Fukushima Dai-ichi NPS is made fully known to the residents concerned.
- Cooperating with Fukushima Prefecture, livelihood support to the residents in the in-house stay area are implemented.

<Directive regarding foods and drinks>

On March 21st, Directive from the Head of Government Nuclear Emergency Response Headquarters to the Prefectural Governors of Fukushima, Ibaraki, Tochigi and Gunma was issued, which directs above-mentioned governors to issue a request to relevant businesses and people to suspend shipment of the following products (①, ②) for the time being.

- ① Spinach and *Kakina* (a green vegetable) produced in Fukushima, Ibaraki, Tochigi and Gunma Prefectures
- ② Raw milk produced in Fukushima Prefecture

<Directive regarding the ventilation when using heating equipments in the area of indoor evacuation >

On March 21st, Directive titled as “Ventilation for using heating equipments within the in-house evacuation zone” from the Head of Local Emergency Response Headquarters to the Prefectural Governor and the heads of cities, towns and villages (Tomioka Town, Hutaba Town, Okuma Town, Namie Town, Kawauchi Village, Naraha Town, Minamisouma City, Tamura City, Kazurao Village, Hirono Town, Iwaki City and Iidate Village) was issued, which directs those governor and heads to publicly announce the guidance to the residents within the in-house evacuation zone, concerning the indoor use of heating equipments that require ventilation, in order to avoid poisoning from carbon monoxide and to reduce exposure.

< Fire Bureaus' Activities>

- From 11:00 till around 14:00 on March 22nd, Niigata City Fire Bureau and Hamamatsu City Fire Bureau gave guidance to TEPCO as to the set up of large decontamination system.

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- From 8:30 till 9:30, from 13:30 till 14:30 on March 23rd, Niigata City Fire Bureau and Hamamatsu City Fire Bureau gave guidance to TEPCO as to the operation of large decontamination system.

(Contact Person)

Mr. Toshihiro Bannai

Director, International Affairs Office,
NISA/METI

Phone:+81-(0)3-3501-1087

地震被害情報（第47報）

（3月24日8時00分現在）

原子力安全・保安院が現時点で把握している東京電力(株)福島第一原子力発電所、福島第二原子力発電所、東北電力(株)女川原子力発電所、日本原子力発電(株)東海第二、電気、ガス、熱供給、コンビナート被害の状況は、以下のとおりです。

前回からの変更点は以下のとおり。

1. 原子力発電所関係

○福島第一原子力発電所

- ・ 3号機原子炉建屋から発生した煙は、23日23:30頃及び24日4:50頃に確認したところ止まっている模様。
- ・ 3号機使用済燃料プールに冷却材浄化系を用いて海水の注入開始（24日5:35頃）
- ・ 5号機の仮設の残留熱除去海水系（RHR）ポンプが、仮設から本設の電源への切り替えの際、自動停止（23日17:24）。

2. 産業保安関係

別紙参照

<被ばくの可能性>

福島県では保健所等14ヶ所（常設）でスクリーニングを実施中。3月21日までに75,429人に対し実施。そのうち、100,000cpm以上の値を示した者は97人であったが、cpm以上の数値を示した者についても脱衣等をし、再計測したところ、100,000cpm以下に減少。

(別紙)

1 発電所の運転状況【自動停止号機数：10基】

○東京電力(株)福島第一原子力発電所（福島県双葉郡大熊町及び双葉町）

(1) 運転状況

- 1号機（46万kW）（自動停止）
- 2号機（78万4千kW）（自動停止）
- 3号機（78万4千kW）（自動停止）
- 4号機（78万4千kW）（定検により停止中）
- 5号機（78万4千kW）（定検により停止中、20日14:30冷温停止）
- 6号機（110万kW）（定検により停止中、20日19:27冷温停止）

(2) モニタリングの状況

別添参照

(3) 主なプラントパラメーター（24日05:00現在）

	1号機	2号機	3号機	4号機	5号機	6号機
原子炉圧力*1 [MPa]	0.511(A) 0.488(B)	0.076(A) 0.076(B)	0.004(C) 0.142(A)	—	0.108	0.109
原子炉格納容器圧力 (D/W) [kPa]	385	105	D/S	—	—	—
原子炉水位*2 [mm]	-1700(A) -1700(B)	-1200(A) 不明(B)	-1800(A) -2300(B)	—	1846	2397
原子炉格納容器内 S/C水温 [°C]	—	—	—	—	—	—
原子炉格納容器内 S/C圧力 [kPa]	370	D/S	D/S	—	—	—
使用済燃料プール 水温度 [°C]	—	52	—	100	45.1	23.5
備考	3/24 1:00 現在の値	3/24 1:00 現在の値	3/24 2:40 現在の値	3/24 2:40 現在の値	3/24 5:00 現在の値	3/24 5:00 現在の値

* 1 : 絶対圧に換算

* 2 : 燃料頂部からの数値

(4) 各プラントの状況

< 1号機関係 >

- ・原子力災害対策特別措置法第15条（非常用炉心冷却装置注水不能）通報（11日16:36）
- ・ベント操作（12日10:17）
- ・1号機の原子炉圧力容器内に消火系ラインを用いて海水注入開始（12日20:20）→14日01:10一時中断
- ・1号機で爆発音。（12日15:36）
- ・消火系に加え、給水系を使うことにより炉心への注水量を増量（ $2\text{m}^3/\text{h}$ → $18\text{m}^3/\text{h}$ ）（23日02:33）。その後、給水系のみに切替（約 $11\text{m}^3/\text{h}$ ）（23日9:00）
- ・原子炉圧力容器へ海水注入中。（24日8:00現在）

< 2号機関係 >

- ・原子力災害対策特別措置法第15条（非常用炉心冷却装置注水不能）通報（11日16:36）
- ・ベント操作（13日11:00）
- ・3号機の建屋の爆発に伴い、原子炉建屋ブローアウトパネル開放（14日11時過ぎ）
- ・原子炉圧力容器の水位が低下傾向（14日13:18）。原子力災害対策特別措置法第15条事象（原子炉冷却機能喪失）である旨、受信（14日13:49）
- ・原子炉圧力容器内に消火系ラインを用いて海水注入作業開始（14日16:34）
- ・原子炉圧力容器の水位が低下傾向（14日22:50）
- ・ベント操作（15日0:02）
- ・2号機で爆発音するとともに、サプレッションプール（圧力抑制室）の圧力低下（15日6:10）。同室に異常が発生したおそれ（15日6:20頃）
- ・外部送電線から予備電源変電設備までの受電を完了し、そこから負荷側へのケーブル敷設を実施（19日13:30現在）
- ・使用済燃料プールに海水を40t注入（冷却系配管に消防車のポンプを接続）（20日15:05～17:20）
- ・2号機のパワーセンター受電（20日15:46）
- ・白煙が発生（21日18:22）
- ・白煙はほとんど見えない程度に減少（22日7:11現在）
- ・使用済燃料プールに海水を18t注入（22日16:07～17:01）
- ・原子炉圧力容器へ海水注入中（24日8:00現在）

< 3号機関係 >

- ・ ベント操作 (12 日 20:41)
- ・ ベント操作 (13 日 9:20)
- ・ 3号機の原子炉圧力容器内に消火系ラインから真水注入開始(13 日 11:55)
- ・ 3号機の原子炉圧力容器内に消火系ラインから海水注入開始(13 日 13:12)
- ・ 3号機及び1号機の注入をくみ上げ箇所の海水が少なくなったため停止 (14 日 1:10)
- ・ 3号機の海水注入を再開(14 日 3:20)
- ・ ベント操作 (14 日 5:20)
- ・ 3号機の格納容器圧力が異常上昇(14 日 7:44)。原子力災害対策特別措置法第15条事象である旨、受信 (14 日 7:52)
- ・ 3号機で1号機と同様に原子炉建屋付近で爆発 (14 日 11:01)
- ・ 3号機から白い湯気のような煙が発生 (16 日 8:30 頃)
- ・ 3号機の格納容器が破損しているおそれがあるため、中央制御室 (共用) から作業員退避 (16 日 10:45)。その後、作業員は中央制御室に復帰し、注水作業再開 (16 日 11:30)
- ・ 自衛隊ヘリにより3号機への海水の投下を4回実施 (17 日 9:48、9:52、9:58、10:01)
- ・ 警察庁機動隊が放水のため現場到着 (17 日 16:10)
- ・ 自衛隊消防車により放水 (17 日 19:35)。
- ・ 警察庁機動隊による放水 (17 日 19:05~19:13)
- ・ 自衛隊消防車5台が放水 (17 日 19:35、19:45、19:53、20:00、20:07)
- ・ 自衛隊消防車6台 (6 t 放水/台) が放水 (18 日 14 時前~14:38)
- ・ 米軍消防車1台が放水 (18 日 14:45 終了)
- ・ 東京消防庁ハイパーレスキュー14台が正門前に到着し (18 日 23:10)、うち、6台が地上放水のため発電所に入構 (18 日 23:30)
- ・ 東京消防庁ハイパーレスキュー隊が放水 (20 日 3:40 終了)
- ・ 3号機の格納容器内圧力が上昇 (20 日 11:00 現在 320kPa)。圧力下げるための準備を進めていたが、直ちに放出を必要とする状況ではないと判断し、圧力監視を継続 (21 日 12:15 120 kPa)
- ・ ケーブル引き込みの現地調査 (20 日 11:00~16:00)
- ・ 東京消防庁ハイパーレスキュー隊が3号機の使用済燃料プールに放水 (20 日 21:39~21 日 03:58)
- ・ 灰色がかった煙が発生 (21 日 15:55 頃)
- ・ 煙が収まっていることを確認 (21 日 17:55)
- ・ 灰色がかった煙は白みがかった煙に変化し終息に向かっていると思われる (22 日 7:11 現在)

- ・東京消防庁及び大阪市消防局が放水（約 180t）（22 日 15:10～15:59）
- ・中央操作室の照明が復帰（22 日 22:43）
- ・使用済燃料プールに冷却浄化系から海水 35t 注入（23 日 11:03～13:20）
- ・原子炉建屋からやや黒色がかった煙が発生（23 日 16:20 頃）。23 日 23:30 頃及び 24 日 4:50 頃に確認したところ止んでいる模様。
- ・使用済燃料プールに冷却材浄化系を用いて海水の注入開始（24 日 5:35 頃）
- ・原子炉圧力容器へ海水注入中（24 日 8:00 現在）

< 4 号機関係 >

- ・原子炉圧力容器のシュラウド工事中のため、原子炉圧力容器内に燃料はなし。
- ・4 号機の使用済燃料プール水温度が上昇（3 月 14 日 4:08 時点 84℃）
- ・4 号機のオペレーションエリアの壁が一部破損していることを確認（15 日 6:14）。
- ・4 号機で火災発生。（15 日 9:38）事業者によると、自然に火が消えていることを確認（15 日 11:00 頃）
- ・4 号機で火災が発生（16 日 5:45 頃）。事業者は現場での火災は確認できず（16 日 6:15 頃）。
- ・自衛隊が 4 号機の使用済燃料プールへ放水（20 日 9:43）
- ・ケーブル引き込みの現地調査（20 日 11:00～16:00）
- ・自衛隊が 4 号機の使用済燃料プールへ放水（20 日 18:30 頃～19:46）
- ・自衛隊消防車 13 台が使用済燃料プールに放水（21 日 06:37～08:41）
- ・パワーセンターまでのケーブル敷設工事完了（21 日 15:00 頃）
- ・パワーセンター受電（22 日 10:35）
- ・コンクリートポンプ車（50 t / h）が約 150 t 放水（22 日 17:17～20:32）
- ・コンクリートポンプ車（50 t / h）が約 130 t 放水（23 日 10:00～13:02）

< 5 号機, 6 号機関係 >

- ・6 号機の非常用ディーゼル発電機（D/G）1 台目（B）は運転により電力供給。復水補給水系（MUWC）を用いて原子炉圧力容器及び使用済燃料プールへ注水。
- ・6 号機の非常用ディーゼル発電機（D/G）2 台目（A）起動。（19 日 4:22）
- ・5 号機の残留熱除去系（RHR）ポンプ（C）（19 日 5:00）及び 6 号機の残留熱除去系（RHR）ポンプ（B）（19 日 22:14）が起動し、除熱機能回復。使用済燃料プールを優先的に冷却（電源：6 号の非常用ディーゼル発電機）（19 日 5:00）
- ・5 号機、冷温停止（20 日 14:30）
- ・6 号機、冷温停止（20 日 19:27）

- ・ 5号機及び6号機、起動用変圧器まで受電（20日 19:52）
- ・ 5号機、電源を非常用ディーゼル発電機から外部電源に切り替え（21日 11:36）
- ・ 6号機、電源を非常用ディーゼル発電機から外部電源に切り替え（22日 19:17）
- ・ 5号機の仮設の残留熱除去海水系（RHR）ポンプが、仮設から本設の電源への切り替えの際、自動停止（23日 17:24）。

<使用済燃料共用プール>

- ・ 18日 6:00過ぎ、プールはほぼ満水であることを確認
- ・ 19日 9:00時点でのプール水温度は5.7℃程度
- ・ 共用プールに注水（21日 10:37～15:30）
- ・ 21日 16:30時点でのプール水温度は6.1℃程度
- ・ 23日 13:15時点でのプール水温度は5.7℃程度

○東京電力(株)福島第二原子力発電所（福島県双葉郡楢葉町及び富岡町）

(1) 運転状況

- 1号機（110万kW）（自動停止、14日 17:00 冷温停止）
- 2号機（110万kW）（自動停止）14日 18:00 冷温停止）
- 3号機（110万kW）（自動停止、12日 12:15 冷温停止）
- 4号機（110万kW）（自動停止、15日 7:15 冷温停止）

(2) モニタリングポスト等の指示値

別添参照

(3) 主なプラントパラメーター（24日 06:00 現在）

	単位	1号機	2号機	3号機	4号機
原子炉圧力* ¹	MPa	0.15	0.12	0.11	0.15
原子炉水温	℃	30.5	27.9	34.3	29.5
原子炉水位* ²	mm	9196	10296	8450	8785
原子炉格納容器内 サブレーションプール水温	℃	25	24	27	28
原子炉格納容器内 サブレーションプール圧力	kPa (abs)	108	106	104	104
備考		冷温停止中	冷温停止中	冷温停止中	冷温停止中

* 1：絶対圧に換算

* 2：燃料頂部からの数値

(4) その他異常等に関する報告

- ・ 1号機にて原子力災害対策特別措置法第10条通報 (11日 18:08)
- ・ 1、2、4号機にて同法第10条通報 (11日 18:33)
- ・ 1号機にて原子力災害対策特別措置法第15条事象 (圧力抑制機能喪失) 発生 (12日 5:22)
- ・ 2号機にて原子力災害対策特別措置法第15条事象 (圧力抑制機能喪失) 発生 (12日 5:32)
- ・ 4号機にて原子力災害対策特別措置法第15条事象 (圧力抑制機能喪失) 発生 (12日 6:07)

○東北電力(株)女川原子力発電所 (宮城県牡鹿郡女川町、石巻市)

(1) 運転状況

- 1号機 (52万4千kW) (自動停止、12日 0:58 冷温停止)
- 2号機 (82万5千kW) (自動停止、地震時点で冷温停止)
- 3号機 (82万5千kW) (自動停止、12日 1:17 冷温停止)

(2) モニタリングポスト等の指示値

MP2付近 (敷地最北敷地境界):

約 1.4 μ Sv/h (22日 16:00) → 約 1.2 μ Sv/h (23日 16:00)

(3) その他異常に関する報告

- ・ タービン建屋地下1階の発煙は消火確認 (11日 22:55)
- ・ 原子力災害対策特別措置法第10条通報 (13日 13:09)

2 産業保安

○電気 (3月24日 8:00 現在)

- ・ 東北電力 (3月23日 18:00 現在)

停電戸数: 約21万戸 (延べ停電戸数 約486万戸)

停電地域: 青森県 三八の一部地域 (約5百戸)

岩手県 一部地域 (約3万8千戸)

宮城県 一部地域 (約13万3千戸)

福島県 一部地域 (約3万8千戸)

- ・ 東京電力

停電は3月19日 01:00 までに復旧済 (延べ停電戸数 約405万戸)

- ・ 北海道電力

停電は3月12日 14:00 までに復旧済 (延べ停電戸数 約3千戸)

- ・ 中部電力

停電は3月12日 17:11 に復旧済 (延べ停電戸数 約4百戸)

○一般ガス（3月24日8:00現在）

死亡事故：地震との関係も含め原因詳細調査中。

- ・盛岡ガス（盛岡市）死者1名、負傷者10名
14日08:00 デパートの地下での爆発
- ・東部ガス（いわき市）死者1名
12日11:30 一般住宅での漏えいガスに着火

北海道、山形県、秋田県においては、供給停止の報告はない。

各社の供給停止状況は以下の通り。

- ・仙台市営ガス 358,779 戸供給停止
- ・塩釜ガス（塩釜市）9,665 戸供給停止
- ・東部ガス（土浦市）1,664 戸供給停止
- ・釜石ガス（釜石市）7,000 戸供給停止
- ・常磐共同ガス（いわき市）11,832 戸供給停止
- ・京葉ガス（浦安市）4,259 戸供給停止
- ・東北ガス（白河市）125 戸供給停止
- ・常磐都市ガス（いわき市）362 戸供給停止
- ・気仙沼市営ガス（気仙沼市）2,800 戸供給停止
- ・石巻ガス（石巻市）14,771 戸供給停止

○簡易ガス（3月24日8:00現在）

各社の供給停止状況は以下の通り。

- ・宮城ガス（塩竈市）651 戸供給停止
（仙台市）2,058 戸供給停止
（黒川郡富谷町）2,318 戸供給停止
- ・岩沼市農業協同組合（岩沼市）753 戸供給停止
- ・橋本産業（東松島市）80 戸供給停止
- ・富岡ガス協業組合（双葉郡富岡町）428 戸供給停止
- ・釜石瓦斯（釜石市）1,357 戸供給停止
- ・仙台市ガス局（名取市）1,225 戸供給停止
（仙台市）559 戸供給停止
（岩沼市）342 戸供給停止
- ・仙台プロパン（登米市）93 戸供給停止
（亶理郡山元町）360 戸供給停止
（東松島市）150 戸供給停止
- ・仙南ガス（白石市）409 戸供給停止
（岩沼市）252 戸供給停止

- (柴田郡柴田町) 1,806 戸供給停止
- ・カメイ (亶理郡山元町) 189 戸供給停止
 - (白河市) 596 戸供給停止
 - (須賀川市) 783 戸供給停止
 - (いわき市) 126 戸供給停止
 - (宮古市) 197 戸供給停止
 - (東松島市矢本町) 243 戸供給停止
- ・東北ガス (白河市) 360 戸供給停止
- ・いわきガス (いわき市) 594 戸供給停止
- ・相馬ガス (相馬市) 143 戸供給停止
- ・相馬市ガス (相馬市) 100 戸供給停止
- ・勝田ガス事業協同組合 (ひたちなか市) 647 戸供給停止
- ・トーホクガス (多賀城市) 130 戸供給停止
- ・三重商会 (大船渡市) 81 戸供給停止
- ・八木又商店 (大船渡市) 105 戸供給停止
- ・名取岩沼農業協同組合 (岩沼市) 586 戸供給停止
- ・ガス&ライフ (東松島市) 859 戸供給停止
- ・仙台エルピーガス (仙台市) 3,594 戸供給停止

○熱供給 (3月24日 8:00 現在)

- ・小名浜配湯 (いわき市小名浜) 供給停止

○LPガス (3月24日 8:00 現在)

死亡事故：地震との関係も含め原因詳細調査中

- ・福島県いわき市 死者1名
- 13日午前中 共同住宅でガス爆発

○コンビナート (3月24日 8:00 現在)

- ・コスモ石油千葉製油所 (千葉県市原市)
LPG貯槽の支柱が折れ、破損。ガス漏れ火災。
重傷者1名、軽傷5名。3月21日午前鎮火。
- ・JX日鉱日石エネルギー(株)仙台製油所 (宮城県仙台市)
出荷設備エリアで爆発、火災が発生。3月15日午後鎮火。

3 原子力安全・保安院等の対応

【3月11日】

14:46 地震発生と同時に原子力安全・保安院に災害対策本部設置

- 15 : 42 福島第一原子力発電所にて原子力災害対策特別措置法第10条通報
- 16 : 36 福島第一原子力発電所1、2号機にて事業者が同法第15条事象（非常用炉心冷却装置注水不能）発生判断（16:45 通報）
- 18 : 08 福島第二原子力発電所1号機にて原子力災害対策特別措置法第10条通報
- 18 : 33 福島第二原子力発電所1、2、4号機にて原子力災害対策特別措置法第10条通報
- 19 : 03 緊急事態宣言（政府原子力災害対策本部及び同現地対策本部設置）
- 20 : 50 福島県対策本部は、福島第一原子力発電所1号機の半径2kmの住人に避難指示を出した。（2km以内の住人は1,864人）
- 21 : 23 内閣総理大臣より、福島県知事、大熊町長及び双葉町長に対し、東京電力(株)福島第一原子力発電所で発生した事故に関し、原子力災害対策特別措置法第15条第3項の規定に基づく指示を出した。
- ・福島第一原子力発電所から半径3km圏内の住民に対する避難指示。
 - ・福島第一原子力発電所から半径10km圏内の住民に対する屋内退避指示。
- 24 : 00 池田経済産業副大臣現地対策本部到着
- 【3月12日】**
- 5 : 22 福島第二原子力発電所1号機にて事業者が原子力災害対策特別措置法第15条事象（圧力抑制機能喪失）発生判断（6:27 通報）
- 5 : 32 福島第二原子力発電所2号機にて事業者が原子力災害対策特別措置法第15条事象（圧力抑制機能喪失）発生判断（6:27 通報）
- 5 : 44 総理指示により福島第一原子力発電所の10km圏内に避難指示
- 6 : 07 福島第二原子力発電所4号機にて原子力災害対策特別措置法第15条事象（圧力抑制機能喪失）発生
- 6 : 50 原子炉等規制法第64条第3項の規定に基づき、福島第一原子力発電所第1号機及び第2号機に設置された原子炉格納容器内の圧力を抑制することを命じた。
- 7 : 45 内閣総理大臣より、福島県知事、広野町長、楢葉町長、富岡町長及び大熊町長に対し、東京電力(株)福島第二原子力発電所で発生した事故に関し、原子力災害対策特別措置法第15条第3項の規定に基づく指示を出した。
- ・福島第二原子力発電所から半径3km圏内の住民に対する避難指示。
 - ・福島第二原子力発電所から半径10km圏内の住民に対する屋

内退避指示。

- 17:00 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 17:39 内閣総理大臣が福島第二原子力発電所の避難区域
・福島第二原子力発電所から半径10km圏内の住民に対する避難を指示。
- 18:25 内閣総理大臣が福島第一原子力発電所の避難区域
・福島第一原子力発電所から半径20km圏内の住民に対する避難を指示。
- 19:55 福島第一原子力発電所1号機の海水注入について総理指示
- 20:05 総理指示を踏まえ、原子炉等規制法第64条第3項の規定に基づき、福島第一原子力発電所第1号機の海水注入等を命じた。
- 20:20 福島第一原子力発電所1号機の海水注入を開始

【3月13日】

- 5:38 福島第一原子力発電所3号機にて原子力災害対策特別措置法第15条事象（全注水機能喪失）である旨、受信。
当該サイトについて、東京電力において現在、電源及び注水機能の回復と、ベントのための作業を実施中。
- 9:01 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 9:08 福島第一原子力発電所3号機の圧力抑制及び真水注入を開始
- 9:20 福島第一原子力発電所3号機の耐圧ベント弁開放
- 9:30 福島県知事、大熊町長、双葉町長、富岡町長、浪江町長に対し、原子力災害対策特別措置法に基づき、放射能除染スクリーニングの内容について指示
- 9:38 福島第一原子力発電所1号機にて原子力災害対策特別措置法第15条通報
- 13:09 女川原子力発電所にて原子力災害対策特別措置法第10条通報
- 13:12 福島第一原子力発電所3号機の注入を真水から海水に切り替え
- 14:36 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月14日】

- 1:10 福島第一原子力発電所1号機及び3号機の注入をくみ上げ箇所の海水が少なくなったため停止。
- 3:20 福島第一原子力発電所3号機の海水注入を再開
- 4:40 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

- 5 : 3 8 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 7 : 5 2 福島第一原子力発電所3号機にて原子力災害対策特別措置法第15条事象（格納容器圧力異常上昇）である旨、受信。
- 13 : 2 5 福島第一原子力発電所2号機にて原子力災害対策特別措置法第15条事象（原子炉冷却機能喪失）である旨、受信。
- 22 : 1 3 福島第二原子力発電所にて原子力災害対策特別措置法第10条通報
- 22 : 3 5 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月15日】

- 0 : 0 0 国際原子力（IAEA）専門家派遣の受け入れを決定
IAEA天野事務局長による原子力発電所の被害に関する専門家派遣の意向を受け、原子力安全・保安院はIAEAによる知見ある専門家の派遣を受け入れることとした。なお、実際の受け入れ日程等については、今後調整を行う。
- 0 : 0 0 米国原子力規制委員会（NRC）専門家派遣の受け入れを決定
- 7 : 2 1 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 7 : 2 4 （独）日本原子力研究開発機構東海研究開発センター核燃料サイクル工学研究所にて原子力災害対策特別措置法第10条通報
- 7 : 4 4 （独）日本原子力研究開発機構原子力科学研究所にて原子力災害対策特別措置法第10条通報
- 8 : 5 4 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 10 : 3 0 経済産業大臣が原子炉等規制法に基づき、4号機の消火及び再臨界の防止、2号機の原子炉内への早期注水及びドライウエルのベントの実施について指示
- 10 : 5 9 今後の事態の長期化を考慮し、現地対策本部の機能を福島県庁内へ移転することを決定。
- 11 : 0 0 内閣総理大臣が福島第一原子力発電所の避難区域・炉内の状況を考慮して、新たに福島第一原子力発電所から半径20km圏～30km圏内の住民に対する屋内退避を指示
- 16 : 3 0 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 22 : 0 0 経済産業大臣が原子炉等規制法に基づき、4号機の使用済燃料プールへの注水の実施を指示

23:46 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月18日】

13:00 文部科学省にて、福島第一、第二原子力発電所の緊急時における全国的モニタリング調査の強化を決定

15:55 原子炉等規制法第62条の3に基づき、東京電力(株)福島第一原子力発電所第1・2・3・4号機における事故故障等（原子炉建屋内の放射性物質の非管理区域への漏えい）の報告を受理

16:48 原子炉等規制法第62条の3に基づき、日本原子力発電(株)東海第二発電所における事故故障等（非常用ディーゼル発電機2C海水ポンプ用電動機の故障）の報告を受理

【3月19日】

7:44 6号機の非常用ディーゼル発電機2台目（A）起動
5号機の残留熱除去系（RHR）ポンプ（C）が起動し、使用済燃料プールの冷却を開始（電源：6号機の非常用ディーゼル発電機）の旨を受信

8:58 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月20日】

23:30 原子力災害対策現地本部から、放射能除染スクリーニングレベルの基準を以下のとおり変更する旨、県知事及び関係市町村長（富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村）宛に指示

【3月21日】

7:45 原子力災害対策現地本部から「安定ヨウ素剤の服用について」として、安定ヨウ素剤の服用は、本部の指示を受け、医療関係者の立ち会いのもとで服用するものであり、個人の判断で服用しない旨の指示を、県知事及び関係市町村長（富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村）宛に発出

16:45 原子力災害対策現地本部長から「屋内退避圏内での暖房器具の使用に係る換気について」として、一酸化炭素中毒等の防止の観点及び被ばく低減の観点から、屋内において換気を必要とする暖房器具を使用する場合の対応について屋内退避圏内の住民に周知する旨の指示を福島県知事及び市町村長（いわき市、田村市、南相馬市、広野町、川内村、浪江町、葛尾村、飯館村）宛に発出。

17:50 原子力災害対策本部長から、ハウレンソウ及びカキナ、原乳に

ついて当分の間、出荷を控えるよう、関係事業者等に要請することの指示を福島県、茨城県、栃木県及び群馬県の各知事宛に発出。

【3月22日】

16:00 原子力安全委員会緊急技術助言組織から、3月22日付け東京電力の「海水分析結果について」に関する原子力安全・保安院からの助言依頼について、回答（助言）を受理。

<被ばくの可能性（3月24日8:00現在）>

1. 住民の被ばく

- (1) 二本松市福島県男女共生センターにおいて、双葉厚生病院からの避難者約60名を含む133名の測定を行い、13,000cpm以上の23名に除染を実施した。
- (2) この他、福島県が用意した民間バスで、双葉厚生病院から川俣町済生会川俣病院へ移動した35名については、県対策本部は被ばくしていないと判断。
- (3) バスにより避難した双葉町の住民約100名について、100名のうち、9名について測定した結果、以下の通りだった。県外(宮城県)に分かれて避難したが、その後合流して二本松市福島男女共生センターへ移動。

カウント数	人数
18,000cpm	1名
30,000~36,000cpm	1名
40,000cpm	1名
40,000cpm弱※	1名
ごく小さい値	5名

※（1回目の測定では100,000cpmを超え、その後靴を脱いで測定した結果計測されたもの）

- (4) 3月12日から3月15日にかけて、大熊町のオフサイトセンターにおいて、スクリーニングを開始。現在までに162名が検査済み。初め除染の基準値を6,000cpmとし、110名が6,000cpm未満、41名が6,000cpm異常の値を示した。後に基準値を13,000cpmと引き上げた際には、8名が13,000cpm未満、3名が13,000cpm以上の値を示した。
検査を受けた162名のうち、5名が除染処置を施した後、病院へ搬送された。
- (5) 福島県において、避難した10km圏内の入院患者と病院関係者の避難を実施。関係者のスクリーニングを行った結果、3名について除染後も高い数値が検出されたため、第2次被ばく医療機関へ搬送。この搬送に

関係した消防職員 60 名のスクリーニングで 3 名について、バックグラウンドの 2 倍以上程度の放射線が検出されたため、60 名に対し除染を行った。

2. 従業員等の被ばく

- (1) 福島第一原発で作業していた従業員 18 名。測定の結果、1 名は 106.3mSv、その他の方は健康に影響ないレベルであるが具体的な数値は不明。106.3mSv の 1 名は、内部被ばくの恐れはなく医療的処置は不要とのこと。
- (2) 福島第一原発 3 号機の爆発の際に近くで作業していて負傷した従業員 7 名（意識あり）負傷。そのうち 6 名については福島第二の産業医で除染処置を施し、問題ないことを確認。1 名については病院で除染し、治療を終了。

3. その他

- (1) 福島県は 3 月 13 日からスクリーニングを開始。避難所を巡回、保健所等 14ヶ所（常設）で実施中。3 月 21 日までに 75,429 人に対し実施。そのうち、100,000cpm 以上の値を示した者は 97 人であったが、cpm 以上の数値を示した者についても脱衣等をし、再計測したところ、100,000cpm 以下に減少。
- (2) 福島第一原発で給水作業に従事していた自衛隊員 5 名が被ばく。作業終了後（12 日）、O F C へ移動後の測定では 30,000cpm。除染後の測定では、5,000～10,000cpm。1 名は放医研に搬送。防衛省において、その他自衛官の被ばくは確認されず。
- (3) 警察官について、警察庁において 2 名の除染の実施を確認。異常の報告はなし。

<放射能除染スクリーニングレベルに関する指示>

- (1) 3 月 20 日、原子力災害対策現地本部から、放射能除染スクリーニングレベルの基準を以下のとおり変更する旨、県知事及び関係市町村長（富岡町、双葉町、大熊町、浪江町、川内村、楡葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯舘村）宛に指示。
旧： γ 線サーベイメーターにより 40 ベクレル/c m²または 6,000cpm
新：1 マイクロシーベルト/時（10cm 離れた場所での線量率）またはこれに相当する 100,000cpm

<避難時における安定ヨウ素剤投与の指示>

- (1) 3月16日、原子力災害対策現地本部から、「避難区域（半径20km）からの避難時における安定ヨウ素剤投与の指示」を県知事及び市町村（富岡町、双葉町、大熊町、浪江町、川内村、楡葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村）宛に発出。
- (2) 3月21日、原子力災害対策現地本部から「安定ヨウ素剤の服用について」として、安定ヨウ素剤の服用は、本部の指示を受け、医療関係者の立ち会いのもとで服用するものであり、個人の判断で服用しない旨の指示を、県知事及び関係市町村長（富岡町、双葉町、大熊町、浪江町、川内村、楡葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村）宛に発出。

<負傷者の状況（3月24日8:00現在）>

1. 地震による被害
 - ・社員2名（軽傷）
 - ・協力会社2名（うち1名両足骨折）
 - ・行方不明2名（社員。4号タービン建屋内）
 - ・急病人1名発生（脳梗塞、救急車搬送、県情報）
 - ・管理区域外にて社員1名が左胸の痛みを訴えて救急車を要請（意識あり）
 - ・社員2名が中央制御室での全面マスク着用中に不調を訴え、福島第二の産業医の受診を受けるべく搬送
2. 福島第一原子力発電所1号機の爆発による負傷
 - ・1号機付近で爆発と発煙が発生した際に4名が1号タービン建屋付近（管理区域外）で負傷。川内診療所で診療。
3. 福島第一原子力発電所3号機の爆発による負傷
 - ・社員4名
 - ・協力会社3名
 - ・自衛隊4名（うち1名は内部被ばくの可能性を考慮し、「(独)放射線医学総合研究所」へ搬送。診察の結果内部被ばくはなし。3月16日退院）
4. その他の被害
 - ・福島第二原子力発電所内の診療所に変電所から腹痛を訴える人が来たが、被ばくをしていないことからいわき市の診療所へ搬送。

<住民避難の状況（3月24日8:00現在）>

3月15日11:00、内閣総理大臣の指示により、福島第一原子力発電所半径20kmから30km圏内の住民に対して、屋内退避を指示。その旨を福島県及び関係自治体へ連絡。

福島第一原子力発電所20km圏外及び福島第二原子力発電所10km圏外への避難は、措置済。

- ・福島第一原子力発電所20kmから30km圏内の屋内退避について、徹底中。
- ・福島県と連携して、屋内退避圏内の住民の生活支援等を実施。

<飲食物への指示>

3月21日、原子力災害対策本部長から、下記の①、②について当分の間、出荷を控えるよう、関係事業者等に要請することの指示を福島県、茨城県、栃木県及び群馬県の各知事宛に発出。

- ①福島県、茨城県、栃木県及び群馬県において産出されたハウレンソウ及びカキナ
- ②福島県において産出された原乳

<屋内退避圏内での暖房器具の使用に係る換気についての指示>

3月21日、原子力災害対策現地本部長から「屋内退避圏内での暖房器具の使用に係る換気について」として、一酸化炭素中毒等の防止の観点及び被ばく低減の観点から、屋内において換気を必要とする暖房器具を使用する場合の対応について屋内退避圏内の住民に周知する旨の指示を福島県知事及び市町村長（いわき市、田村市、南相馬市、広野町、川内村、浪江町、葛尾村、飯館村）宛に発出。

<消防機関の活動状況>

- ・3月22日、11:00～14:00頃：新潟市消防局及び浜松市消防局が大型除染システムの東京電力による設営を指導。
- ・3月23日、8:30～9:30、13:30～14:30：新潟市消防局及び浜松市消防局が大型除染システムの東京電力による運用を指導。

（本発表資料のお問い合わせ）

原子力安全・保安院

原子力安全広報課：吉澤、金城

電話：03-3501-1505

03-3501-5890

(参考)

【東北地方太平洋沖地震】

1. 災害概要

(1) 発生日時：平成 23 年 3 月 11 日（金） 14：46 発生

(2) 発生場所：震源三陸沖（北緯 38 度、東経 142.9 度）

深さ 10km、マグニチュード 9.0

(3) 各地の震度

○震度 4 以上の地域

震度 7 宮城県北部

震度 6 強 茨城県北部、茨城県南部

震度 5 強 青森県三八上北

震度 5 弱 新潟県中越

震度 4

○震度 4 以上の市町村

震度 6 強 福島県楢葉町、富岡町、大熊町、双葉町

震度 6 弱 宮城県石巻市、女川町（発電所の震度計による）、東海村

震度 5 弱 新潟県刈羽村

震度 4 青森県六ヶ所村、東通村、新潟県柏崎市、神奈川県横須賀市

震度 1 北海道泊村

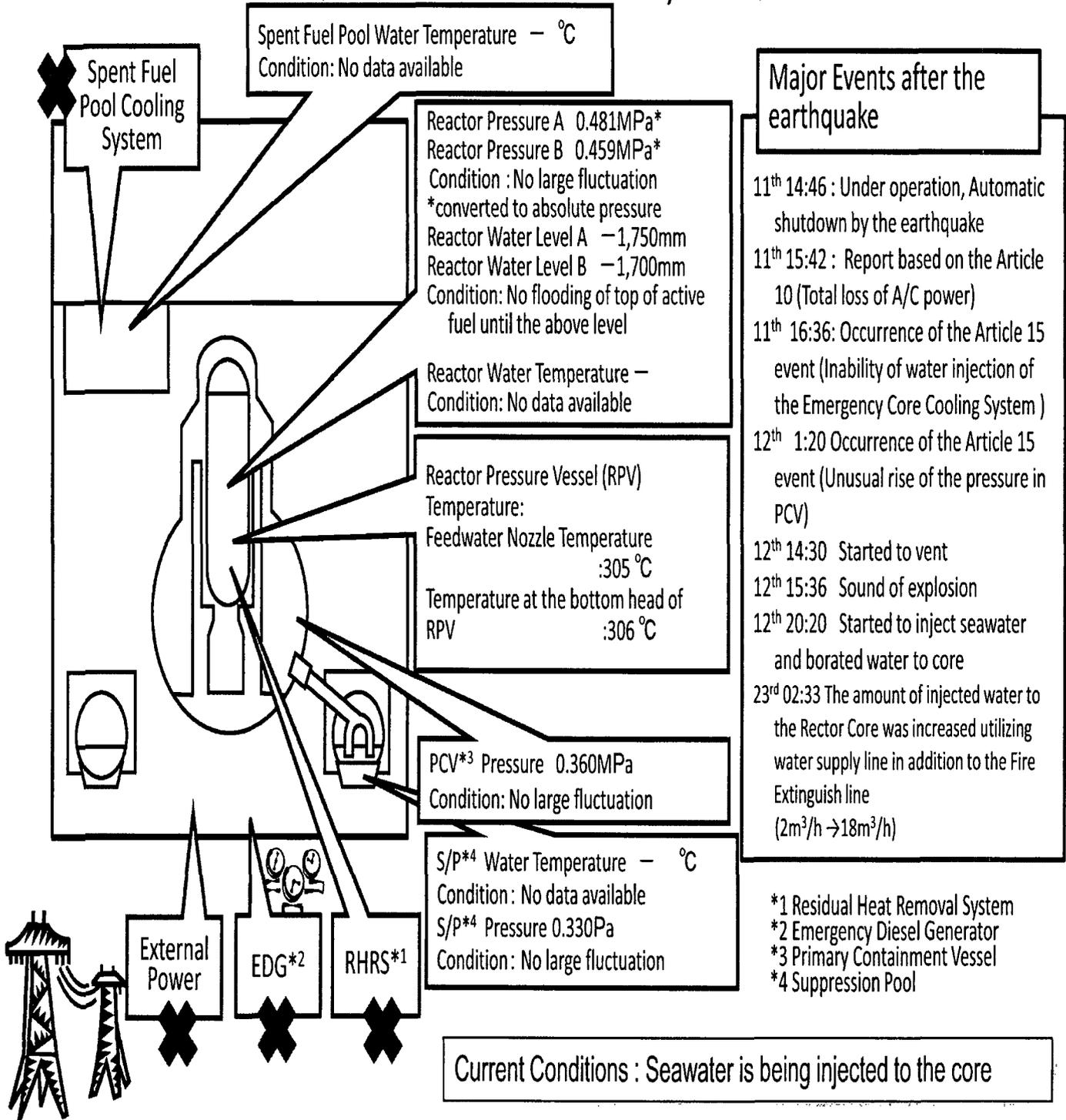
福島第一原子力発電所 プラント関連パラメータ

3月24日 05:00 現在

号機	1u	2u	3u	4u	5u	6u
注水状況	給水ノズルを用いた海水注水中。 流量 160l/min (3/24 02:35)	消火系ラインを用いた海水注水中。 流量 11 m ³ /hr (本設計器) (3/24 01:00)	消火系ラインを用いた海水注水中。 流量 計器不良 (本設計器) (3/24 02:40)	停止中	停止中	停止中
原子炉水位	燃料域A: -1700mm 燃料域B: -1700mm (3/24 01:00 現在)	燃料域A: -1200mm (3/24 01:00 現在)	燃料域A: -1800mm 燃料域B: -2300mm (3/24 02:40 現在)	-	停止域 1846mm (3/24 05:00 現在)	停止域 2397mm (3/24 05:00 現在)
原子炉圧力	0.410MPa g (A) 0.387MPa g (B) (3/24 01:00 現在)	-0.025MPa g (A) -0.025MPa g (B) (3/24 01:00 現在)	0.041MPa g (A) -0.097MPa g (C) (3/24 02:40 現在)	-	0.007MPa g (3/24 05:00 現在)	0.008MPa g (3/24 05:00 現在)
原子炉水温度	-			-	71.4℃ (3/24 05:00 現在)	24.1℃ (3/24 05:00 現在)
原子炉圧力容器温度	給水ノズル温度: 243℃ 圧力容器下部温度: 229℃ (3/24 01:00 現在)	給水ノズル温度: 102℃ 圧力容器下部温度: 109℃ (3/24 01:00 現在)	給水ノズル温度: 80.7℃ 圧力容器下部温度: 185.4℃ (3/24 02:20 現在)	4u 原子炉内に発熱体(燃料)なし 5,6u 原子炉水温度にて監視中		
D/W・S/C 圧力	D/W 0.385MPa abs S/C 0.370MPa abs (3/24 01:00 現在)	D/W 0.105MPa abs S/C ダウンスケール (3/24 01:00 現在)	D/W ダウンスケール S/C ダウンスケール (3/24 02:40 現在)	-		
CAMS	D/W 4.39×10 ¹ Sv/h S/C 2.79×10 ¹ Sv/h (3/24 01:00 現在)	D/W 4.93×10 ¹ Sv/h S/C 1.49×10 ¹ Sv/h (3/24 01:00 現在)	D/W 5.79×10 ¹ Sv/h S/C 1.66×10 ¹ Sv/h (3/24 02:40 現在)	-		
D/W 設計使用圧力	0.384MPa g	0.384MPa g	0.384MPa g	-		
D/W 監視使用圧力	0.427MPa g	0.427MPa g	0.427MPa g	-		
使用済燃料プール水温度	-	52℃ (3/24 01:00 現在)	-	100℃ (3/24 02:40)	45.1℃ (3/24 05:00 現在)	23.6℃ (3/24 05:00 現在)
電源	外部電源受電中 (P/C2C)		外部電源受電中 (P/C4D)		外部電源受電中	
その他情報						

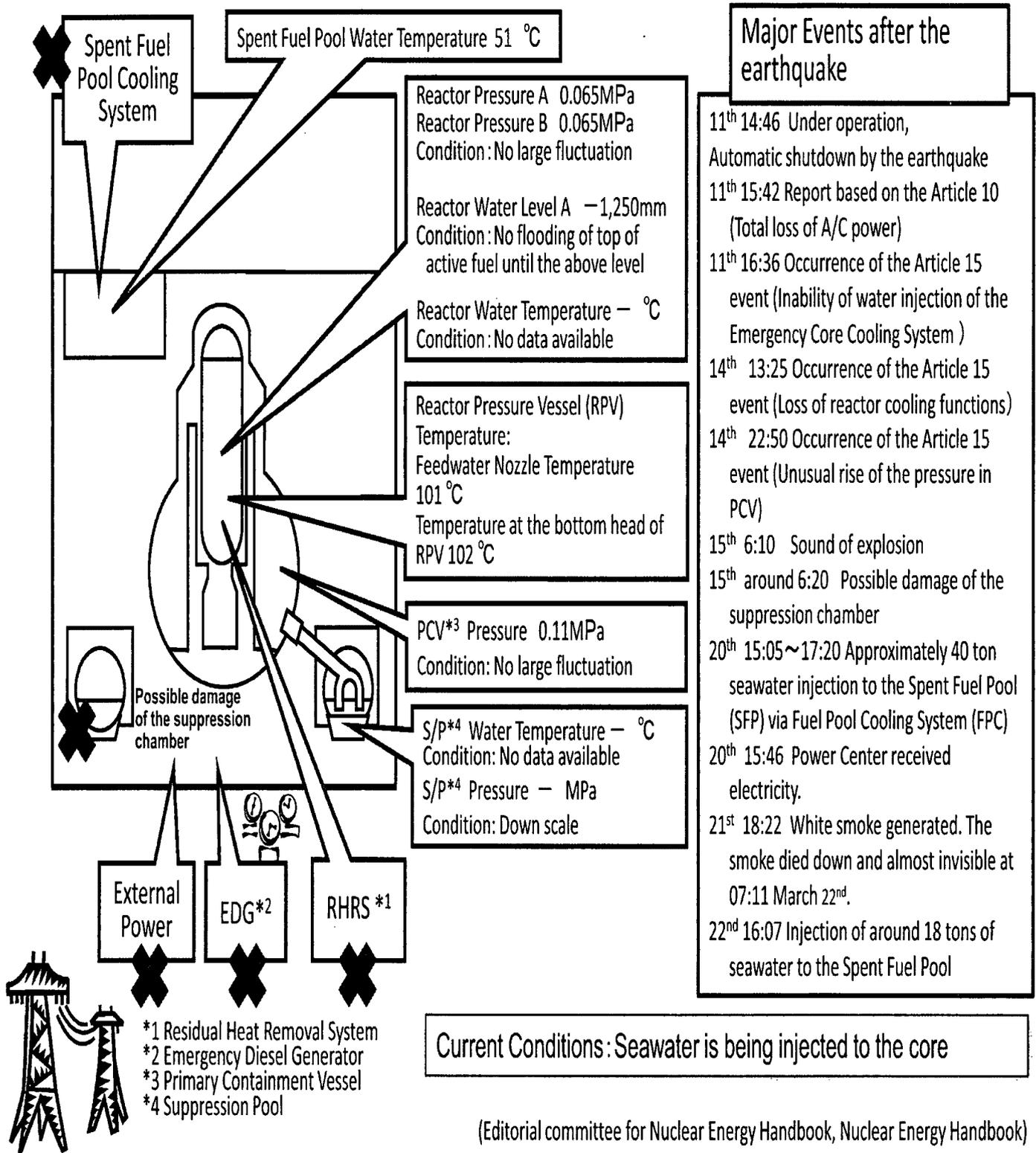
Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 1

(As of 18:00 March 23rd, 2011)



(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

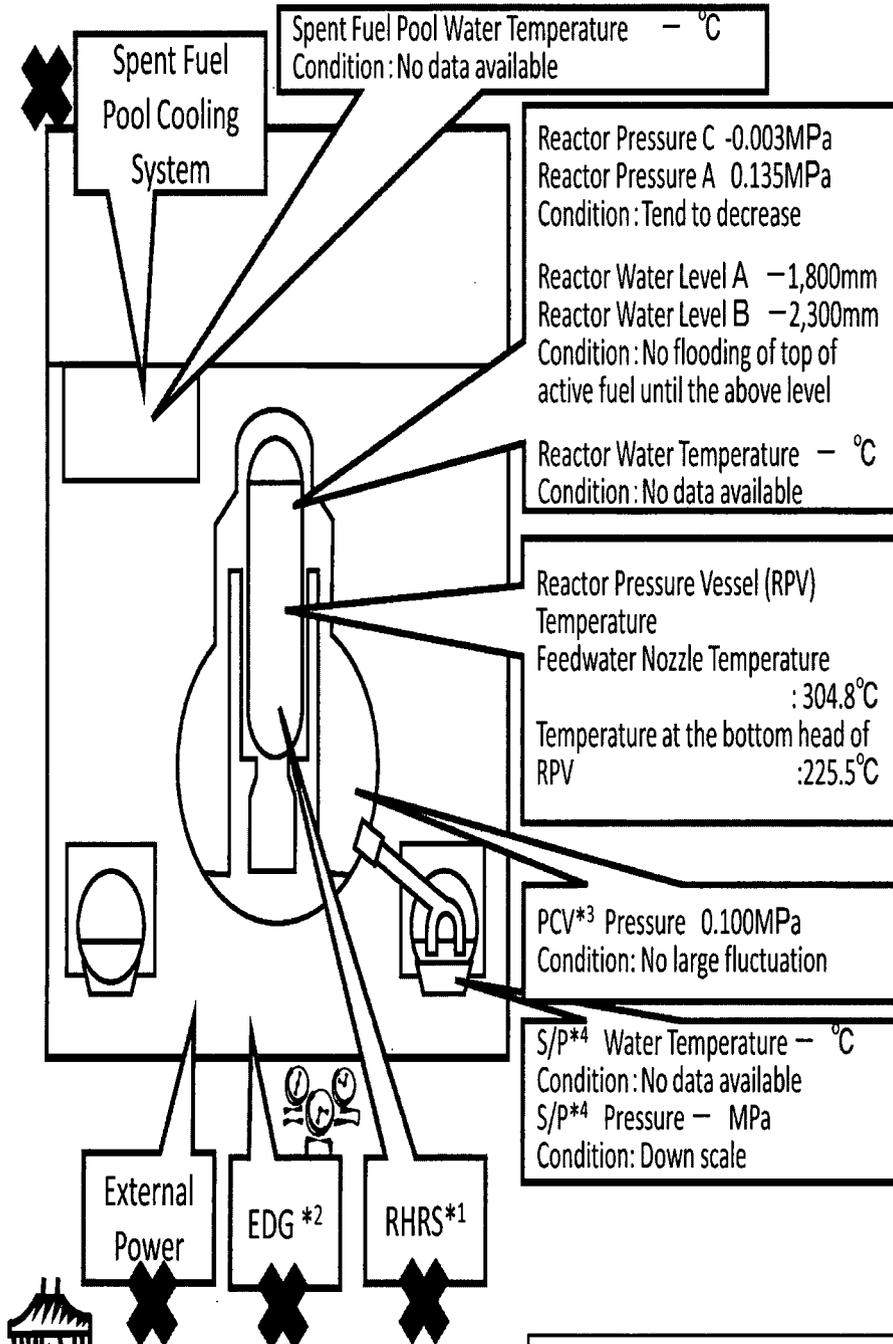
Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 2 (As of 18:00 March 23rd, 2011)



Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 3

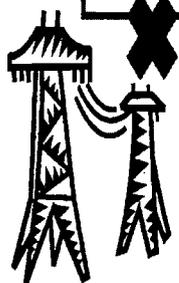
(As of 18:00 March 23rd, 2011)

Major Events after the earthquake



- 11th 14:46 Under operation, Automatic shutdown by the earthquake
- 11th 5:42 Report based on the Article 10 (Total loss of A/C power)
- 13th 5:10 Occurrence of the Article 15 event (Inability of water injection of the Emergency Core Cooling System)
- 13th 9:20 Started to vent
- 14th 7:44 Occurrence of the Article 15 event (Unusual rise of the pressure in PCV)
- 14th 11:01 Sound of explosion
- 16th around 8:30 White smoke generated.
- 17th 9:48~10:01 Water discharge by the helicopters of Self-Defense Force (4 times)
19:05~20:07 Water spray from the ground by High pressure water-cannon trucks (Police: once, Self-Defense Force: 5 times)
- 18th before 14:00~14:38 Water spray from the ground by 6 fire engines of Self-Defense Force
~14:45 Water spray from the ground by a fire engine of the US Military
- 19th 0:00 ~01:00 Water spray by Tokyo Fire Department
- 19th 14:10 ~ 20th 3:40 Water spray by Tokyo Fire Department
- 20th 11:00 Pressure of PCV rose(320kPa).Afterward fell.
- 20th 20:39 ~ 21st 3:58 Water spray by Tokyo Fire Department
- 21st about 15:55 Grayish smoke generated and was confirmed to be died down at 17:55.
- 22nd 15:10 ~15:59 Water spray by Tokyo Fire Department
- 22nd 22:43 Lightening in the Central Control Room was recovered.
- 23rd 11:03 ~13:20 Injection of 35ton of sea water to the Spent Fuel Pool via the Cooling and Purification Line
- 23rd around 16:20 Black smoke generated.

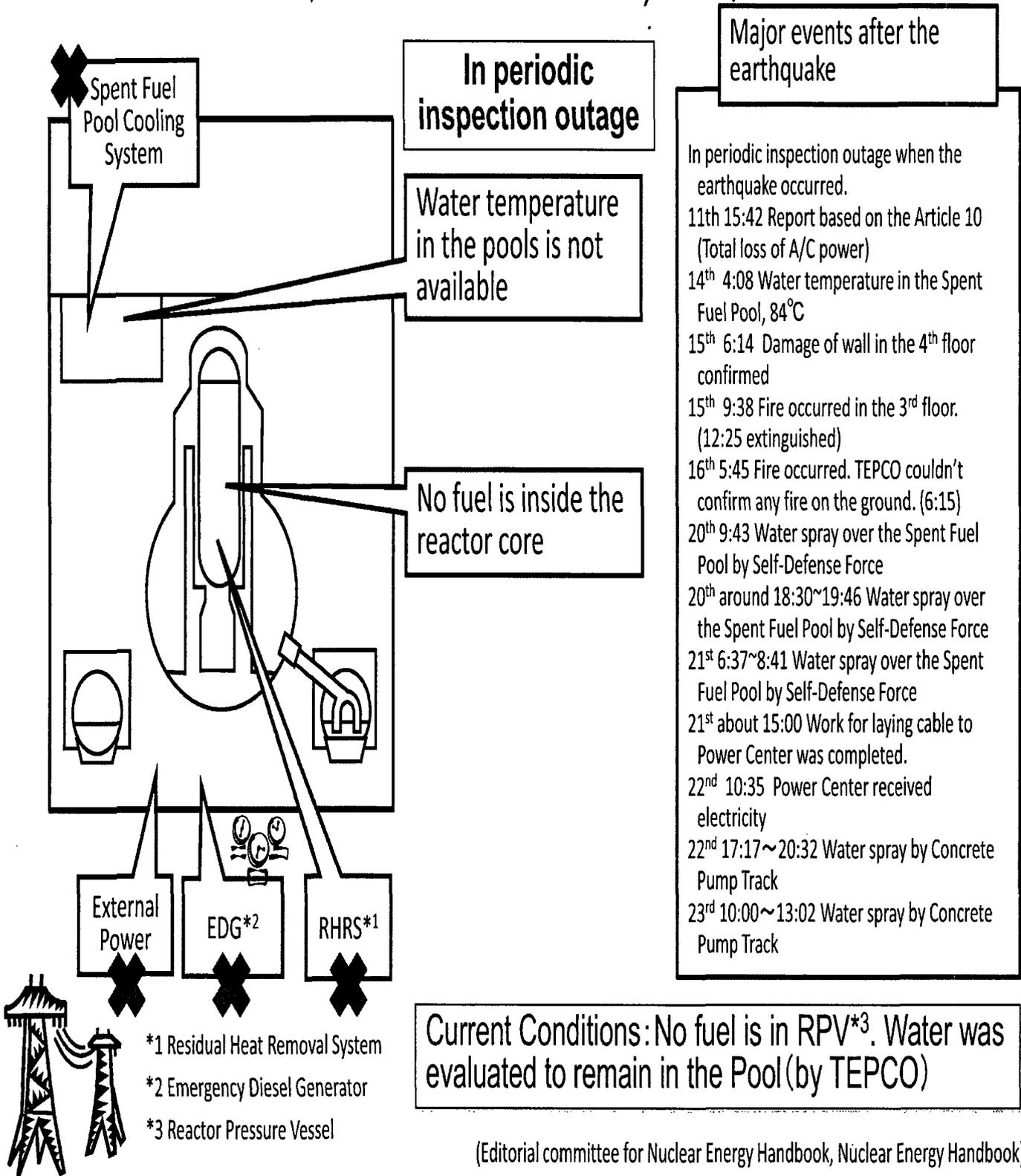
Current Conditions: Water spray to Spent Fuel Pool and sea water injection to the Reactor Core



*1 Residual Heat Removal System
*2 Emergency Diesel Generator
*3 Primary Containment Vessel
*4 Suppression Pool

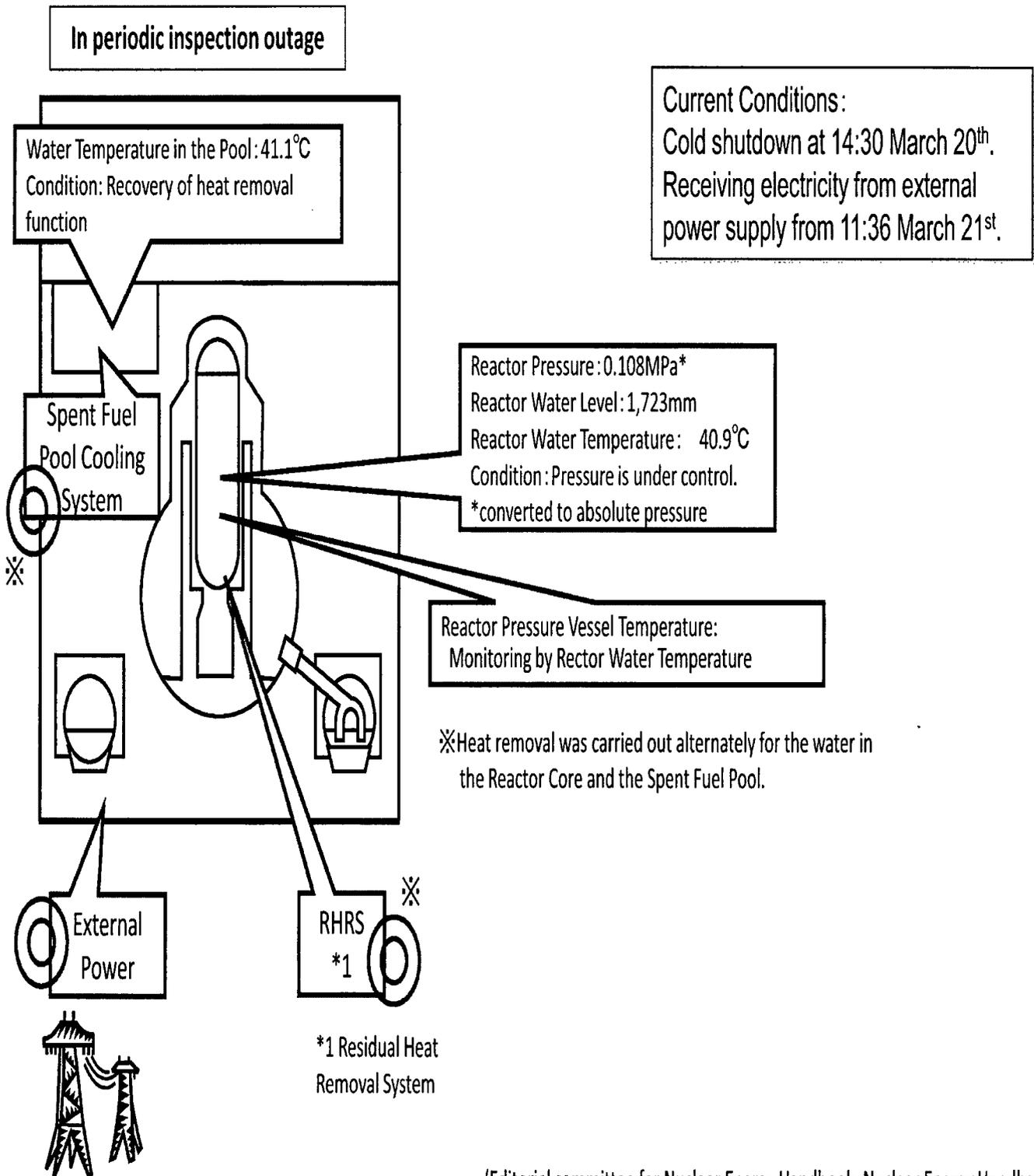
(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 4 (As of 18:00 March 23rd, 2011)



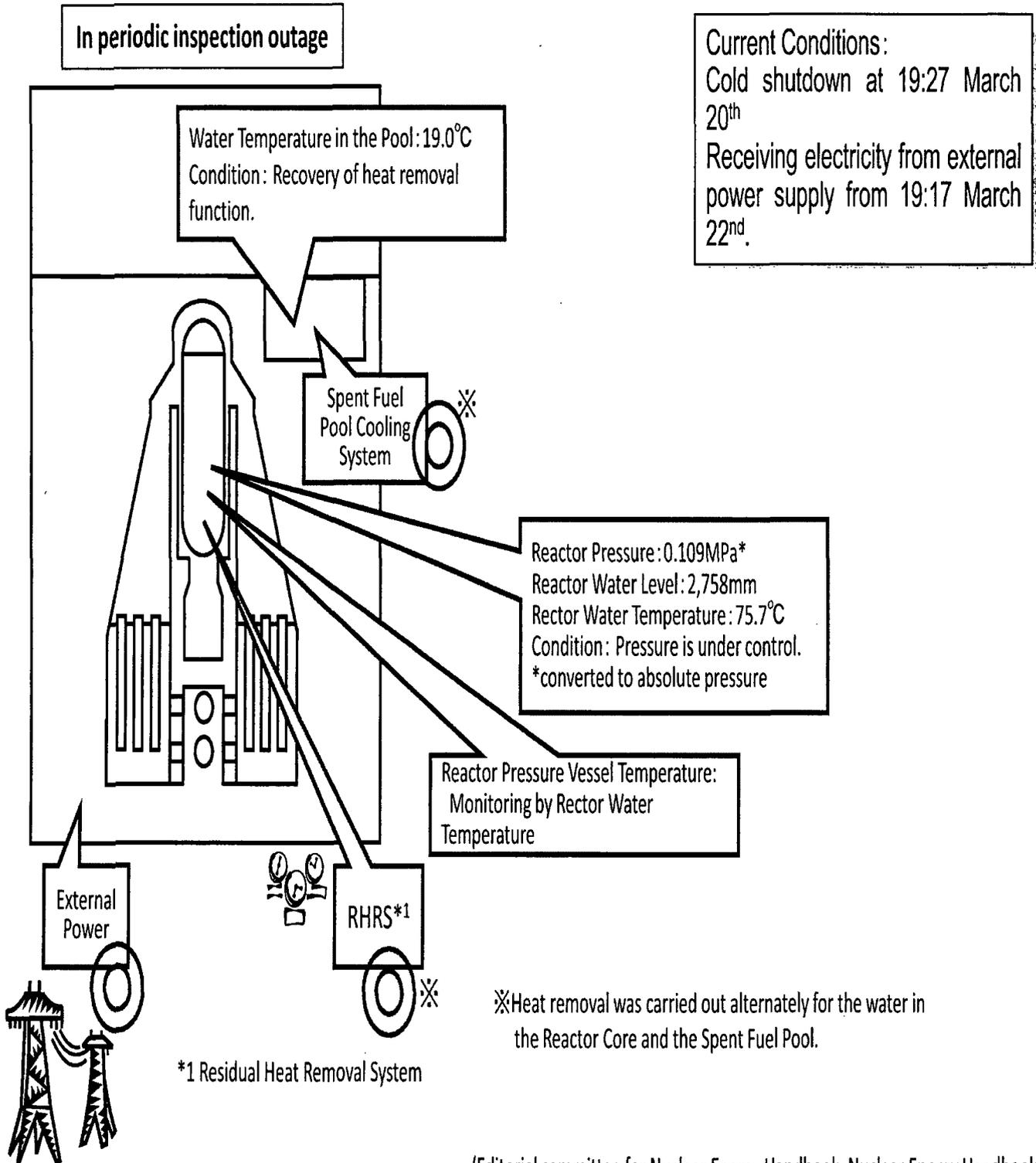
(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 5 (As of 18:00 March 23rd, 2011)



(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

Conditions of Fukushima Dai-ichi Nuclear Power Station Unit 6 (As of 18:00 March 23rd, 2011)



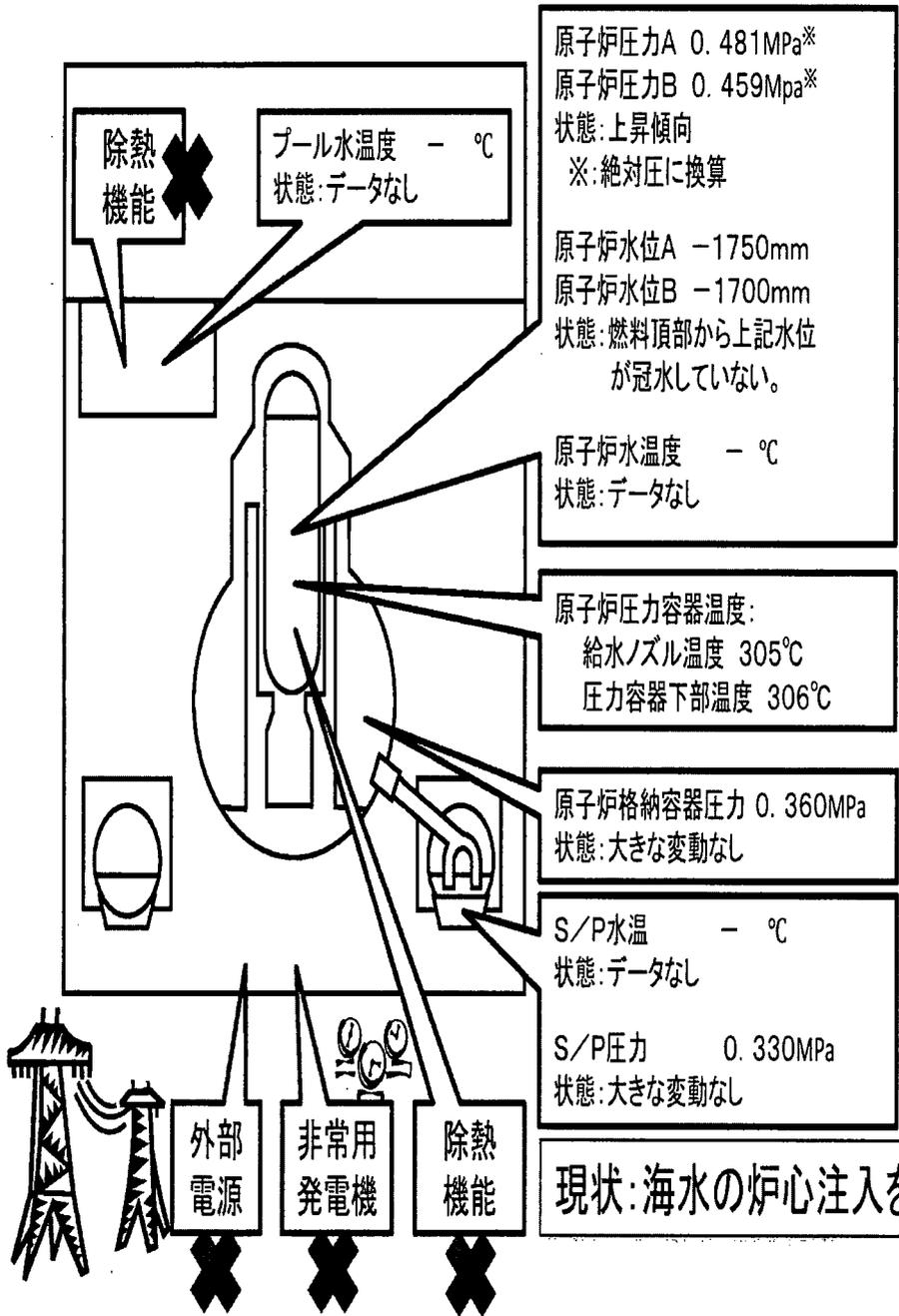
(Editorial committee for Nuclear Energy Handbook, Nuclear Energy Handbook)

福島第一原子力発電所1号機の状況

(3月23日 18:00現在)

発生後の主要なできごと

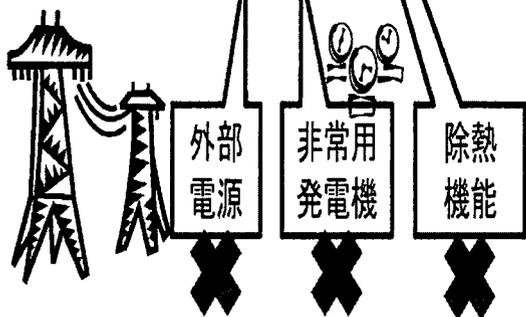
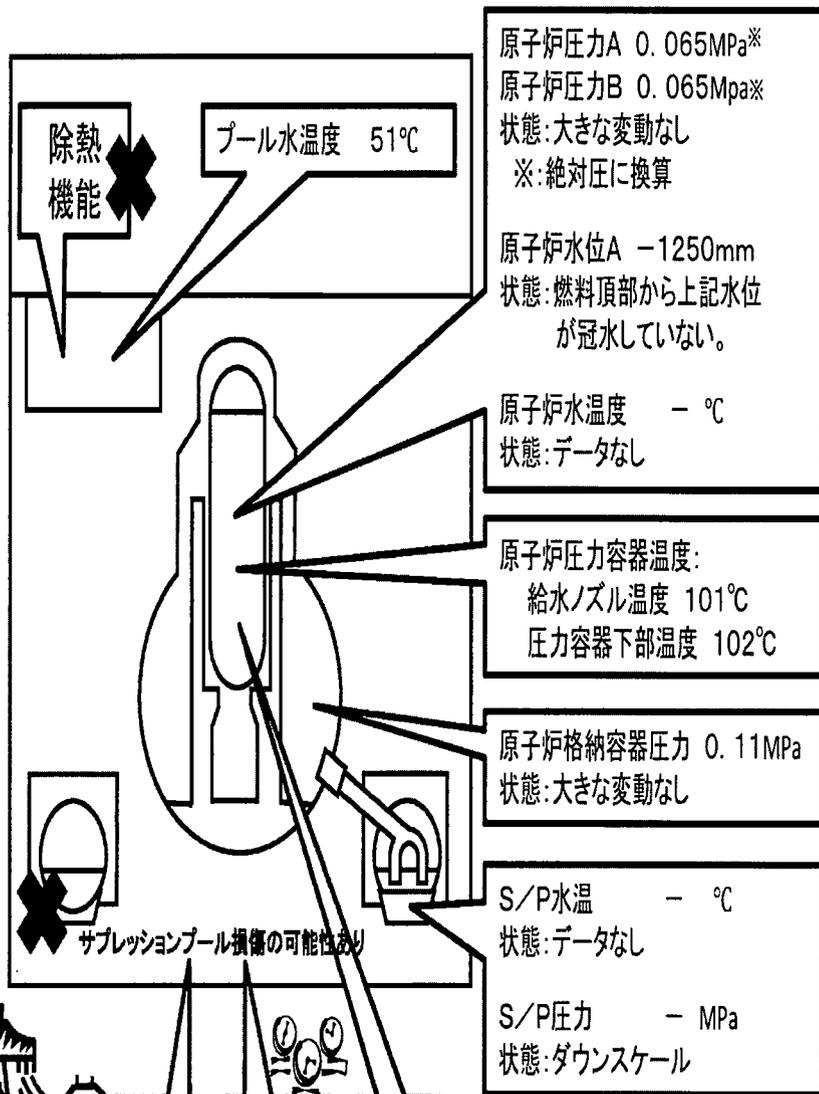
- 11日14:46 運転中、地震により自動停止
- 11日15:42 10条通報(全交流電源喪失)
- 11日16:36 15条事象の発生
(非常用炉心冷却装置注水不能)
- 12日01:20 15条事象の発生
(格納容器圧力異常上昇)
- 12日14:30 ベント開始
- 12日15:36 爆発音
- 12日20:20 海水及びホウ酸の炉心注入開始
- 23日02:33 消火系に加え、給水系を使うこと
により炉心への注水量を増量
(2m³/h → 18m³/h)



福島第一原子力発電所2号機の状況 (3月23日 18:00現在)

発生後の主要なできごと

- 11日14:46 運転中、地震により自動停止
- 11日15:42 10条通報(全交流電源喪失)
- 11日16:36 15条事象の発生
(非常用炉心冷却装置注水不能)
- 14日13:25 15条事象の発生
(原子炉冷却機能喪失)
- 14日22:50 15条事象の発生
(格納容器圧力異常上昇)
- 15日06:10 爆発音発生
- 15日06:20頃 サプレッションプール(圧力抑制室)損傷の可能性あり
- 20日15:05~17:20 燃料プール冷却浄化系(FPC)から使用済燃料プール(SFP)に約40tの海水を注水
- 20日15:46 パワーセンター受電
- 21日18:22 白煙が発生。22日7:11にほとんど見えない程度に減少
- 22日16:07 SFPに約18tの海水を注水



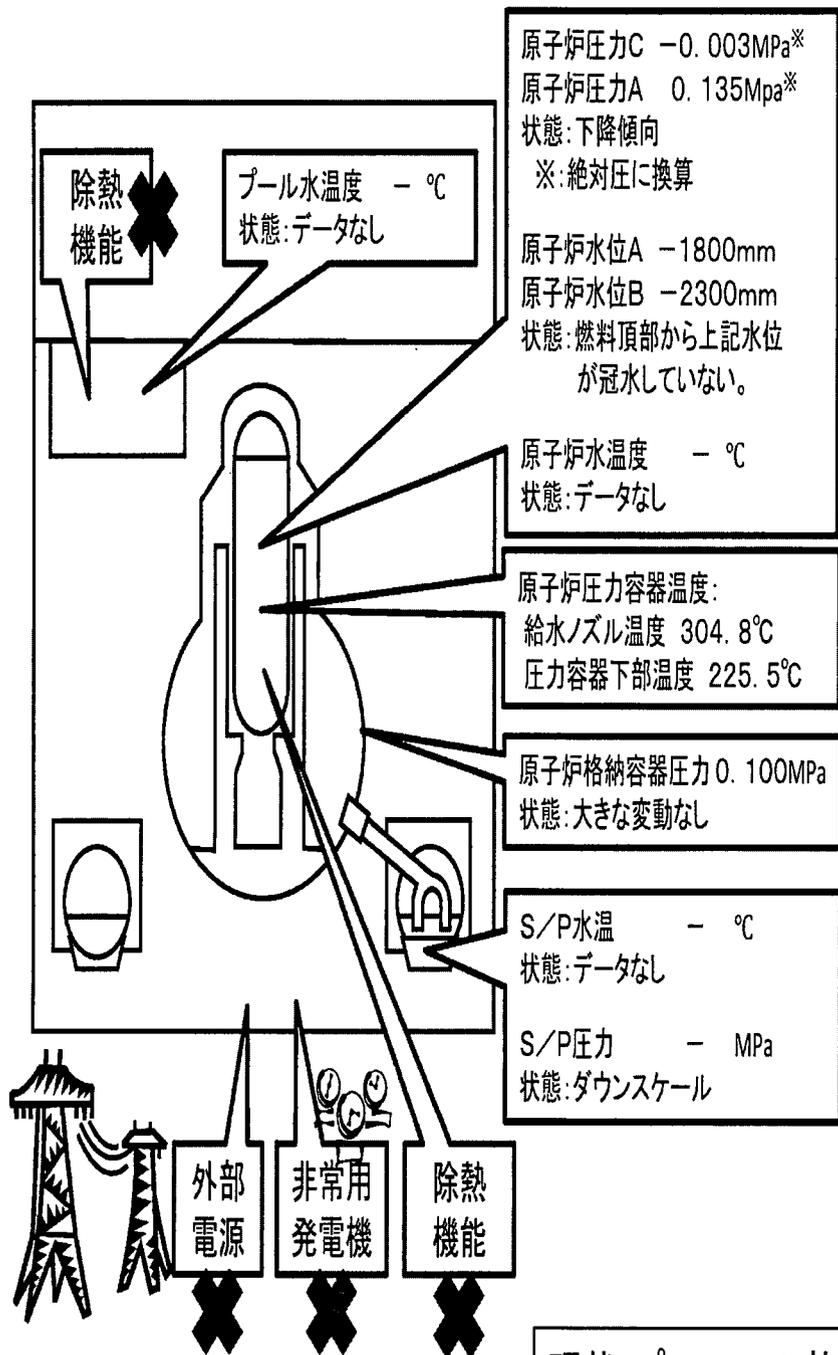
現状:海水の炉心注入を継続

福島第一原子力発電所3号機の状況

(3月23日 18:00現在)

発生後の主要なできごと

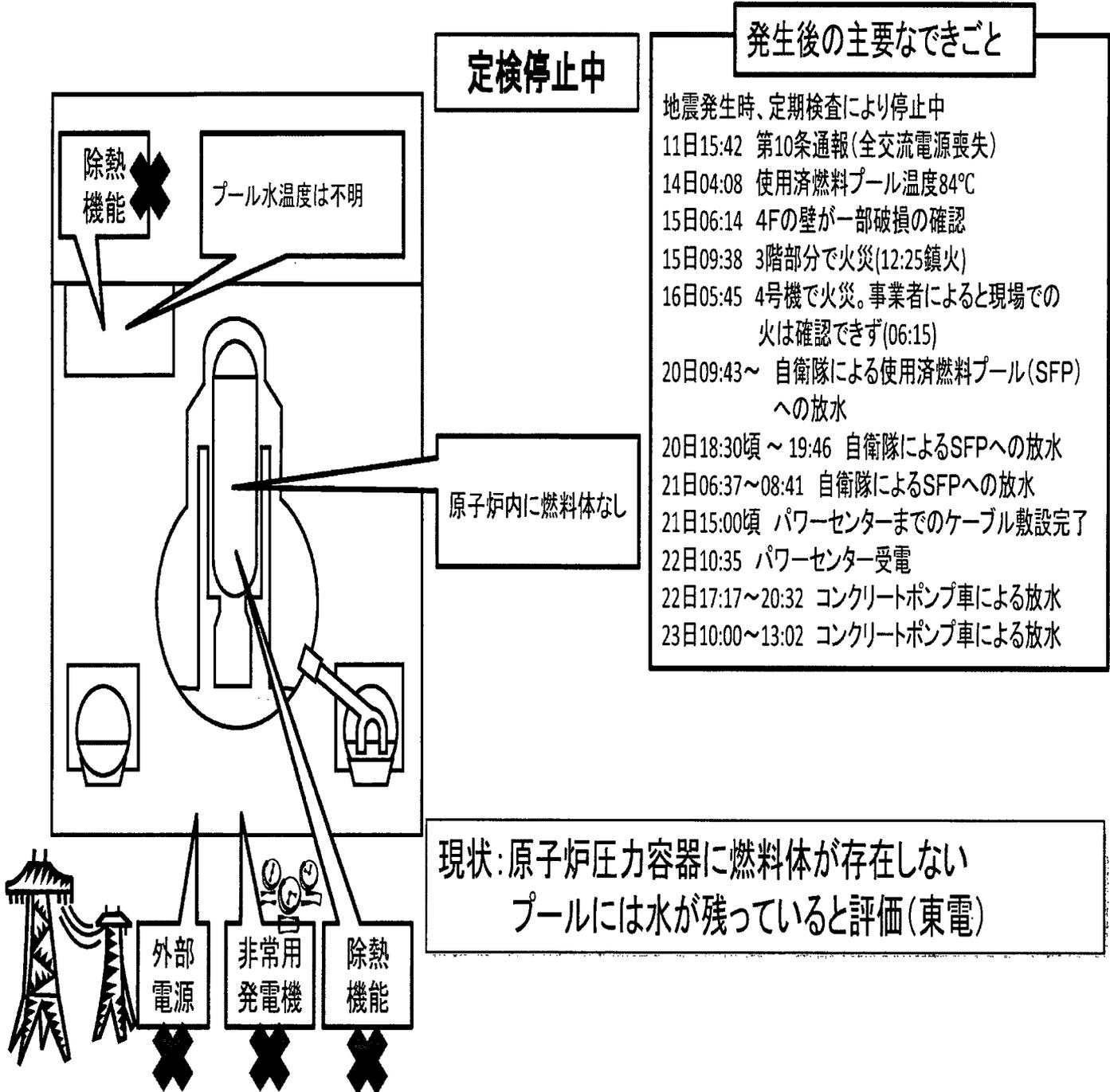
- 11日14:46 運転中、地震により自動停止
- 11日05:42 10条通報(全交流電源喪失)
- 13日05:10 15条事象の発生
(非常用炉心冷却装置注水不能)
- 13日09:20 ベント開始
- 14日07:44 15条事象の発生(格納容器圧力異常上昇)
- 11日11:01 爆発音
- 16日08:30頃 白煙が発生
- 17日09:48~10:01 自衛隊ヘリによる放水
(計4回)を実施
- 17日19:05~20:07 高圧放水車による散水
(警察1回、自衛隊5回)
- 18日14時前~14:38 自衛隊消防車6台による地上放水
~14:45 米軍消防車1台による地上放水
- 19日0:00~01:00 消防庁による放水
- 19日14:10~20日3:40 消防庁による放水
- 20日 11:00 格納容器内圧力が上昇(320kPa)。
その後、低下。
- 20日20:39~21日3:58 消防庁による放水
- 21日15:55頃 灰色がかかった煙が発生。17:55に煙が
収まっていることを確認
- 22日15:10~15:59 消防庁による放水
- 22日22:43 中央操作室の照明復帰
- 23日11:03~13:20 燃料プール冷却浄化系(FPC)から使
用済燃料プール(SFP)に約35tの海水
を注水
- 23日16:20頃 黒煙が発生



現状: プールへの放水作業及び海水の炉心注入

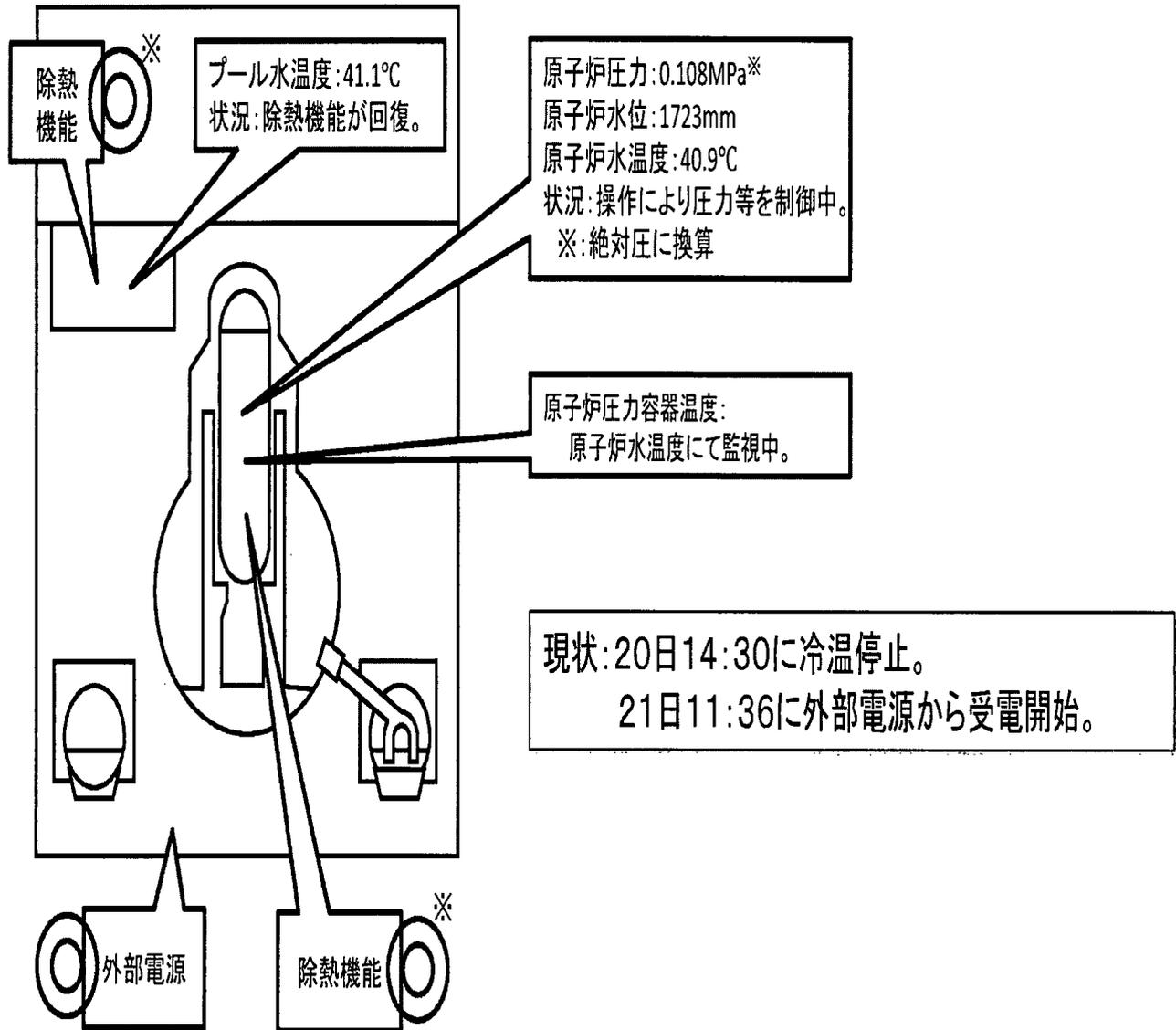
福島第一原子力発電所4号機の状況

(3月23日 18:00現在)



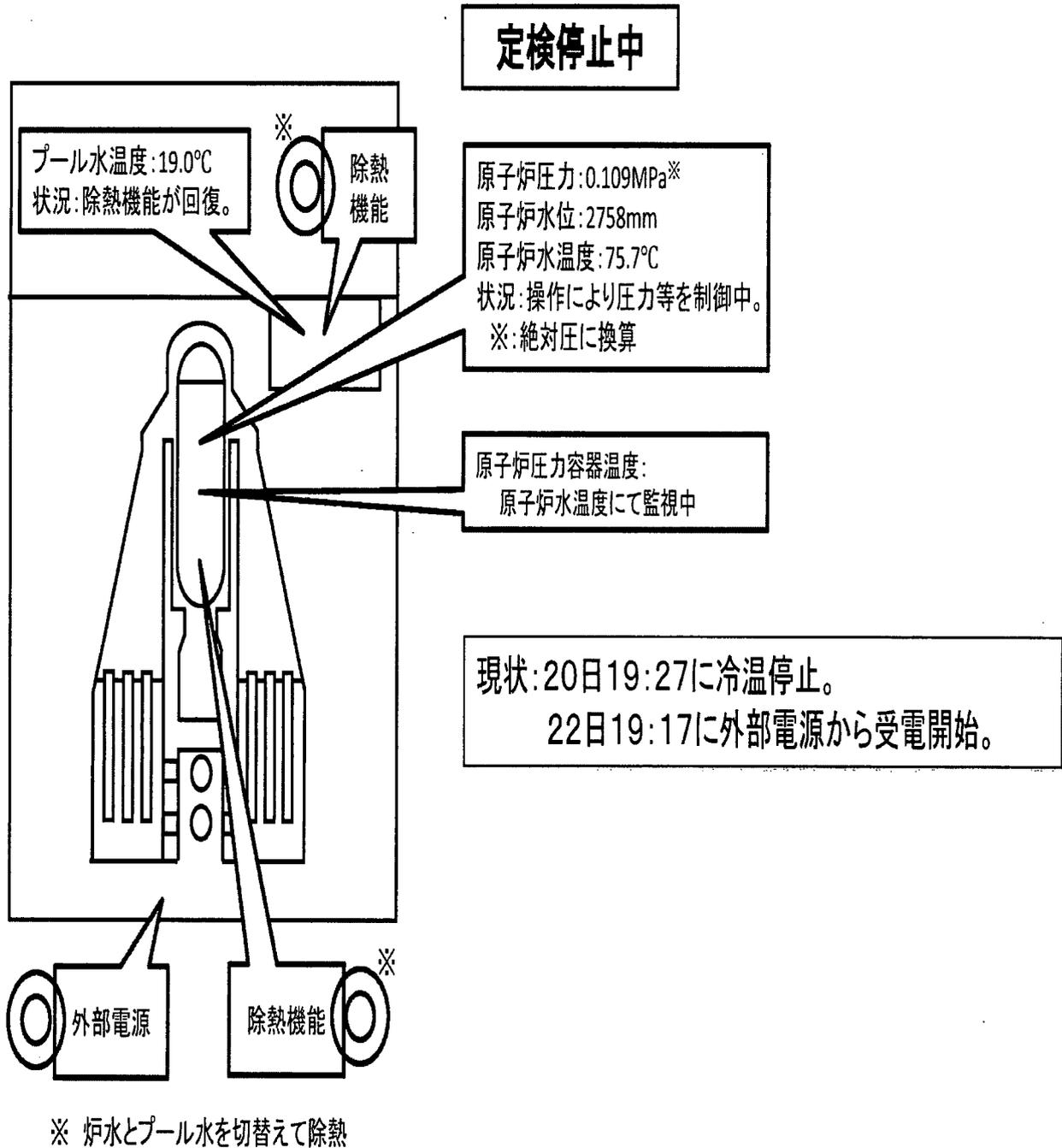
福島第一原子力発電所5号機の状況 (3月23日 18:00現在)

定検停止中



※ 炉水とプール水を切替えて除熱

福島第一原子力発電所6号機の状況 (3月23日 18:00現在)



From: OST02 HOC
Sent: Thursday, March 24, 2011 8:58 AM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: Briefing materials
Attachments: document1.tif; document2.pdf; document3.tif; document4.tif; document5.tif; document6.tif; document7.pdf; document8.pdf; document9.tif; document10.tif; document11.tif; document12.tif; document13.tif

From: HOO Hoc
Sent: Thursday, March 24, 2011 7:52 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Briefing materials

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Thursday, March 24, 2011 7:45 AM

To: [REDACTED] (b)(6)

[REDACTED] (b)(6)

Subject: Briefing materials

Electronic version of documents from 3/24 Ministry of Foreign Affairs Briefing for the diplomatic community. Agenda below.

Naomi Walcott
Emergency Action Officer
Japan Emergency Command Center
U.S. Embassy Tokyo

This email is UNCLASSIFIED.

From: PROTOCOLOFFICE-EM [mailto:protocoloffice-em@mofa.go.jp]
Sent: Thursday, March 24, 2011 8:21 PM
To: PROTOCOLOFFICE-EM
Subject: Official notice(24/03/2011) Documents of the briefing

—Urgent—

Official Notice

(24 March 2011)

To All Missions (Embassies, Consular posts and International Organizations in Japan)

Ministry of Foreign Affairs has the honour to send for the perusal of Missions, documents which were distributed at the briefing on 24th March, 2011 at 17:00 for your reference.

List of attachments

1. List of briefers from Ministries other than the MOFA (24th, March)
2. Measurement of radiation doses (Ministry of Land, Infrastructure, Transport and Tourism)
3. Press Release (Detection of radioactive materials in tap water in Fukushima Prefecture and Tokyo, 23 March, 2011) (Ministry of Health, Labour and Welfare)
4. Instruction (23 March 2011) (Ministry of Health, Labour and Welfare)
5. Press Release (Monitoring of Radioactive Contaminants for Agricultural and Livestock Products, 23 March, 2011) (Ministry of Health, Labour and Welfare)
6. Levels of radioactive contaminants in foods (Ministry of Health, Labour and Welfare)
7. Press Release (23 March, 2011) (Cabinet Office)
8. System for Prediction of Environmental Emergency Dose Information
(Ministry of Education, Culture, Sports, Science and Technology)
9. IAEA Radiation Monitoring results (MOFA)
10. Seismic Damage Information (the 47th Release, As of 8:00 March 24th, 2011) (Nuclear and Industrial Safety Agency)
11. Conditions of Fukushima Dai-ichi Nuclear Power Station (Nuclear and Industrial Safety Agency)
12. Fukushima Dai-ichi Monitoring points (March 24th, 2011) (Nuclear and Industrial Safety Agency)
13. Readings of Sea Area Monitoring at Post Out of Fukushima Dai-ichi NPP (Ministry of Education, Culture, Sports, Science and Technology)

(END)



主要施策

- 港灣
 - スーパー中核港湾プロジェクトの推進
 - 輸出入・港湾手続のシシグロウアップ化
 - リサイクルポート
 - みなとの技術(港湾技術研充開発)
 - みなと振興交付金
 - 運河の魅力発見プロジェクト
 - みなとオアシス
 - コンテナターミナルのグレートオープン戦略
 - 海外港湾振興プロジェクト協議会
 - 基本方針における需要予測
 - 放逐船対策

■海岸

- 海岸行政に関する施策の紹介

Measurement of radiation doses

Measurement of Radiation Doses in the Ports around Tokyo Bay

Currently, the level of radiation in Tokyo City, Yokohama City, Kawasaki City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

[Radiation data as of] - 24th March 2011 (AM)

- [English](#)
- [Chinese](#)
- [Traditional Chinese](#)
- [Hangoul](#)

[Reference]

Kinya Ichimura
 Special Assistant to the Director,
 Security and Emergency Management Office,
 Ports and Harbours Bureau
 Tel: +81-3-5253-8111 (ext. 46284)
 Tel: +81-3-5253-8070 (direct)
 Fax: +81-3-5253-1648

基本情報

- 組織
- 予算
- 法令等
- 政策評価
- 審議会・委員会等
- 報道発表資料
- 社会資本整備重点計画
- 統計・データ
- みなと一覧
- 出版物
- キッズページ
- 港とみなとの相関図
- 公共調達制度
- ご意見・ご要望

Measurement of Radiation Dose in the Ports around Tokyo Bay

Measured dose

	Measurement points (Address)	Mar.23 AM	Mar.23 PM	Mar.24 AM		Annual exposure calculation
Port of Tokyo	◎ Tokyo Metropolitan Institute of Public Health (Hyakunin-cho, Shinjuku-ku, Tokyo)	146nGy/h 8:00	146nGy/h 17:00	139nGy/h 8:00	≈ 0.0001390 mSv/h	1.22mSv/year
Port of Yokohama	☆ Environmental Science Research Institute (Takigashira, Isogo-ku, Yokohama, Kanagawa)	71nGy/h 8:00	68nGy/h 17:00	67nGy/h 8:00	≈ 0.0000670 mSv/h	0.59mSv/year
Port of Kawasaki	△ Kawasaki Municipal Research Institute for Environmental Protection (Tajima-cho, Kawasaki-ku, Kawasaki, Kanagawa)	103nGy/h 8:00	97nGy/h 17:00	89nGy/h 8:00	≈ 0.0000890 mSv/h	0.78mSv/year
Port of Chiba	□ Chiba Prefectural Environmental Research Center (Iwasaki-Nishi, Ichihara, Chiba)	100nGy/h 8:00	104nGy/h 17:00	98nGy/h 8:00	≈ 0.0000980 mSv/h	0.86mSv/year

- 1) According to the website of Tokyo-Electric Power Company, the unit is converted 1 nano-Gray/hour (nGy/hr) \approx 1 nano-Sievert /hour (nSv/hr).
- 2) "Annual exposure calculation" is the estimation under the condition that the hourly radiation dose measurement at the measurement point is accumulated 24 hours throughout the year.
- 3) 1 milli-Sievert (mSv) = 1000 micro-Sievert (μ Sv)
1 micro-Sievert (μ Sv) = 1000 nano-Sievert (nSv)

According to the Ministry of Education, Culture, Sports, Science and Technology, examples of exposure level of radiation in daily life is as below.

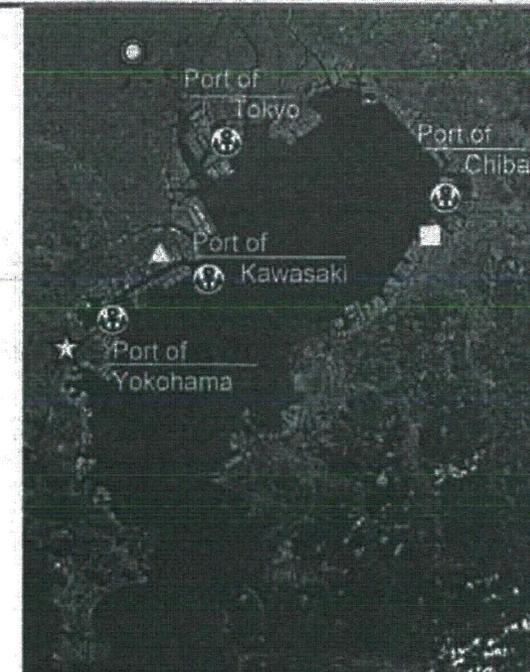
- Chest X-ray (once)	0.05 mSv
- 1 roundtrip between Tokyo and New York by air	0.2 mSv
- Stomach X-ray (once)	0.6 mSv

According to the WHO, a person is exposed to approximately 3.0mSv/year on average.

References;

◎	Tokyo Metropolitan Institute of Public Health Website (Japanese only) http://www.tokyo-aiken.go.jp/monitoring/index.html
☆	City of Yokohama, Environmental Planning Bureau Website(Japanese only) http://www.city.yokohama.lg.jp/kankyo/saigai/
△	City of Kawasaki Website(Japanese only) http://www.city.kawasaki.jp/e-news/info3715/index.html
□	Chiba Prefecture Government Website(Japanese only) http://www.pref.chiba.lg.jp/index.html

Radiation Measurement Map



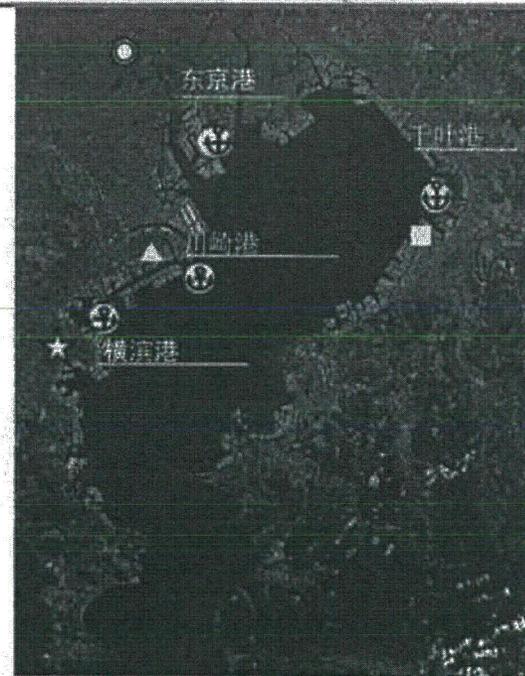
东京湾周边港的放射线辐射量检测状况

【检测值】

	检测点名称及地址	Mar.23	Mar.23	Mar.24		年换算值
		AM	PM	AM		
东京港	◎ 健康安全中心 (东京都新宿区百人町)	146nGy/h 8:00	146nGy/h 17:00	139nGy/h 8:00	≈ 0.0001390 mSv/h	1.22mSv
横滨港	☆ 环境科学研究所 (神奈川県横浜市矶子区龙头)	71nGy/h 8:00	68nGy/h 17:00	67nGy/h 8:00	≈ 0.0000670 mSv/h	0.59mSv
川崎港	△ 川崎市公害研究所 (神奈川県川崎市川崎区田岛町)	103nGy/h 8:00	97nGy/h 17:00	89nGy/h 8:00	≈ 0.0000890 mSv/h	0.78mSv
千叶港	□ 千叶县环境研究中心 (千叶县市原市岩崎西)	100nGy/h 8:00	104nGy/h 17:00	98nGy/h 8:00	≈ 0.0000980 mSv/h	0.86mSv

- 1) 东京电力网站上公布的换算公式为 $1\text{nGy/h} \approx 1\text{nSv/h}$ 。
- 2) 表中的“年换算值”为持续在检测点户外365天每天24小时受到该每小时放射线辐射量时的数值。
- 3) $1\text{mSv} = 1000\mu\text{Sv}$ $1\mu\text{Sv} = 1000\text{nSv}$

放射线检测地图



- 日本文部科学省网站上公布的日常生活中受到的放射线辐射例
 - ・胸部X光检查(1次) 0.05 mSv
 - ・乘坐东京—纽约的飞机往返1次 0.2 mSv
 - ・胃部X光检查(1次) 0.6 mSv
- 根据国际卫生组织(WHO)报告, 人们在日常生活中平均每年受到3.0 mSv的放射线辐射。

出处)

◎	东京都健康安全研究中心网站 http://www.tokyo-eiken.go.jp/monitoring/index.html
☆	横浜市环境创造局网站 http://www.city.yokohama.lg.jp/kankyo/saigai/
△	川崎市网站 http://www.city.kawasaki.jp/e-news/info3715/index.html
□	千叶县网站 http://www.pref.chiba.lg.jp/index.html

東京灣周邊港的放射線輻射量檢測狀況

【測定値】

計測点名称及び住所		Mar.23 AM	Mar.23 PM	Mar.24 AM		年換算値
東京港	◎ 健康安全中心 (東京都新宿區百人町)	146nGy/h 8:00	146nGy/h 17:00	139nGy/h 8:00	≈ 0.0001390 mSv/h	1.22mSv
横濱港	☆ 環境科學研究所 (神奈川縣横濱市磯子區瀧頭)	71nGy/h 8:00	68nGy/h 17:00	67nGy/h 8:00	≈ 0.0000670 mSv/h	0.59mSv
川崎港	△ 川崎市公害研究所 (神奈川縣川崎市川崎區田島町)	103nGy/h 8:00	97nGy/h 17:00	89nGy/h 8:00	≈ 0.0000890 mSv/h	0.78mSv
千葉港	□ 千葉縣環境研究中心 (千葉縣市原市巖崎西)	100nGy/h 8:00	104nGy/h 17:00	98nGy/h 8:00	≈ 0.0000980 mSv/h	0.86mSv

1) 東京電力網站上公佈的換算公式為 $1\text{nGy/h} \approx 1\text{nSv/h}$ 。

2) 表中的「年換算値」為持續在檢測點戶外365天每天24小時受到該每小時輻射劑量時的總和。

3) $1\text{mSv} = 1000 \mu\text{Sv}$ $1 \mu\text{Sv} = 1000\text{nSv}$

● 日本文部科學省網站上公佈的日常生活中受到的輻射劑量例

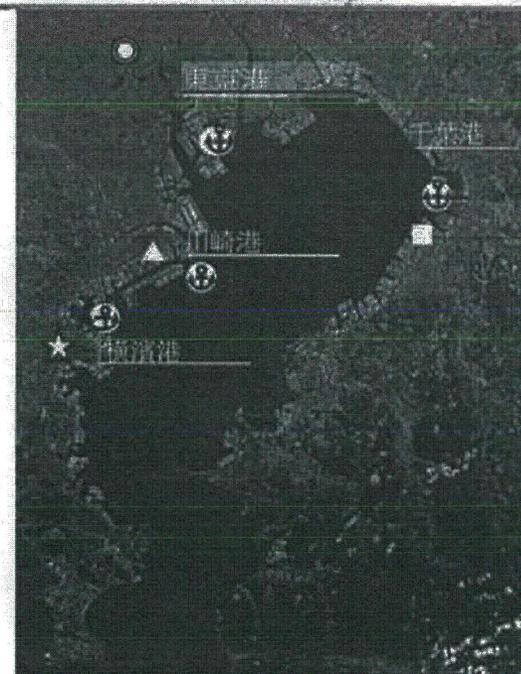
- ・ 胸部X光檢查 (1次) 0.05 mSv
- ・ 乘坐東京-紐約的飛機往返1次 0.2 mSv
- ・ 胃部X光檢查 (1次) 0.6 mSv

● 根據世界衛生組織 (WHO) 報告，人們在日常生活中平均每年受到了3.0 mSv的輻射劑量。

出處)

◎	東京都健康安全研究中心網站 http://www.tokyo-eiken.go.jp/monitoring/index.html
☆	横濱市環境創造局網站 http://www.city.yokohama.lg.jp/kankyo/saigai/
△	川崎市網站 http://www.city.kawasaki.jp/e-news/info3715/index.html
□	千葉縣網站 http://www.pref.chiba.lg.jp/index.html

輻射檢測地圖



도쿄만 주변 항구에서의 방사선량 측정 상황에 대하여

【測定値】

	계측 지점 및 주소	Mar.23 AM	Mar.23 PM	Mar.24 AM		年換算値
도쿄항	◎ 건강안전센터 (도쿄도 신주쿠구 하쿠닌초)	146nGy/h 8:00	146nGy/h 17:00	139nGy/h 8:00	≒0.0001390 mSv/h	1.22mSv
요코하마항	☆ 환경화학연구소 (가나가와현 요코하마시이소고구 다키가시라)	71nGy/h 8:00	68nGy/h 17:00	67nGy/h 8:00	≒0.0000670 mSv/h	0.59mSv
가와사키항	△ 가와사키시 공해연구소 (가나가와현 가와사키시 가와사키구 다지마초)	103nGy/h 8:00	97nGy/h 17:00	89nGy/h 8:00	≒0.0000890 mSv/h	0.78mSv
지바항	□ 지바현 환경연구센터 (지바현 이치하라시 이와사키니시)	100nGy/h 8:00	104nGy/h 17:00	98nGy/h 8:00	≒0.0000980 mSv/h	0.86mSv

- 1) 도쿄 전력 HP에서는 1nGy/h(나노그레이/시)≒1nSv/h(나노시버트/시)로 환산했습니다.
- 2) 표의 "연환산치"는 측정 지점의 1 시간당 방사선 량을 1 일 24 시간 365 일 받는 경우의 수치입니다. 요코하마항
- 3) 1 밀리시버트 (mSv) = 1000 마이크로시버트 (μSv)
1 마이크로시버트 = 1000 나노시버트 (nSv)

● 문부과학성 HP에서 발표하고 있는 일상생활에서 받게 될 방사선의 예방사선 측정 지점

- 흉부 엑스레이 검사(1회) 0.05 mSv
- 도쿄-뉴욕 항공기로 1회 왕복 0.2 mSv
- 위 부위 엑스레이 검사(1회) 0.6 mSv

● WHO에 따르면 사람은 통상적 생활에서 평균 연간 3.0mSv의 방사선을 받고 있습니다.

출처)

◎	도쿄도 건강안전연구센터 HP http://www.tokyo-eiken.go.jp/monitoring/index.html
☆	요코하마시 환경창조국 HP http://www.city.yokohama.lg.jp/kankyo/saigai/
△	가와사키시 HP http://www.city.kawasaki.jp/e-news/info3715/index.html
□	지바현 HP http://www.pref.chiba.lg.jp/index.html

방사선 측정 지점





内閣府

プレス発表

平成23年3月23日
原子力安全委員会

緊急時迅速放射能影響予測ネットワークシステム（SPEEDI）の試算について

【経緯】

原子力安全委員会では、3月16日より、緊急時迅速放射能影響予測ネットワークシステム（SPEEDI）による試算のために、試算に必要となる放出源情報の推定に向けた検討をしてまいりました。3月20日から陸向きの風向となったため、大気中の放射性核種の濃度が測定でき、限定的ながら放出源情報を推定できたことから、本システムの試算を行うことが可能となりました。

これをもとに試算した結果は、別紙のとおりです。

【評価】

- 本試算は、福島第一原子力発電所の事故発生後、連続して一日中屋外で過ごすという保守的な条件を仮定して、甲状腺の被ばく線量を試算したものです。
- ただし、屋内では屋外と比べて4分の1から10分の1に放射線の影響を低減させることができます。
- 本試算は、限定的な情報しか得られていない状況下で試算されたものであり、今後、この試算の精度を高めるために、モニタリング結果を充実させていくことが必要です。



内部被ばく臓器等価線量

日時 = 2011/03/12 06:00 -
2011/03/24 00:00 の積算値

領域 : 92km X 92km
核種名 = ヨウ素合計
対象年齢 = 1歳児
臓器名 = 甲状腺

【凡例】
線量等価線 (mSv)
1= 10000 _____
2= 5000
3= 1000 - - - - -
4= 500 - - - - -
5= 100 - - - - -

(評価)

本試算は、福島第一原子力発電所の事故発生後、連続して一日中屋外で過ごすという保守的な条件を仮定して、甲状腺の被ばく線量を試算した

SPEEDI(緊急時迅速放射能影響予測)ネットワークシステムは、原子力施設から大量の放射性物質が放出されたり、あるいは、そのおそれがあるという緊急時に、周辺環境における放射性物質の大気中濃度や被ばく線量などを、放出源情報、気象条件および地形データをもとに迅速に予測するシステムです。

国・地方公共団体は、SPEEDIネットワークシステムが予測した情報により、周辺住民のための防護対策の検討を迅速に進めることができます。

The SPEEDI network system started on January 2005 using more precise prediction model.

This brochure introduces the concept of the SPEEDI network system to the general public as well as parties concerned with nuclear emergency preparedness to deepen understanding.



Nuclear Safety Technology Center

Headquarters

Tokyo Toyama Kaikan Bldg. 5F, 5-1-3-101 Hakuori, Bunkyo-ku,
Tokyo 112-8604
Phone: 03-3814-7000

Department of Emergency Preparedness Operations Division of Emergency Preparedness Technology

Tokyo Toyama Kaikan Bldg. 4F, 5-1-3-101 Hakuori, Bunkyo-ku,
Tokyo 112-8604
Phone: 03-3816-3970

Training Center for Supervisor

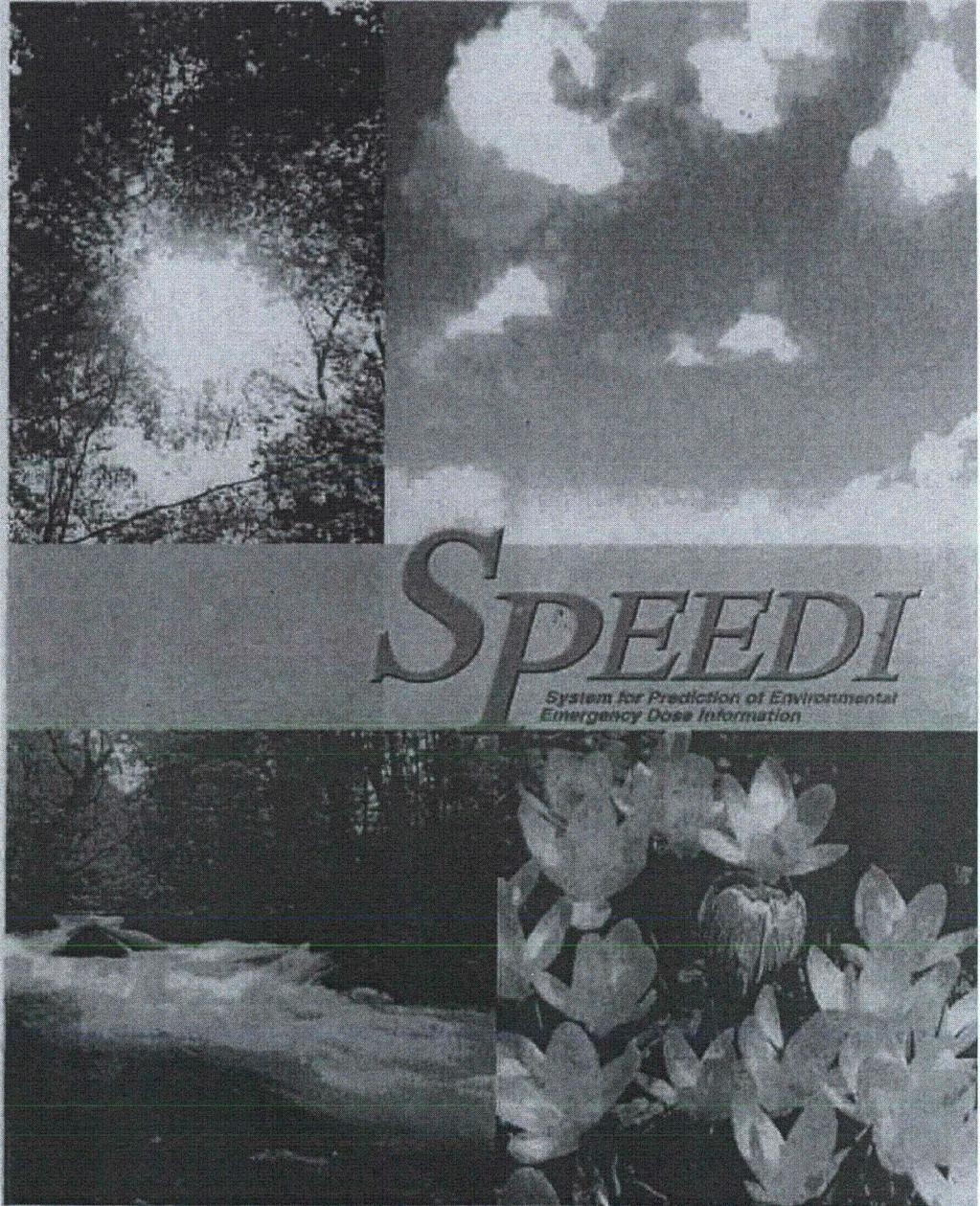
147-5 Aza-Shirane, Oaza-Muramatsu Tokai-mura, Naka-gun,
Ibaraki 319-1112
Phone: 029-262-7911

Emergency Preparedness Technology Center (EPTC)

Nuclear Disaster Prevention Research Plaza
1-67 Aza-Hozuki, Oaza-Otsuchi, Tokai-mura, Naka-gun,
Ibaraki 319-5212
Phone: 0175-71-1180

Nuclear Energy Library

Toranshon Mitsui Bldg. 2F, 3-5-1 Kasumigasaki, Chiyoda-ku,
Tokyo 100-0043
Phone: 03-3500-6121



Ministry of Education, Culture, Sports,
Science and Technology

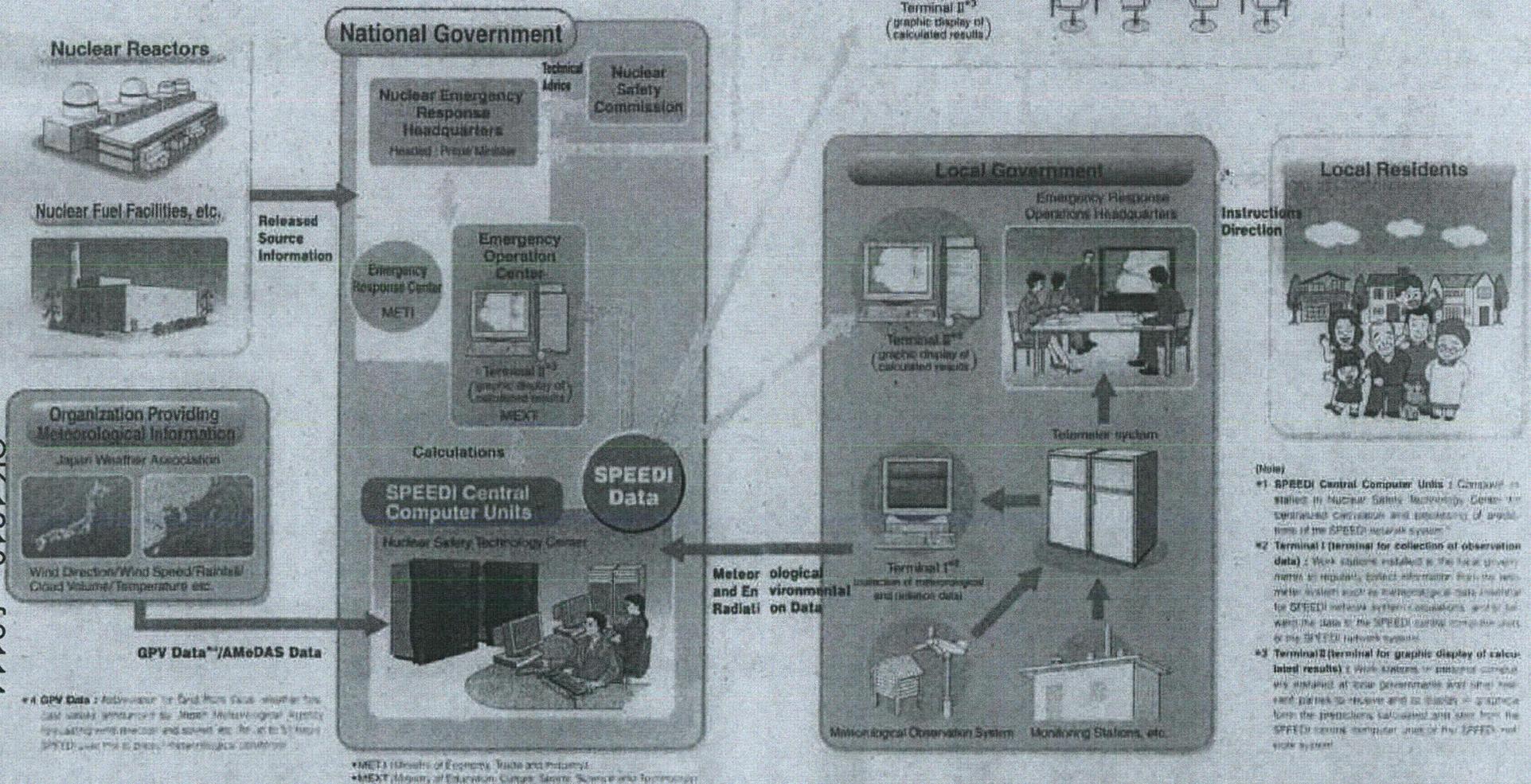
This brochure was prepared by the Nuclear Safety Technology Center under license from
the Ministry of Education, Culture, Sports, Science and Technology.

March 2005 (Ver. 2005)

SPEEDI is a system for speedy prediction of environmental dose during nuclear emergencies.

In the nuclear event or its possibility caused by massive release of radioactive materials from nuclear facilities, the SPEEDI (System for Prediction of Environmental Emergency Dose Information) network system, using source term information from the nuclear facility and data on meteorological conditions as well as topographic data, is able to speedy predict the atmospheric concentration of radioactive materials and exposure dose in the surrounding areas.

The information predicted by the SPEEDI network system will be used by national and local government make an action plan to decrease exposure for residents of surrounding areas.



CK 1210 of 3114

The SPEEDI network system links National and Local government by a exclusive line.

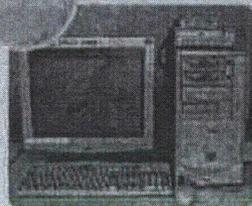
The SPEEDI network system, centering on the SPEEDI central computer units established at the Nuclear Safety Technology Center, links MEXT, the Nuclear Safety Commission, METI, off-site centers, local governments and the Japan Weather Association by a exclusive line.

The SPEEDI central computer units regularly collects meteorological and environmental radiation data from monitoring stations, etc. of local governments, and GPV and AMEDAS data from the Japan Weather Association, to prepare for emergencies.

Data Communication Network of the SPEEDI



Terminal I is installed at relevant local governments to collect information such as meteorological data.



Terminal II is installed at the National and relevant Local governments as well as locations such as off-site centers for a graphic display of calculated results by SPEEDI.

Yokohama (Tokai N.P.P.)

Aomori (Fukushima N.P.P.)
JNFL Rokkasho Plant

Sendai (Mutsu N.P.P.)



Maatsuyama (Mutsu N.P.P.)



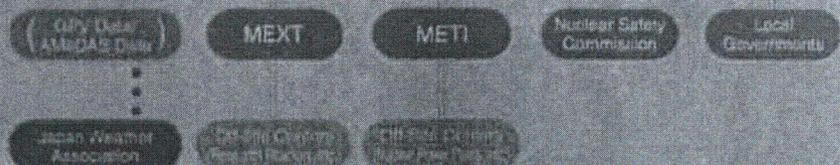
Local governments collect meteorological and environmental radiation data by the telemeter system through monitoring stations and meteorological observation systems such as wind speed and direction monitors around nuclear facilities.

Maatsuyama (Mutsu N.P.P.)

Maatsuyama (Mutsu N.P.P.)

Fukushima (Fukushima Daiichi and Daini N.P.P.)

Nuclear Safety Technology Center



•METI (Ministry of Economic Trade and Industry)
•MEXT (Ministry of Education, Culture, Sports, Science and Technology)

● indicates installation locations of Terminal I and main facilities.

CK 1211 of 3114

The SPEEDI system prepares for emergency predictions through routine collection of data.

The SPEEDI network system is composed of routine information processing and emergency information processing.

In normal, meteorological and environmental radiation data are routinely collected through the network into the SPEEDI central computer units to prepare for emergencies.

In emergency, using meteorological and topographical data for the area around the nuclear facility, wind direction and speed are calculated to predict atmospheric concentration of radioactive materials and exposure dose, etc.

Data Used by SPEEDI

	Items	Contents	Input Methods	Use
Real Time Data	Meteorological information	Wind direction, wind speed, atmospheric stability, inversion, net radiation	On-line input from local governments	Calculations for local meteorological predictions
	GPY Data	GPY Data (wind speed, atmospheric pressure, temperature, specific humidity, rainfall, cloud amount, AMeDAS Data (wind direction, wind speed, rainfall)	On-line input from Japan Weather Association	Calculations for wind field predictions Calculations for concentration predictions Calculations for dose predictions
	Released Source information	Site and facility name, start of release, release duration, radionuclide name and release rate	Manual input	Calculations for dispersion predictions Calculations for dose predictions

Stored Data	Geographic information	Place name, coastline, rivers, roads, railroads, longitude and latitude coordinates, etc.	Automatic search of the data base	Design for graphic display
	Social environment information	Population distribution, schools, hospitals, evacuation centers, etc.		Design for graphic display
	Site information	Site name, facility name, longitude, latitude, exhaust stacks height above sea level, reactor type		Release point information for calculations of concentration predictions
	Dose conversion factor	Radionuclide specific dose conversion factors for effective dose, etc.		Calculations for dose predictions
	Radionuclide composition ratio	Rare gas and iodine fuel rod composition ratio, etc. by reactor type and burn up		Estimations of environmental composition ratio of rare gas iodine isotopes, etc.
	Topographical information	Map of numerical data at 50m and 250m, land utilization data		Calculations for local weather predictions Calculations for wind field predictions Calculations for concentration predictions Calculations for dose predictions

Routine Processing

Collection of Meteorological and Environmental Radiation Data

Meteorological data and environmental radiation data from the telemeter system of the local governments, and GPY data and AMeDAS data from the Japan Weather Association are collected in the SPEEDI central computer units through the communication network.

Processing during Emergency

Preparation of Meteorological Prediction Data for the Region around the Nuclear Facility

Meteorological prediction data that take into account the topography around the nuclear facility are prepared using collected meteorological (GPY) data and topographic (altitude, land utilization) data

Prediction of Wind Field

Meteorological data and topographical data are used to calculate the wind field (wind direction/speed) around the nuclear facility

Prediction of Concentration and Dose

The concentration of radioactive materials in the atmosphere and exposure dose, etc. are calculated through information such as wind direction and speed, dispersion and volume of radioactive materials released from the nuclear facility

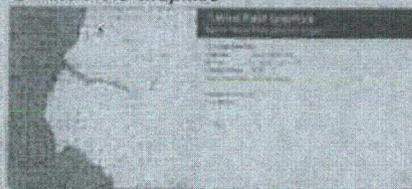
Graphic Transmission and Display

Calculated results are depicted in easy-to-understand graphical form (refer to graphic displays below), and are provided to the central government, relevant local governments and other parties concerned.

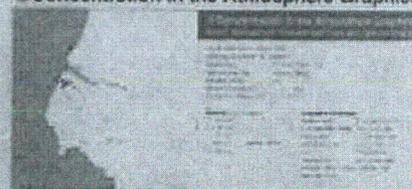
Wind Field Concentration in the Atmosphere
 Surface Exposure Dose Air Absorbed Dose Rate
 External Exposure Dose
 Internal Exposure Dose
 Meteorological Data Radiation Data

Graphic Display (example)

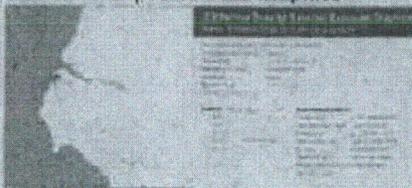
Wind Field Graphics



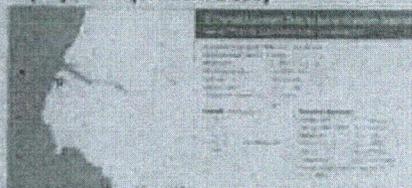
Concentration in the Atmosphere Graphics



External Exposure Dose Graphics



Internal Exposure Dose Graphics (Thyroid Equivalent Dose)



From: LIA06 Hoc
Sent: Monday, March 21, 2011 1:51 PM
To: rachel.liang@dhs.gov
Cc: LIA08 Hoc; LIA09 Hoc
Subject: RE: Analysis of Domestic Power Plants

As part of our longer term activities we will evaluate lessons-learned and recommendations. Such a review would include regulatory actions; for example, to identify potential research projects, generic issues, and regulatory enhancements.

This review will likely take some time (months) to complete. I expect we would share it with our partners in the Federal Government and likely will have a publicly available component.

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

From: Liang, Rachel [mailto:Rachel.Liang@dhs.gov]
Sent: Monday, March 21, 2011 10:22 AM
To: LIA11 Hoc
Subject: Analysis of Domestic Power Plants

NRC Federal Liaison Desk,

The Nuclear SSA requests the NRC's assistance, leveraging the representatives to the Federal Liaison Team, to ascertain if the NRC other Federal departments/agencies (e.g., DOE, FEMA, etc.) are planning to conduct a study and/or analysis of current U.S. commercial nuclear power plant safety and preparedness capabilities/protocols based upon the recent earthquake and tsunami in Japan?

If so, will these studies/analyses be shared with the wider US Government community?

Thanks,

Rachel (Treffeisen) Liang
Nuclear Sector-Specific Agency
Office of Infrastructure Protection
Department of Homeland Security
(703) 603-5136 (office)
(b)(6) (mobile)
rachel.liang@dhs.gov **NEW!**

From: RMTPACTSU_ELNRC <RMTPACTSU_ELNRC@ofda.gov>
Sent: Friday, March 25, 2011 12:58 PM
To: Marshall, Jane
Subject: FW: Draft agenda for today's 1400 call for the consortium for support of the Japanese event
Attachments: DRAFT AGENDA FOR DAILY GOVERNMENT.doc

The call was at 1300 before this one. Overall federal lead was how it was characterized.

From: LIA09 Hoc [mailto:LIA09.Hoc@nrc.gov]
Sent: Monday, March 21, 2011 1:46 PM
To: RMTPACTSU_ELNRC
Subject: FW: Draft agenda for today's 1400 call for the consortium for support of the Japanese event

Liaison Team
NRC Operations Center

From: LIA09 Hoc
Sent: Monday, March 21, 2011 1:40 PM
To: 'peter.lyons@hq.doe.gov'; [REDACTED] (b)(6); 'rmtpacstu_elnrc@ofda.gov'; 'rmtpactsu_rm@ofda.gov'; Coggins, Angela; Batkin, Joshua; 'craig.conklin@hq.dhs.gov'; 'websterwe@inpo.org'; 'ellisjo@inpo.org'; 'czekallamb@inpo.org'; 'ryankp@inpo.org'
Cc: LIA06 Hoc; LIA08 Hoc
Subject: Draft agenda for today's 1400 call for the consortium for support of the Japanese event

Please find the draft agenda for today's call at 1400 to coordinate support for the Japanese nuclear reactor event. It is for discussion purposes and subject to change based on input from the consortium.

Mark Lombard, Deputy Director
Liaison Team
NRC Operations Center

DRAFT AGENDA FOR DAILY GOVERNMENT/INDUSTRY CONSORTIUM TELECONFERENCE

(b)(5)

All nuclear power reactors in the United States are subject to U.S. Nuclear Regulatory Commission (NRC) regulations. As such, we regulate the nuclear power reactors to ensure they meet these requirements and maintain safety.

Liaison Team
NRC Operations Center

From: OST02 HOC
Sent: Monday, March 21, 2011 12:42 PM
To: LIA07 Hoc; LIA09 Hoc
Attachments: FW: IAEA distributed documents; FW: IAEA distributed documents; FW: IAEA distributed documents

From: LIA09 Hoc
Sent: Monday, March 21, 2011 12:11 PM
To: Bergman, Thomas; LIA08 Hoc; LIA06 Hoc
Cc: Bailey, Marissa; Webber, Robert; Thaggard, Mark; Blount, Tom; Adams, John; Tschiltz, Michael; Giitter, Joseph; McGinty, Tim
Subject: RE:

I understand. That is why I asked a follow up to their email last week and this is the response I received.

Liaison Team
NRC Operations Center

From: Bergman, Thomas
Sent: Monday, March 21, 2011 12:05 PM
To: LIA09 Hoc; LIA08 Hoc; LIA06 Hoc
Cc: Bailey, Marissa; Webber, Robert; Thaggard, Mark; Blount, Tom; Adams, John; Tschiltz, Michael; Giitter, Joseph; McGinty, Tim
Subject: RE:

This contradicts guidance we were issued last week. Can we just confirm as T&A is due this week. Thx.

From: LIA09 Hoc
Sent: Monday, March 21, 2011 11:51 AM
To: LIA08 Hoc; LIA06 Hoc
Cc: Bailey, Marissa; Bergman, Thomas; Webber, Robert; Thaggard, Mark; Blount, Tom; Adams, John; Tschiltz, Michael; Giitter, Joseph; McGinty, Tim
Subject: FW:

FYI

Liaison Team
NRC Operations Center

From: Jones, Jackie
Sent: Monday, March 21, 2011 11:40 AM
To: LIA09 Hoc
Cc: Lombard, Mark
Subject: RE:

You would use the new TAC (ZG0061).

Thanks

Jacqueline Y. Jones
Senior Program Analyst/Functional Lead
Office of the Chief Financial Officer
Financial Services Branch
Time, Labor, and Payroll Services

Office: 301-415-7384
Fax: 301-415-6725
Mail Stop T9E2
jackie.jones@nrc.gov

From: LIA09 Hoc
Sent: Monday, March 21, 2011 10:15 AM
To: Jones, Jackie
Cc: Lombard, Mark
Subject:

Jackie,

A follow up to the HRMS email sent last Thursday. For SESers and BCs filling roles in the Operations Center, such as team directors, should we use the Japan TAC or just use our normal management TAC? Please reply to all so I have this on my personal email also.

Thank you,

Mark Lombard
Liaison Team
NRC Operations Center

From: Adams, John
Sent: Monday, March 21, 2011 11:51 AM
To: LIA09 Hoc
Subject: Out of Office:

I will be supporting the NRC reponse to the Japanese earthquake and tsunami in the NRC Operations Center 3/24/11 @ 7:00 a.m. If you require assistance prior to my return please contact Tom Blount @301-415-5710.

From: LIA08 Hoc
Sent: Monday, March 21, 2011 11:46 AM
To: LIA06 Hoc; LIA09 Hoc; RST01 Hoc; PMT01 Hoc
Subject: health and human services call

Just got off our daily call with Emergency Support Function (ESF) #8 – health and human services sector. Call is chaired by HHS, and includes DOS, DOD, NRC, CDC, FAA, FDA, states, the Canadian government, and a host of others.

Of note:

USG apparently decided an hour ago to provide KI to US citizens in Toyko.

EPA is getting some slightly elevated radiation readings on EPA rad monitors in California. Data will be available tonight or tomorrow, as levels are just barely above minimum detectible limits.

Several public issues to be aware of – Canadians deploying more air monitoring equipment; Teamsters Union has issues about unloading cargo from Japan on US docks, other federal agencies developing guidance for travelers who think they were on a plane or boat with someone who was contaminated (expecting a large worried well issue).

Jeff Temple
301-816-5185

From: Lombard, Mark
Sent: Monday, March 21, 2011 10:15 AM
To: LIA09 Hoc
Subject: Out of Office:

I am (b)(6) from March 21 through March 25, 2011. I will respond to emails when I return to the office on March 28, 2011.

Thank you,

Mark

From: LIA09 Hoc
Sent: Monday, March 21, 2011 8:58 AM
To: Brochman, Phil
Subject: sharing of classified pics

Apparently Naval Reactors is asking for access to the pics we discussed the other day. Can you swing by the LT room when you get a chance please?

Thanks,

Mark Lombard, Deputy Director
Liaison Team
NRC Operations Center

From: OST02 HOC
Sent: Monday, March 21, 2011 8:43 AM
To: LIA07 Hoc; LIA09 Hoc
Attachments: FW: IAEA distributed documents; FW: IAEA distributed documents

From: OST02 HOC
Sent: Monday, March 21, 2011 8:17 AM
To: LIA07 Hoc; LIA09 Hoc
Subject: FW: IAEA distributed documents

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Monday, March 21, 2011 7:40 AM
To: HOO Hoc; LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: IAEA distributed documents

From: Kenagy, W David[SMTP:KENAGYWD@STATE.GOV]
Sent: Monday, March 21, 2011 7:39:00 AM
To: Kenagy, W David; McClelland, Vince; Rodriguez, Veronica; Heinrich, Ann; HOO Hoc; HOO2 Hoc; Huffman, William; DeCair.Sara@epamail.epa.gov; timothy.greten@dhs.gov; Maria.Marinissen@hhs.gov; (b)(6) doehqeoc@oem.doe.gov; hhs.soc@hhs.gov; James.Kish@dhs.gov; HOO Hoc; Smith, Brooke; Zubarev, Jill E; Shaffer, Mark R; NITOPS@nnsa.doe.gov; Skypek, Thomas M; (b)(6)
Cc: (b)(6)
Subject: RE: IAEA distributed documents
Auto forwarded by a Rule

On travel switching to commercial account.

From: Kenagy, W David
Sent: Sunday, March 20, 2011 3:50 PM
To: Kenagy, W David; 'McClelland, Vince'; 'Rodriguez, Veronica'; 'Heinrich, Ann'; 'Hoo1@nrc.gov'; 'Hoo2@nrc.gov'; 'wch@nrc.gov'; 'DeCair.Sara@epamail.epa.gov'; 'timothy.greten@dhs.gov'; 'Maria.Marinissen@hhs.gov'; (b)(6); 'doehqeoc@oem.doe.gov'; 'hhs.soc@hhs.gov'; 'James.Kish@dhs.gov'; 'hoo.hoc@nrc.gov'; 'Brooke.Smith@nrc.gov'; Zubarev, Jill E; Shaffer, Mark R; 'NITOPS@nnsa.doe.gov'; Skypek, Thomas M; (b)(6)
Subject: RE: IAEA distributed documents

From: Kenagy, W David
Sent: Sunday, March 20, 2011 10:32 AM
To: Kenagy, W David; 'McClelland, Vince'; 'Rodriguez, Veronica'; 'Heinrich, Ann'; 'Hoo1@nrc.gov'; 'Hoo2@nrc.gov'; 'wch@nrc.gov'; 'DeCair.Sara@epamail.epa.gov'; 'timothy.greten@dhs.gov'; 'Maria.Marinissen@hhs.gov'; (b)(6); 'doehqeoc@oem.doe.gov'; 'hhs.soc@hhs.gov'; 'James.Kish@dhs.gov'; 'hoo.hoc@nrc.gov'; 'Brooke.Smith@nrc.gov'; Zubarev, Jill E; Shaffer, Mark R; 'NITOPS@nnsa.doe.gov'; Skypek, Thomas M; (b)(6)
Subject: RE: IAEA distributed documents

From: LIA07 Hoc
Sent: Tuesday, March 15, 2011 6:30 PM
To: LIA09 Hoc
Subject: FW: NOC Phase 1 - Awareness 0330-11 Update Report 16 - Earthquake-Tsunami - Japan (1800 EDT 15 Mar 11)
Attachments: image003.jpg; Senior Leadership Brief Earthquake - Tsunami - Japan (1800 EDT 15 Mar 11).pdf; NOC Phase 1 - Awareness 0330-11 Update Report 16 - Earthquake - Tsunami - Japan (1800 EDT 15 Mar 11).pptx; image001.jpg

Also for the book ...
Same tab as the other stuff

From: HOO Hoc
Sent: Tuesday, March 15, 2011 6:29 PM
To: PMT01 Hoc; RST01 Hoc; LIA01 Hoc; LIA02 Hoc; LIA04 Hoc; LIA07 Hoc; LIA11 Hoc; LIA12 Hoc; Gott, William; Marshall, Jane; McDermott, Brian; Morris, Scott; Thorp, John
Subject: FW: NOC Phase 1 - Awareness 0330-11 Update Report 16 - Earthquake-Tsunami - Japan (1800 EDT 15 Mar 11)

Headquarters Operations Officer
U.S. Nuclear Regulatory Commission
Phone: 301-816-5100
Fax: 301-816-5151
email: hoo.hoc@nrc.gov
secure e-mail: hoo1@nrc.sgov.gov



From: NOC.SWO.Restricted [mailto:NOC.SWO.Restricted@dhs.gov]
Sent: Tuesday, March 15, 2011 6:05 PM
Subject: NOC Phase 1 - Awareness 0330-11 Update Report 16 - Earthquake-Tsunami - Japan (1800 EDT 15 Mar 11)

NOC Phase 1 - Awareness 0330-11 Update Report 16 - Earthquake-Tsunami - Japan

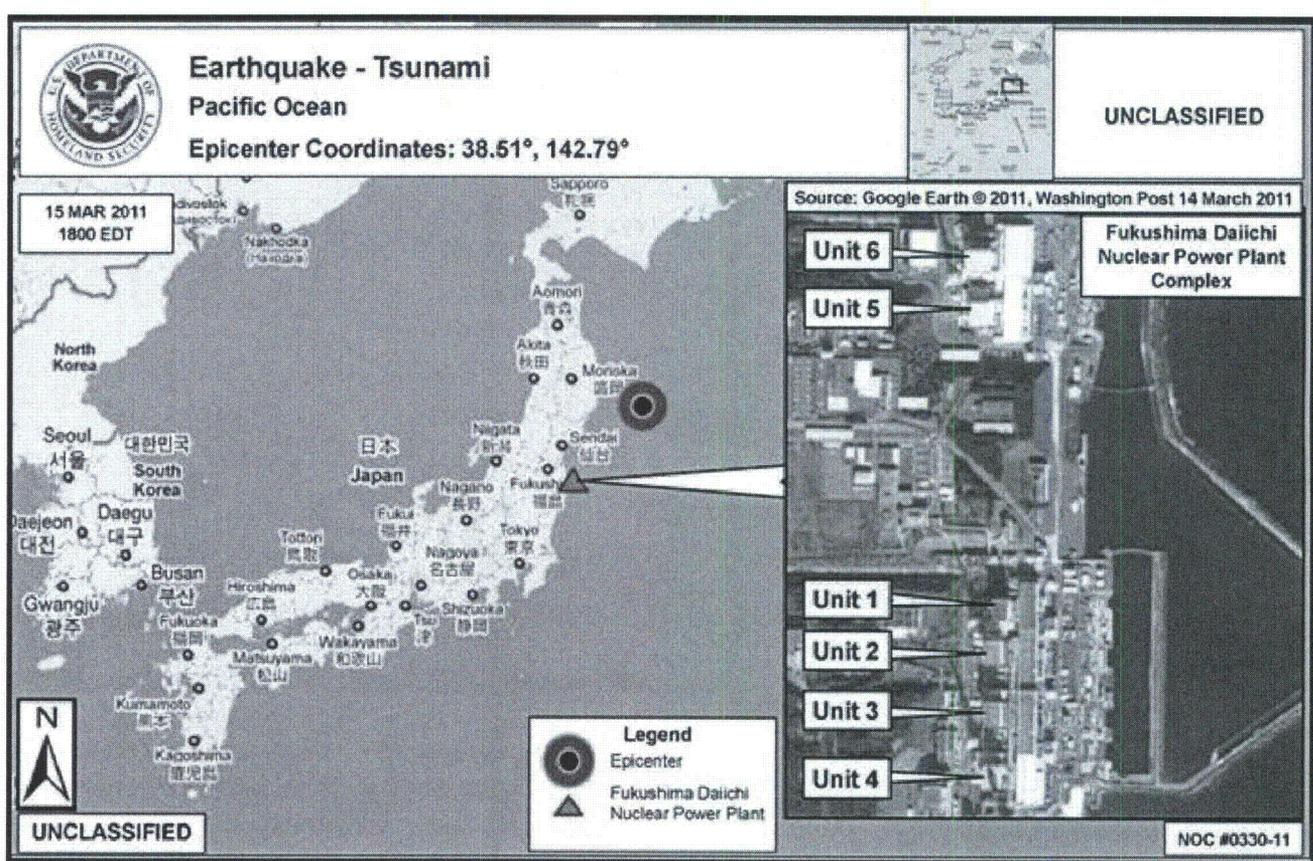
Current: The Government of Japan (GoJ) reports the current death toll is approximately 3,373 (+898); 7,558 (+4,440) are reported missing. The US Department of State reports from the Japanese Ministry of Economy, Trade, and Industry that Fukushima Daiichi Units 1 and 3 were regaining stability and estimated radiation levels have dropped to *small to negligible* levels outside a 12-mile radius from the reactors. The small generator fire reported in Unit 4 was extinguished late yesterday. Initial reports indicate Units 5 and 6 (not in operation at the time of the earthquake) are beginning to increase in temperature, indicating a possible problem with the cooling system. Seawater cooling operations are underway at Units 1,2, and 3. The US Nuclear Regulatory Commission (NRC) reports containment integrity was not assured at Unit 2; however, containment remained intact as of 1200 EDT today. The US Coast Guard reports no impacts to Pacific Area assets. A Federal Emergency Management Agency, East Regional Incident Management Assistance

Team has been activated to assist the US Environmental Protection Agency in deploying radiation monitors to Alaska, Hawaii, and Guam.

Future: The US NRC has two experts in Japan and dispatched nine additional experts which are expected to arrive 16 Mar. The Department of Energy (DOE) is assessing the radioactive plume threat to Guam, Hawaii, and the US West Coast. The 31st Marine Expeditionary Unit is due to arrive in Sendai 0700 EDT, 17 Mar to coordinate debris removal at Sendai Airport. The Department of Homeland Security National Operations Center will continue to monitor this incident. The next scheduled update and Senior Leadership Brief report will be published at 0600 EDT, 16 Mar.

Other: Several US commercial air carriers resumed regular flights to and from Tokyo and flight paths are in accordance with Federal Aviation Administration area restrictions. DOE reports a 19-mile radius no-fly zone has been established around the Fukushima Daiichi Nuclear Power Plant.

Background: At approximately 0046 EST, 11 Mar, the US Geological Survey (USGS) reported an 8.9 magnitude earthquake off the eastern coast of Honshu, Japan resulting in a tsunami affecting the Pacific region. On 15 Mar, USGS upgraded the magnitude of the earthquake to 9.0.



**DHS Senior Leadership Brief:
Earthquake-Tsunami-Japan
1800 EDT 15 March 2011**

Updates in bold blue

Current Situation

- The U.S. Geological Survey (USGS) has upgraded the magnitude of the earthquake, off the northern coast of Japan from 8.9 to 9.0.
- **The U.S. Department of State (DOS) reports 3,373 fatalities; 7,558 missing; 1,990 injured; 220,000 people within the 12 mile radius of Fukushima Daiichi Nuclear Power Plant were preemptively evacuated.**
- The Nuclear Regulatory Commission (NRC) reports that no harmful levels of radiation are currently forecast to reach the U.S. **DOE is assessing the radioactive plume threat to Guam, Hawaii and the U.S. West Coast. DOE plume model and projections have been updated to include changing wind patterns. The current model is based on collaboration among DOE, NRC, and NOAA.**

Government of Japan (GoJ)

- **Several U.S. commercial air carriers resumed regular flights to and from Tokyo and flight paths are in accordance with Federal Aviation Administration (FAA) area restrictions.**
- **Air China has cancelled flights from Beijing and Shanghai to Tokyo. Lufthansa has announced that it would divert Tokyo-bound flights to Nagoya or Osaka due to radiation concerns.**
- **Japanese Ministry of Defense (MoD) deployed 60,000 personnel, 96 helicopters, seven planes, and 58 naval vessels to conduct urban search and rescue (USAR) activities.**
- **GoJ requested U.S. military assistance in cleaning up the Sendai airport.**

Nuclear Reactors

- **DOS requested best case/worst case calculations from NRC to determine if an evacuation of U.S. Citizens from Japan would be prudent. NRC reports that failure to add water to the core is a hypothetical worst case scenario that will result in containment failure and radioactive release into the environment. There is no mention of evacuation in the report.**
- **DNDO has compiled an assessment of the worst case scenario based on current modeling. That assessment will be provided separately to the Secretary and senior leadership.**
- **The Japanese Economic, Trade, and Industry (METI) Minister stated Fukushima Daiichi Units 1 and 3 are regaining stability. The NRC reported that containment integrity was not assured at Fukushima Daiichi Unit 2; however, containment remained intact as of 1200 EDT. The fire in Unit 4 was a small generator fire, which was extinguished late on 14 March. Current information indicates that the structures that contain the reactor vessels remain intact. Units 5 and 6 were shutdown and cooled at the time of the earthquake. DOS is reporting that Units 5 and 6 are beginning to heat up, indicating a problem with the cooling system.**
 - Unit 1 is shutdown. The core is damaged and partially uncovered. Seawater injections continue and there is stable core cooling.
 - Unit 2 is shutdown. The core is damaged and not stable. Seawater injections continue. Radiation levels are uncertain at this time.
 - Unit 3 is shutdown. The core is damaged and partially uncovered. Seawater injections continue and there is stable core cooling.
- **A 19 mile radius no-fly zone has been established around the Fukushima Daiichi Nuclear Power Plant.**

- FEMA reports Fukushima 2 and Onagawa Nuclear Power Plants remain stable.

New Requests for U.S. Assistance from GoJ

- GoJ has requested a supply of potassium iodine tablets from the U.S. Government.

International Support

- 105 countries and 11 international organizations are offering aid to Japan.

DHS Support

U.S. Customs and Border Protection (CBP)

- The CBP Attaché is expected to arrive in Japan on 16 March. The Deputy Attaché is working closely with Japanese customs and immigration officials to expedite the entry of U.S. humanitarian aid through Japanese ports of entry.
- Due to communications issues, CBP Container Security Initiative (CSI) ports in Japan are not operational; National Targeting Center – Cargo (NTC-C) will handle targeting operations.

Federal Emergency Management Agency (FEMA)

- FEMA National Incident Management Assistance Team-East will support EPA in getting radiation monitors to FEMA Regions IV and X. If any radiation is detected the results will be conveyed to the public in easy to understand terms.

Transportation Security Administration (TSA)

- TSA does not screen passengers or checked baggage areas for radiation in the U.S. and does not have the technology or training to do so. Foreign civil aviation authorities and carriers are not required to screen for radiation of inbound U.S. flights.

U.S. Coast Guard (USCG)

- No impacts are reported to the Pacific Area assets.

National Protection and Programs Directorate (NPPD) Office of Infrastructure Protection (IP) National Infrastructure Coordinating Center (NICC)

- NPPD reports DHS OneNet is experiencing degradation of service in various locations in Japan.
- NICC reports evaluations of impacts to undersea cables and cable landings are ongoing.

Interagency Domestic Actions

- All departments and agencies should be prepared to describe their preparedness capabilities and response plans for a similar radioactive release in the U.S.

National Security Staff (NSS)

- During the 15 March Deputies SVTC, the White House directed radiation plume models from DOE, NRC, and NOAA be shared across the government.

Department of Defense (DoD)

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

(b)(5)

- GoJ is using two U.S. Air Bases at Misawa and Yokota as logistical staging areas.

Department of Energy (DOE)

- DOE teams have deployed with their own dosimeter readers, which allow for real-time awareness of absorbed doses of radiation. Field operations will be determined by team leads based on local situation.
- Two DOE Radiological Assistance Program (RAP) Teams and Ground Consequence Management Response (GCMR) Team are en route to Yokota Air Base, Japan. The RAP teams will conduct Aerial Measuring System (AMS) flyovers and the GCMR team will assess ground contamination. **AMS was scheduled to arrive 1330 EDT 15 March with 32-personnel including five 2-man teams capable of collecting detailed ground data. The GoJ accepted DOE's RAP team assistance.**

Health and Human Services (HHS)

- HHS will coordinate with FEMA to develop a public communications plan on potential radiological health impacts on the west coast, Hawaii, Guam, and U.S. territories.
- HHS is working with USDA and NOAA to develop a food safety communications plan to include their capabilities to monitor imports and clear imports that may have been exposed to radiation.

Department of State (DOS)

- DOS has implemented a policy that all U.S. citizens on official travel to Japan will go through screening for radiation before departure for return to the U.S.

National Oceanic and Atmospheric Administration (NOAA)

- As of 0800 EDT 15 March, NOAA reports winds have returned to an easterly direction at 15-25 mph and will continue so until Sunday.

Nuclear Regulatory Commission (NRC)

- Two senior NRC experts supporting USAID response efforts in Japan are engaged with the US Ambassador's staff; nine additional experts are expected to arrive in Tokyo on 16 March.

(b)(6)

Senior Watch Officer

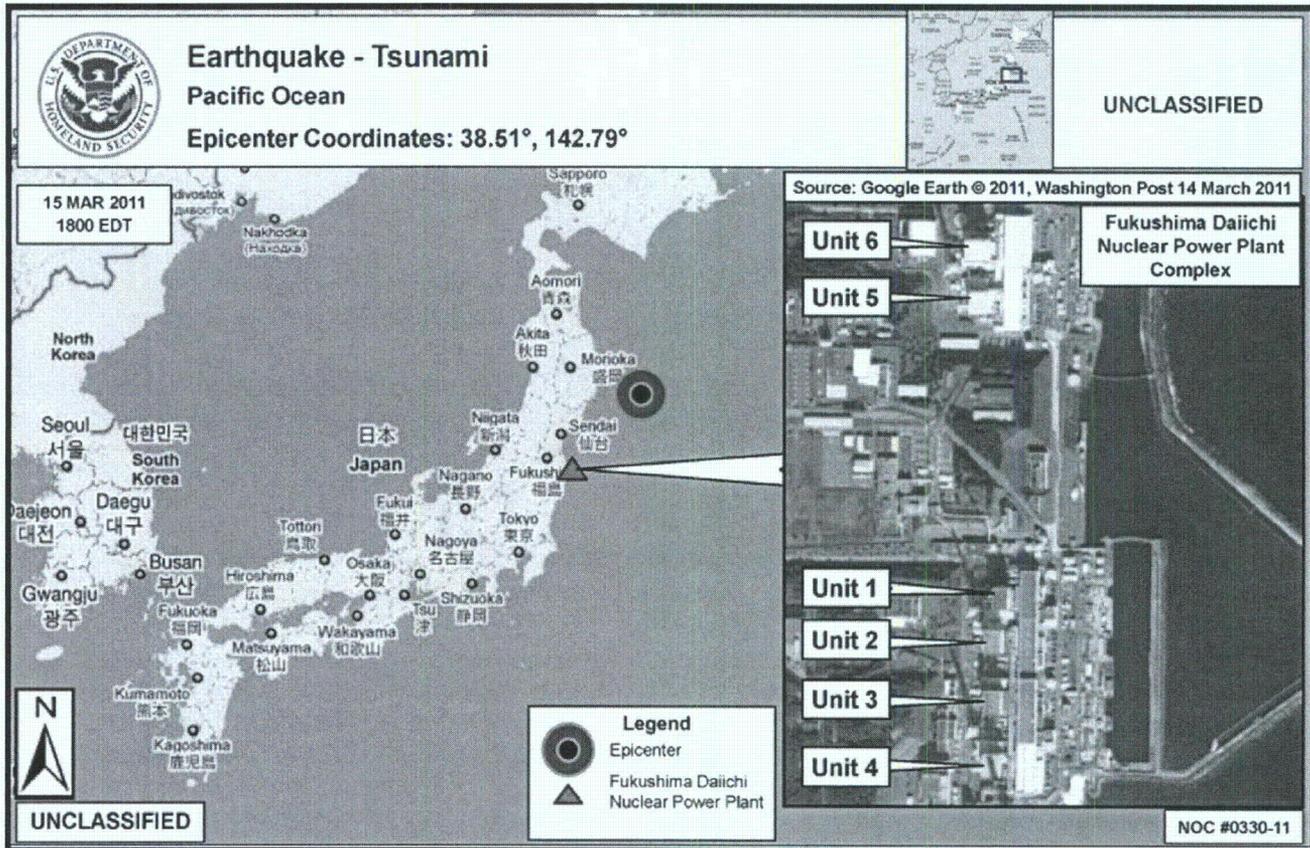
**National Operations Center
U.S. Department of Homeland Security**

Unclassified:

Secure:

NOC Phase 1 - Awareness 0330-11 Update Report 16

Earthquake-Tsunami - Japan



Current: The Government of Japan (GoJ) reports the current death toll is approximately 3,373 (+898); 7,558 (+4,440) are reported missing. The US Department of State reports from the Japanese Ministry of Economy, Trade, and Industry that Fukushima Daiichi Units 1 and 3 were regaining stability and estimated radiation levels have dropped to *small to negligible* levels outside a 12-mile radius from the reactors. The small generator fire reported in Unit 4 was extinguished late yesterday. Initial reports indicate Units 5 and 6 (not in operation at the time of the earthquake) are beginning to increase in temperature, indicating a possible problem with the cooling system. Seawater cooling operations are underway at Units 1,2, and 3. The US Nuclear Regulatory Commission (NRC) reports containment integrity was not assured at Unit 2; however, containment remained intact as of 1200 EDT today. The US Coast Guard reports no impacts to Pacific Area assets. A Federal Emergency Management Agency, East Regional Incident Management Assistance Team has been activated to assist the US Environmental Protection Agency in deploying radiation monitors to Alaska, Hawaii, and Guam.

Future: The US NRC has two experts in Japan and dispatched nine additional experts which are expected to arrive 16 Mar. The Department of Energy (DOE) is assessing the radioactive plume threat to Guam, Hawaii, and the US West Coast. The 31st Marine Expeditionary Unit is due to arrive in Sendai 0700 EDT, 17 Mar to coordinate debris removal at Sendai Airport. The Department of Homeland Security National Operations Center will continue to monitor this incident. The next scheduled update and Senior Leadership Brief report will be published at 0600 EDT, 16 Mar.

Other: Several US commercial air carriers resumed regular flights to and from Tokyo and flight paths are in accordance with Federal Aviation Administration area restrictions. DOE reports a 19-mile radius no-fly zone has been established around the Fukushima Daiichi Nuclear Power Plant.

Background: At approximately 0046 EST, 11 Mar, the US Geological Survey (USGS) reported an 8.9 magnitude earthquake off the eastern coast of Honshu, Japan resulting in a tsunami affecting the Pacific region. On 15 Mar, USGS upgraded the magnitude of the earthquake to 9.0.

Time/Date of Report: 1800 EDT 15 Mar 11

Report prepared by: DHS – National Operations Center

**DHS Senior Leadership Brief:
Earthquake-Tsunami-Japan
1800 EDT 15 March 2011**

Updates in bold blue

Current Situation

- The U.S. Geological Survey (USGS) has upgraded the magnitude of the earthquake, off the northern coast of Japan from 8.9 to 9.0.
- The U.S. Department of State (DOS) reports 3,373 fatalities; 7,558 missing; 1,990 injured; 220,000 people within the 12 mile radius of Fukushima Daiichi Nuclear Power Plant were preemptively evacuated.
- The Nuclear Regulatory Commission (NRC) reports that no harmful levels of radiation are currently forecast to reach the U.S. **DOE is assessing the radioactive plume threat to Guam, Hawaii and the U.S. West Coast. DOE plume model and projections have been updated to include changing wind patterns. The current model is based on collaboration among DOE, NRC, and NOAA.**

Government of Japan (GoJ)

- Several U.S. commercial air carriers resumed regular flights to and from Tokyo and flight paths are in accordance with Federal Aviation Administration (FAA) area restrictions.
- Air China has cancelled flights from Beijing and Shanghai to Tokyo. Lufthansa has announced that it would divert Tokyo-bound flights to Nagoya or Osaka due to radiation concerns.
- Japanese Ministry of Defense (MoD) deployed 60,000 personnel, 96 helicopters, seven planes, and 58 naval vessels to conduct urban search and rescue (USAR) activities.
- GoJ requested U.S. military assistance in cleaning up the Sendai airport.

Nuclear Reactors

- DOS requested best case/worst case calculations from NRC to determine if an evacuation of U.S. Citizens from Japan would be prudent. NRC reports that failure to add water to the core is a hypothetical worst case scenario that will result in containment failure and radioactive release into the environment. There is no mention of evacuation in the report.
- DNDO has compiled an assessment of the worst case scenario based on current modeling. That assessment will be provided separately to the Secretary and senior leadership.

- The Japanese Economic, Trade, and Industry (METI) Minister stated Fukushima Daiichi Units 1 and 3 are regaining stability. The NRC reported that containment integrity was not assured at Fukushima Daiichi Unit 2; however, containment remained intact as of 1200 EDT. The fire in Unit 4 was a small generator fire, which was extinguished late on 14 March. Current information indicates that the structures that contain the reactor vessels remain intact. Units 5 and 6 were shutdown and cooled at the time of the earthquake. DOS is reporting that Units 5 and 6 are beginning to heat up, indicating a problem with the cooling system.
 - Unit 1 is shutdown. The core is damaged and partially uncovered. Seawater injections continue and there is stable core cooling.
 - Unit 2 is shutdown. The core is damaged and not stable. Seawater injections continue. Radiation levels are uncertain at this time.
 - Unit 3 is shutdown. The core is damaged and partially uncovered. Seawater injections continue and there is stable core cooling.
- A 19 mile radius no-fly zone has been established around the Fukushima Daiichi Nuclear Power Plant.
- FEMA reports Fukushima 2 and Onagawa Nuclear Power Plants remain stable.

New Requests for U.S. Assistance from GoJ

- GoJ has requested a supply of potassium iodine tablets from the U.S. Government.

International Support

- 105 countries and 11 international organizations are offering aid to Japan.

DHS Support

U.S. Customs and Border Protection (CBP)

- The CBP Attaché is expected to arrive in Japan on 16 March. The Deputy Attaché is working closely with Japanese customs and immigration officials to expedite the entry of U.S. humanitarian aid through Japanese ports of entry.
- Due to communications issues, CBP Container Security Initiative (CSI) ports in Japan are not operational; National Targeting Center – Cargo (NTC-C) will handle targeting operations.

Federal Emergency Management Agency (FEMA)

- FEMA National Incident Management Assistance Team-East will support EPA in getting radiation monitors to FEMA Regions IV and X. If any radiation is detected the results will be conveyed to the public in easy to understand terms.

Transportation Security Administration (TSA)

- TSA does not screen passengers or checked baggage areas for radiation in the U.S. and does not have the technology or training to do so. Foreign civil aviation authorities and carriers are not required to screen for radiation of inbound U.S. flights.

U.S. Coast Guard (USCG)

- No impacts are reported to the Pacific Area assets.

National Protection and Programs Directorate (NPPD) Office of Infrastructure Protection (IP) National Infrastructure Coordinating Center (NICC)

- NPPD reports DHS OneNet is experiencing degradation of service in various locations in Japan.
- NICC reports evaluations of impacts to undersea cables and cable landings are ongoing.

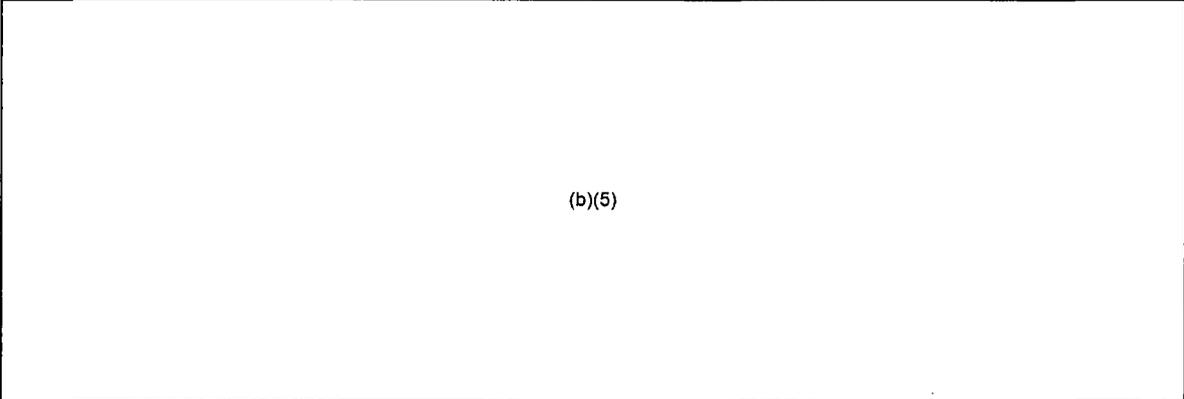
Interagency Domestic Actions

- All departments and agencies should be prepared to describe their preparedness capabilities and response plans for a similar radioactive release in the U.S.

National Security Staff (NSS)

- During the 15 March Deputies SVTC, the White House directed radiation plume models from DOE, NRC, and NOAA be shared across the government.

Department of Defense (DoD)

- 

- GoJ is using two U.S. Air Bases at Misawa and Yokota as logistical staging areas.

Department of Energy (DOE)

- DOE teams have deployed with their own dosimeter readers, which allow for real-time awareness of absorbed doses of radiation. Field operations will be determined by team leads based on local situation.

- Two DOE Radiological Assistance Program (RAP) Teams and Ground Consequence Management Response (GCMR) Team are en route to Yokota Air Base, Japan. The RAP teams will conduct Aerial Measuring System (AMS) flyovers and the GCMR team will assess ground contamination. **AMS was scheduled to arrive 1330 EDT 15 March with 32-personnel including five 2-man teams capable of collecting detailed ground data. The GoJ accepted DOE's RAP team assistance.**

Health and Human Services (HHS)

- HHS will coordinate with FEMA to develop a public communications plan on potential radiological health impacts on the west coast, Hawaii, Guam, and U.S. territories.
- HHS is working with USDA and NOAA to develop a food safety communications plan to include their capabilities to monitor imports and clear imports that may have been exposed to radiation:

Department of State (DOS)

- DOS has implemented a policy that all U.S. citizens on official travel to Japan will go through screening for radiation before departure for return to the U.S.

National Oceanic and Atmospheric Administration (NOAA)

- **As of 0800 EDT 15 March, NOAA reports winds have returned to an easterly direction at 15-25 mph and will continue so until Sunday.**

Nuclear Regulatory Commission (NRC)

- **Two senior NRC experts supporting USAID response efforts in Japan are engaged with the US Ambassador's staff; nine additional experts are expected to arrive in Tokyo on 16 March.**

From: LIA07 Hoc
Sent: Tuesday, March 15, 2011 1:42 PM
To: LIA09 Hoc
Subject: Emailing:
FAX_Status_Update_Fukushima_Daiichi_Fukushima_Daini_Onagawa_NPP_revised1.pdf
Attachments: FAX_Status_Update_Fukushima_Daiichi_Fukushima_Daini_Onagawa_NPP_revised1.pdf

The message is ready to be sent with the following file or link attachments:

FAX_Status_Update_Fukushima_Daiichi_Fukushima_Daini_Onagawa_NPP_revised1.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

From: Marshall, Jane
Sent: Tuesday, March 15, 2011 1:39 PM
To: 'john.zabko@dhs.gov'
Subject: Fw: Emailing: RST Plant Status 3.15.11_0730am.pdf
Attachments: RST Plant Status 3.15.11_0730am.pdf

This is most current at the moment. Working on an update- will try to send that as well when it's baked.
Sent from my NRC Blackberry

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

From: LIA09 Hoc
To: Marshall, Jane
Sent: Tue Mar 15 13:31:16 2011
Subject: Emailing: RST Plant Status 3.15.11_0730am.pdf

7:30am 3/15/2011 Status Update

From: LIA07 Hoc
Sent: Tuesday, March 15, 2011 5:51 AM
To: LIA09 Hoc
Subject: Status Update 3-15-11 0600EDT
Attachments: USNRC Earthquake-Tsunami Update.031511.0600EDT.docx

From: LIA07 Hoc
Sent: Monday, March 14, 2011 10:04 PM
To: LIA09 Hoc
Subject: please pdf and print for books
Attachments: USNRC Earthquake-Tsunami Update.031411.2200EDT.docx

From: LIA09 Hoc
Sent: Monday, March 14, 2011 4:23 PM
To: LIA07 Hoc
Subject: FW: HHS questions
Attachments: Doc1.docx

From: Hoc, PMT12
Sent: Monday, March 14, 2011 4:16 PM
To: LIA03 Hoc; LIA09 Hoc
Subject: HHS questions

We were asked to answer these questions from HHS by 4:30 today. OPA reviewed them and thinks they are ok. Before sending them back to HHS do you want to review? Please advise.

(b)(5)

From: LIA09 Hoc
Sent: Monday, March 14, 2011 4:22 PM
To: LIA07 Hoc
Subject: FW: Updated talking points PMT/RST

From: Hoc, PMT12
Sent: Monday, March 14, 2011 3:21 PM
To: LIA09 Hoc
Subject: Updated talking points PMT/RST

USNRC Emergency Operations Center Status Update

The NRC is evaluating the current plant status information, based on the information provided to date some fuel damage has occurred. We are monitoring the restoration of cooling water to prevent additional fuel damage. Current information indicates that the structure that contains the reactor vessel remains intact.

Japanese authorities have implemented protective measures for the population surrounding the facilities. The protective measures include evacuation of persons residing within 20 km of the reactor site, shelter in place for those who cannot evacuate, and issuance of potassium iodide. Based on the information available and preliminary analysis, these protective measures are consistent with US standards.

From: LIA07 Hoc
Sent: Monday, March 14, 2011 1:34 PM
To: LIA09 Hoc
Subject: FW:
Attachments: update - reactors.docx

From: Marshall, Jane
Sent: Monday, March 14, 2011 1:31 PM
To: Marshall, Jane; LIA07 Hoc; ET02 Hoc
Subject:

Summary of 14 March meeting with Japanese

Unit Summary

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."

General Observations

Japanese extremely concerned about stability and reliability of current sea water injection method. When asked, they described their request for USG assistance with water injection as a means to improve reliability.

They asked if we had any other suggestions for water injection. The possibility of airlifting pumps to the site was mentioned and when asked, they estimated the distance from the sea to the pump location as approximately 200 m and the distance from the pump to RCS tie in as approximately 250-300 m. More specific information was promised and my contact information was passed to them. I asked for specific design information regarding the RCS tie to ensure that any USG equipment brought to the site will be able to connect into the RCS.

They indicated that debris from the hydrogen burns was part of the reason that they were having difficulty keeping sea water injection flowing.

Contingency Planning

For contingency planning, the GOJ asked for USG advice and assistance regarding: .

1. Post accident DECON; and
2. Post core melt long term site stability planning.

From: Ralston, Michelle <Michelle.Ralston@dhs.gov>
Sent: Monday, March 14, 2011 2:01 PM
To: LIA11 Hoc
Subject: RE: INFO: Update on Japan and Talking Points

I see, thanks.

Respectfully,

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

From: prvs=0470316c4=LIA11.Hoc@nrc.gov [mailto:prvs=0470316c4=LIA11.Hoc@nrc.gov] **On Behalf Of** LIA11 Hoc
Sent: Monday, March 14, 2011 2:01 PM
To: Ralston, Michelle
Subject: RE: INFO: Update on Japan and Talking Points

It's the same one, it was dated 0600, but was sent at 0800.

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]
Sent: Monday, March 14, 2011 1:57 PM
To: LIA11 Hoc
Subject: RE: INFO: Update on Japan and Talking Points

Would you kindly re-send the 0800? The last one I received was at 0600.

Respectfully,

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

From: prvs=0470316c4=LIA11.Hoc@nrc.gov [mailto:prvs=0470316c4=LIA11.Hoc@nrc.gov] **On Behalf Of** LIA11 Hoc
Sent: Monday, March 14, 2011 1:39 PM
To: Ralston, Michelle; Anderson, Joseph
Subject: RE: INFO: Update on Japan and Talking Points

The most current SITREP was from 0800 EDT.

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]
Sent: Monday, March 14, 2011 1:35 PM
To: Anderson, Joseph
Cc: LIA11 Hoc
Subject: RE: INFO: Update on Japan and Talking Points

Thanks.

Respectfully,

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

From: prvs=047c3216c=Joseph.Anderson@nrc.gov [mailto:prvs=047c3216c=Joseph.Anderson@nrc.gov] **On Behalf Of** Anderson, Joseph
Sent: Monday, March 14, 2011 1:35 PM
To: Ralston, Michelle
Cc: LIA11 Hoc
Subject: RE: INFO: Update on Japan and Talking Points

I don't believe that they have issued any new SITREP, but I will check. I would go to IAEA website for most current information on Japanese reactor status.

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]
Sent: Monday, March 14, 2011 1:19 PM
To: Anderson, Joseph
Subject: RE: INFO: Update on Japan and Talking Points

Sure. I have not received a Sit Rep from the NRC since this morning. Am I off the list?

Respectfully,

Michelle Ralston, MS, PMI

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

From: prvs=047c3216c=Joseph.Anderson@nrc.gov [mailto:prvs=047c3216c=Joseph.Anderson@nrc.gov] **On Behalf Of**
Anderson, Joseph
Sent: Monday, March 14, 2011 1:13 PM
To: Ralston, Michelle
Subject: RE: INFO: Update on Japan and Talking Points

Thanks Michelle!

From: Ralston, Michelle [mailto:Michelle.Ralston@dhs.gov]
Sent: Monday, March 14, 2011 1:08 PM
To: Colman, Steve; King, William; Burnside, Conrad; Thomson, Rebecca; Webb, Bill; Hammons, Darrell; Hammond, Lisa; Fiore, Craig; Feighert, Dan; McCabe, Ron
Cc: Mroz (Sahm), Sara; Wright, Lisa (Gibney); Anderson, Joseph; Barnes, Joshua; Eberst, William; Seward, Andrew; Ward, Paul; Howe, Michael; Hower, Andrew; Hamilton, Lisa; Ahlgrim, Bridget; Horton, Douglas; DeFelice, Anthony; Wierman, Kenneth; DeGilio, Lou
Subject: FW: INFO: Update on Japan and Talking Points

Good afternoon,

Please see attached. Thanks .

Respectfully,

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

From: Greten, Timothy
Sent: Monday, March 14, 2011 1:03 PM
To: Quinn, Vanessa; Sherwood, Harry; Ralston, Michelle; Horwitz, Steve
Subject: FW: INFO: Update on Japan and Talking Points

Please forward this—the latest

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

From: Kirin, Alexandra
Sent: Monday, March 14, 2011 12:06 PM
To: Kish, James; Greten, Timothy
Subject: FW: INFO: Update on Japan and Talking Points

Gentlemen –

Just wanted to share with you the release issued by the White House yesterday and the final set of talking points that we have shared with our regional External Affairs staff. Thanks so much for all your help over the weekend.

Thanks,
Ali

Alexandra Kirin
Office of External Affairs
Federal Emergency Management Agency
500 C Street S.W. Washington, DC 20472
202-646-4526 (Direct)
202-646-3272 (News Desk)

March 14, 2011

Talking Points

For Internal Use Only

RESPONSE TO RADIOLOGICAL EMERGENCIES INVOLVING NUCLEAR POWER PLANTS IN THE U.S.

- **In the event of an incident or explosion occurring at a nuclear power plant in the U.S., the Department of Homeland Security would bring to bear the expertise and authorities of agencies across the Federal government.** These roles are outlined in the National Response Framework, a guide to how the nation conducts all-hazards response – from the smallest incident to the largest catastrophe. The NRF makes clear the roles and responsibilities of federal agencies under all domestic incidents, so that all other members of the nation’s emergency management team understand how the federal response would be coordinated. It applies to both Stafford Act and non-Stafford Act events. For more on the NRF, click here: http://www.fema.gov/pdf/emergency/nrf/NRF_FAQ.pdf.
- **Under this scenario, several agencies would have lead roles in technical and operational needs. For instance:**
 - The Nuclear Regulatory Commission (NRC) would coordinate incidents at, or caused by, a facility that is licensed by the NRC or under agreement with the NRC, such as commercial nuclear power plants.
 - The Environmental Protection Agency EPA would coordinate the Federal environmental response to incidents involving the release of nuclear/radioactive materials that occur in the inland zone and in certain coastal zones.
- **FEMA would stand ready to support the federal response efforts in any way needed, as permitted under our authorities.** We would leverage all of the resources our agency brings to bear, including our expertise in disaster response and recovery coordination, help with staffing, and other needs, in support of the federal response and the impacted states and local communities.
- When disasters strike, the first responders are local emergency and public works personnel, volunteers, humanitarian organizations, and numerous private interest groups who provide emergency assistance required to protect the public’s health and safety and to meet immediate human needs.
- While the NRC has a key role in working with many of the nation’s nuclear power plants meet regulatory requirements for emergency planning and preparedness for onsite nuclear power plant activities, FEMA has a key role in working with states and local communities with

emergency planning and preparedness for offsite radiological activities – meaning for the residents and communities beyond the physical boundaries of the power plant.

- FEMA established the Radiological Emergency Preparedness Program to provide state and local communities the support and resources they need to ensure the health and safety of citizens living around commercial nuclear power plants would be adequately protected in the event of a nuclear power plant accident; and inform and educate the public about radiological emergency preparedness.
- As part of this effort, FEMA works closely with state, local and tribal communities to ensure they have adequate emergency plans in place to protect public health and safety, ensure that these plans can be used by emergency response personnel and include sufficient resources and equipment during an emergency, and provided emergency preparedness training to state and local officials as needed. Under this program, FEMA also evaluates the alert and notification system for nuclear power plants, including outdoor warning sirens and back-up systems.
- FEMA cooperates closely with the NRC in these efforts and provides its findings from these evaluations to the NRC.
- As we do with all hazards, FEMA is focused on making sure the public is aware of the various risks in their communities and providing preparedness and safety information about the potential impact of a nuclear or radiological threat. Families that live near or around nuclear power plants should become informed about simple steps they can take to protect themselves in the event of a nuclear explosion by contacting their local Office of Emergency Management, referring to information in the local telephone directory and publications received about emergency preparedness. Individuals and families can also visit <http://www.ready.gov/america/beinformed/nuclear.html>

###

From: LIA07 Hoc
Sent: Monday, March 14, 2011 1:02 PM
To: LIA09 Hoc
Subject: FW: Official: Rods likely melting in Japanese reactors (AP)

From: RMTFACTSU_ELNRC [mailto:RMTFACTSU_ELNRC@ofda.gov]
Sent: Monday, March 14, 2011 11:25 AM
To: LIA11 Hoc; LIA01 Hoc; LIA07 Hoc; LIA08 Hoc; Harrington, Holly; McIntyre, David; Marshall, Jane; Gott, William; Grant, Jeffery
Subject: FW: Official: Rods likely melting in Japanese reactors (AP)

FYI

From: OpsNewsTicker@state.gov [mailto:OpsNewsTicker@state.gov]
Sent: Monday, March 14, 2011 11:21 AM
Subject: Official: Rods likely melting in Japanese reactors (AP)

TOKYO (AP) - Japanese officials say the nuclear fuel rods appear to be melting inside all three of the most troubled nuclear reactors.

Chief Cabinet Secretary Yukio Edano said Monday: "Although we cannot directly check it, it's highly likely happening."

Some experts would consider that a partial meltdown of the reactor. Others, though, reserve that term for times when nuclear fuel melts through a reactor's innermost chamber but not through the outer containment shell.

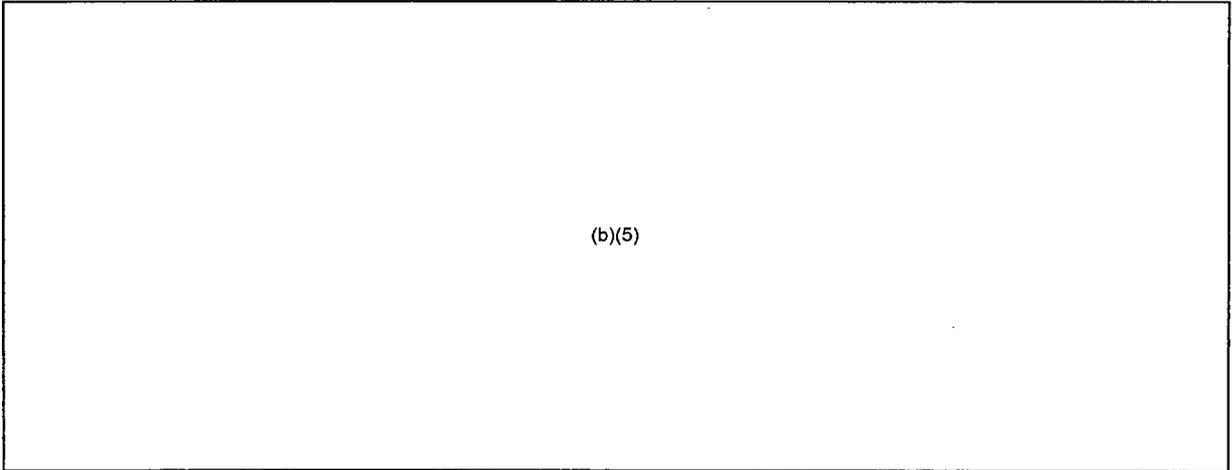
NewsTickers alert senior Department officials to breaking news. This item appears as it did in its original publication and does not contain analysis or commentary by Department sources.

From: LIA07 Hoc
Sent: Monday, March 14, 2011 12:49 PM
To: RMTPACTSU_ELNRC
Cc: LIA11 Hoc; LIA09 Hoc
Subject: NRC bullet submission for USAID Public Fact Sheet
Attachments: NRC Input to USAID Public Fact Sheet 1125 031411.docx

Please find attached the NRC bullets for the USAID Public Fact Sheet for 3/14/11. Please respond to this address if you have any questions.

Yen Chen
US Nuclear Regulatory Commission
LIA07.HOC@nrc.gov (Operations Center)

NRC Input to USAID Public Fact Sheet (Internal USG)



From: LIA07 Hoc
Sent: Monday, March 14, 2011 6:54 AM
To: RMTFACTSU_ELNRC
Cc: LIA11 Hoc; LIA09 Hoc; LIA07 Hoc
Subject: NRC bullet submission for USAID Administrator's Report
Attachments: NRC Input to USAID Administrators Report 0655 031411.docx

Please find attached the NRC bullets for the USAID Administrator's Report for 3/14/11. Please respond to this address if you have any questions.

-Jim

Jim Anderson
Office of Nuclear Security and Incident Response
US Nuclear Regulatory Commission
james.anderson@nrc.gov
LIA07.HOC@nrc.gov (Operations Center)

NRC Input to USAID Administrator's report (Internal USG)

(b)(5)

From: OST02 HOC
Sent: Monday, March 14, 2011 2:32 AM
To: LIA07 Hoc; LIA09 Hoc
Attachments: IAEA press release_7.pdf

Japan Earthquake Update (4 March 2011 07:00 CET)

Japan's Nuclear and Industrial Safety Agency (NISA) has provided the IAEA with further information about the hydrogen explosion that occurred today at the unit 3 reactor at the Fukushima Daiichi nuclear plant. A hydrogen explosion occurred at unit 3 on 14 March at 11:01AM local Japan time.

All personnel at the site are accounted for. Six people have been injured.

The reactor building exploded but the primary containment vessel was not damaged. The control room of unit 3 remains operational.

The IAEA continues to liaise with the Japanese authorities and is monitoring the situation as it evolves.

From: OST02 HOC
Sent: Monday, March 14, 2011 2:20 AM
To: LIA07 Hoc; LIA09 Hoc
Attachments: IAEA press release_2.pdf

Japan Earthquake Update (14 March 2011 05 5 CET)

Based on information provided by Japanese authorities, the IAEA can confirm the following information about the status of Units 1, 2, 3 and 4 at Fukushima Daini nuclear power plant.

All four units automatically shut down on March 11. All units have off-site power and water levels in all units are stable. Though preparations have been made to do so, there has been no venting to control pressure at any of the plant's units.

At unit 1, plant operators were able to restore a residual heat remover system, which is now being used to cool the reactor. Work is in progress to achieve a cold shutdown of the reactor.

Workers at units 2 and 4 are working to restore residual heat removal systems.

Unit 3 is in a safe, cold shutdown.

Radiation dose rate measurements observed at four locations around the plant's perimeter over a 16-hour period on 13 March were all normal.

Japan Earthquake Update (14 March 2011 04:00 CET)

Japan's Nuclear and Industrial Safety Agency (NISA) has informed the IAEA that there has been an explosion at the Unit 3 reactor at the Fukushima Daiichi nuclear plant.

The explosion occurred at 11:01AM local Japan time.

The IAEA is seeking further information on this development

Japan Earthquake Update 4 March 2011 01:30 CET

Based on information provided by Japanese authorities, the IAEA can confirm the following information about the status of Units 1, 2 and 3 at Fukushima Daiichi nuclear power plant.

Unit 1 is being powered by mobile power generators on site, and work continues to restore power to the plant. There is currently no power via off-site power supply or backup diesel generators being provided to the plant. Seawater and

boron are being injected into the reactor vessel to cool the reactor. Due to the explosion on 12 March, the containment building has been lost.

Unit 2 is being powered by mobile power generators on site, and work continues to restore power to the plant. There is currently neither off-site power supply nor backup diesel generators providing power to the plant. The reactor core is being cooled through reactor core isolation cooling, a procedure used to remove heat from the core. The current reactor water level is lower than normal but remains steady. The containment building is intact at Unit 2.

Unit 3 does not have off-site power supply nor backup diesel generators providing power to the plant. As the high pressure injection system and other attempts to cool the reactor core have failed, injection of water and boron into the reactor vessel has commenced. Water levels inside the reactor vessel increased steadily for a certain amount of time but readings indicating the water level inside the pressure vessel are no longer showing an increase. The reason behind this is unknown at this point in time. To relieve pressure, venting of the containment started on 13 March at 9:20AM local Japan time. Planning is underway to reduce the concentration of hydrogen inside the containment building. The containment building is intact at Unit 3.

The IAEA is seeking information about the status of spent fuel at the Daiichi plant.

Japan Earthquake Update (13 March 2011 21:45 CET)

The Japanese authorities have informed the IAEA that radioactivity levels at the site boundary of the Onagawa nuclear power plant have returned down to normal background levels. The first (ie lowest) state of emergency was reported at the plant earlier on Sunday after an increased level of radioactivity was detected at the site boundary. Investigations at the site indicate that no emissions of radioactivity have occurred from any of the three units at Onagawa. The current assumption of the Japanese authorities is that the increased level may have been due to a release of radioactive material from the Fukushima Daiichi nuclear power plant.

The IAEA continues to liaise with the Japanese authorities and is monitoring the situation as it evolves.

1335 CET, 13 March 201

Japanese authorities have informed the IAEA's Incident and Emergency Centre (IEC) that venting of the containment of reactor Unit 3 of the Fukushima Daiichi nuclear power plant started at 9:20 AM local Japan time of 13 March through a controlled release of vapour. The operation is intended to lower pressure inside the reactor containment.

Subsequently, following the failure of the high pressure injection system and other attempts of cooling the plant, injection of water first and sea water afterwards started. The authorities have informed the IAEA that accumulation of hydrogen is possible.

Japanese authorities have also informed the IAEA that the first (i.e., lowest) state of emergency at the Onagawa nuclear power plant has been reported by Tohoku Electric Power Company. The authorities have informed the IAEA that the three reactor units at the Onagawa nuclear power plant are under control.

As defined in Article 10 of Japan's Act on Special Measures Concerning Nuclear Emergency Preparedness, the alert was declared as a consequence of radioactivity readings exceeding allowed levels in the area surrounding the plant. Japanese authorities are investigating the source of radiation. The IAEA has offered its "Good Offices" to Japan to support the nation's response to the 11 March earthquake and tsunami. One IAEA capability intended to help member states during crises is the Response and Assistance Network (RANET). The network consists of nations that can offer specialized assistance after a radiation incident or emergency. Such assistance is coordinated by the IAEA within the framework of the Assistance Convention.

The IAEA continues to liaise with the Japanese authorities and is monitoring the situation as it evolves.

From: LIA07 Hoc
Sent: Monday, March 14, 2011 2:05 AM
To: LIA09 Hoc
Subject: Latest from IAEA
Attachments: IAEA 031311-2145; IAEA-031311-1335; IAEA 031411-3; IAEA 0114-02; IAEA 031411-1

Attachment IAEA 0114-02(615369 bytes) cannot be converted to PDF format.

Attachment IAEA 031311-2145(615369 bytes) cannot be converted to PDF format.

Attachment IAEA 031411-1(615369 bytes) cannot be converted to PDF format.

Attachment IAEA 031411-3(615369 bytes) cannot be converted to PDF format.

Attachment IAEA-031311-1335(615369 bytes) cannot be converted to PDF format.

From: OST02 HOC
Sent: Sunday, March 13, 2011 5:43 AM
To: LIA09 Hoc
Attachments: press release.pdf

From: OST02 HOC
Sent: Sunday, March 13, 2011 4:15 AM
To: LIA09 Hoc
Subject: Emailing: IAEA press release.pdf
Attachments: IAEA press release.pdf

The message is ready to be sent with the following file or link attachments:

IAEA press release.pdf

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.



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Subject:

IAEA

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INCIDENT AND EMERGENCY CENTRE

Status of the Fukushima Daiichi nuclear power plant

The Incident and Emergency Centre (IEC) is continuing to monitor the status of the nuclear power plants in Japan following the earthquake. At 02:00 UTC on March 13, 2011 the IEC spoke to its counterparts in Japan the Nuclear and Industrial Safety Agency (NISA) who provided the following updated information about the three reactor units at the Fukushima Daiichi nuclear power plant:

Unit 1

The reactor is being maintained shutdown. There is currently no off-site electrical power supply nor diesel generators providing power to Unit 1. Work continues to restore power to the plant. Water level in the reactor is out of the measuring range, but at least 170 cm below the top of the core. There was an explosion outside of the containment (estimate 06:36 UTC, March 12) during which 4 people were injured. Containment is intact in Unit 1. The injection of seawater and boron into Unit 1 commenced at 11:20 UTC March 12 using a special piping configuration and is continuing.

Unit 2

The reactor is being maintained shutdown. There is currently no off-site power supply nor diesel generators providing power to Unit 2. Work continues to restore power to the plant. The reactor water level remains unchanged at approximately 355 cm above the top of the core. Cooling of the core is being maintained through reactor core isolation cooling. Containment is intact in Unit 2.

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The reactor is being maintained shutdown. There is currently no off-site power supply nor diesel generators providing power to Unit 3. The reactor water level has decreased to a level of 135 cm above the top of the core. Cooling of the core is being achieved through the high pressure coolant injection system. Containment is intact in Unit 3. Venting of the containment of Unit 3 started at 00:15 UTC, March 13. As of 00:25, March 13 borated water was being added into Unit 3.

Additional Information

Page 1 of 2

Protective countermeasures are being implemented with evacuations out to 20 km around Fukushima Daiichi. Additional countermeasures are being considered. Mobile monitoring has been routinely performed at the site boundary. A summary of results overtime is provided below.

Mobile Monitoring Results

Time and Date

06:29 UTC 12-Mar-2011

06:47 UTC 12-Mar-2011

10:44 UTC 12-Mar-2011

~LWF0003

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11 :26 UTC 12-Mar-2011

14:30 UTC 12-Mar-2011

18:08 UTC 12-Mar-2011

Dose Rate at Site Boundary

1015 micro Sv/h

141.8 micro Sv/h

64.2 micro Sv/h

59.1 micro Sv/h

47.9 micro Sv/h

40.0 micro Sv/h

The Japanese authorities classified the event in Unit 1 according to International Nuclear and Radiological Event Scale (INES) as a level 4.

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Emergency Response Manager 13-March-2011 04:00 UTC

IAEA Incident and Emergency Centre

Page 2 of 2

From: OST02 HOC
Sent: Sunday, March 13, 2011 4:13 AM
To: LIA09 Hoc
Subject: Scanned Press Release
Attachments: press release.pdf

News Release



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March 13, 2011 Nuclear and Industrial Safety Agency

Seismic Damage Information(the 18th Release)

(As of 04:30 March 13, 2011) -

__Nuclear and Industrial Safety Agency (NISA) confirmed the current situation of Higashidori and Onagawa NPSs, Tohoku Electric Power Co., Inc; Higashidori, Fukushima Dai-ichi, Fukushima Dai-ni and Kashiwazaki-Kariwa NPSs, Tokyo Electric Power Co., Inc. and electricity, gas, heat supply and complex as follows:



1. Summary of Damage: Earthquake at Sanriku OkD

(1)

(2)

Time of Occurrence: 14:46 (UTC 5:46) March 11, 2011, Friday

Epicenter:

Off-Coast of Sanriku (North Latitude: 38; 142.9), 10km deep, M8.8

East Longitude

(3) Seismic Intensity in Japanese Scale

<Area of Seismic Intensity Larger Than and Including 4>

7: Northern Miyagi Prefecture

6+: Northern and southern Ibaraki Prefecture

5+: Sanpachi-Kamikita Aomori Prefecture

5-: Chuetsu, Niigata Prefecture

<Municipality of Seismic Intensity Larger than and Including 4>

6+: Naraha Machi, Tomioka Machi, Ookuma-machi, and Futaba-machi, Fukushima Prefecture

6-: Ishinomaki-city and, Onagawa town (by Seismograph of NPP)of , Miyagi Prefecture and Tokaimura, Ibaraki Pref.

5-: Kariwa-village, Niigata Prefecture

4: Rokkasho-village, Higashidori-village, Aomori Prefecture, Kashiwazaki-city, Niigata Prefecture and Yokosuka-city, Kanagawa Prefecture

1: Tomari-village, Hokkaido

News Release



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2. The status of operation at Power Stations(Number of automatic shutdown(units): 10 (as of 11:00, March12)

a. Onagawa Nuclear Power Station (Onagawa-machi and Ishinomaki-shi, Miyagi Prefecture)

(1) The status of operation

Unit 1 (524MWe): automatic shutdown, cold shut down at 0:58, March 12 Unit 2 (825MWe): automatic shutdown

Unit 3 (825MWe): automatic shutdown, cold shut down at 1:17, March 12 (2) Readings of monitoring post

Variation in the monitoring post readings: No

Variation in the main stack monitor readings: No

(3) Report concerning other malfunction

It is confirmed Smoke in the first basement of the Turbine Building was confirmed the extinguished at 22:55 on March 11th.

b. Fukushima Dai-ichi Nuclear Power Station, Tokyo Electric Power

Co., Inc. (TEPCO)

(Okuma-machi and Futaba-machi, Futaba-gun, Fukushima Prefecture) (1) The status of operation

Unit 1 (460MWe): automatic shutdown

Unit 2 (784MWe): automatic shutdown

Unit 3 (784MWe): automatic shutdown

Unit 4(784MW): in periodic inspection outage

Unit 5(784MW): in periodic inspection outage

Unit 6(1, 100MW): in periodic inspection outage

(2) Readings at monitoring post

The measurement of radioactive materials in the environmental monitoring

area near the site boundary by a monitoring car confirmed the increase in the radioactivity compared to the radioactivity at 04:00, March 12 now.

MP4(Monitoring car data at the site boundary, North-west of Unit 1): 40microSv/h(03:08, March13)

MP6 (at the main gate) 0.07microSv/h ->3.1 micro Sv/h

(04:00, March12->02:50, March 13)

MP8 (at the observation platform) 0.07microSv/h ->4.5 micro Sv/h

(04:00, March 12->02:50, March 13)

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News Release



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(3) Wind direction/wind speed(as of 20:38, March 12)

Wind direction: West

Wind Speed: 0.5m/s

(4)Report concerning other malfunction

Article 10* of Act on Special Measures Concerning Nuclear Emergency Preparedness (Fukushima Dai -ichi)

(* A heightened alert condition)

Article 15** of Act on Special Measures Concerning Nuclear Emergency Preparedness (Fukushima Dai-ichi, Units 1 and 2)

(** Nuclear emergency situation)

Situation of power source to recover water injection function at the Station. 'Cable from electric power generating cars are under connecting work(as of 15:04, March 12)

. Pressure in the containment vessel has arisen. Steam release is undertaken in order to relieve pressure.(as of 14:40, March 12)
. A radiation level exceeding 500 microSv/h was monitored at the site boundary(15:29, March 12). A large motion occurred due to an earthquake with close epicentre and an large sound was issued near Unit1 and smoke was observed.

c. Fukushima-Daini Nuclear Power Station(TEPCO) (Naraha-machiff'omioka-machi. Futaba-gun, Fukushima pref.)

(1) The status of operation

Unit1U,100MW): automatic shutdown

Unit2U,100MW): automatic shutdown

Unit3(1,100MW): automatic shutdown, cold shut down at 12:15, March 12 Unit4U,100MW): automatic shutdown

(2) Readings at monitoring post etc.

Variation in the monitoring post readings: No

Variation in the main stack monitoring readings: No

(3) Direction and velocity of wind (As of 01:59, 13 March)

Direction: South-west

Velocity: 4.1m/s

(4) Report concerning other malfunction

No Report of fire, etc.

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News Release



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Article 10* of Act on Special Measures Concerning Nuclear Emergency Preparedness (Fukushima Dai-ni, Unit 1)

(* A heightened alert condition)

Article 15** of Act on Special Measures Concerning Nuclear Emergency Preparedness (Fukushima Dai-ni, Units 1,2 and 4)

(**Nuclear emergency situation)

3. Industrial Safety

o Electricity

* Tokyo Electric Power Co. (as of 04:30, March 13, 2011)

Scale of loss of electrical power: approx. 340 thousand houses Power loss area:

Ibaraki Pref.: Whole area (approx. 332 thousand houses), Tochigi Pref.: Mogi .cho, etc. (approx 7 thousand houses) Chiba Pref.: Katori"shi, etc. approx 3 hundred houses)

* Tohoku Electric Power Co. (as of 22:00, March 12, 2011)

Scale of loss of electrical power: approx.2150 thousand houses (under investigation)

Power loss area:

I ware Pref.: Whole area, (approx 502 thousand houses)

Akita Fret: Some area (approx 600 houses)

Miyagi Fret: whole area (approx 1,283 thousand houses)

Aomori Pref.: area (approx 250 thousand houses)

Yamagata Pret: Recovered (as of21:13, March 12)

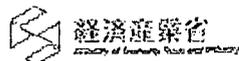
Fukushima Fret: Some parts of Naka-dori and Hama-dori (approx 114 thousand houses)

Niigata Pref.: Recovered(as of 15:51, March 12)

'Hokkaido Electric Power Co. (as of 14:00, March 12, 2011) Electrical outage be restored

*Chubu Electric Power Co. (as of 17: 11, March 12, 2011) Electrical outage be restoredinnaoan.(as of 17:11, March12)

News Release



oGeneral Gas (as of 21 :30, March 12)

The Japan Gas Association dispatched its six advance teams of thirty staff (five teams for Sendai and one team for Joban area) at 07:00, 12 March upon request from Sendai-shi.

Sendai-city municipal Gas, Kesenuma-city municipal Gas, Ishinomaki Gas have trouble contacting at 1:00 12 March. The Japan Gas Association confirmed that there are no supply disruption in the supply area of city gas in Hokkaido, Yamagata, and Akita prefecture.

* Tokyo Gas Co. (whole area of Hitachi-shi)

Hitachi branch: 30,007 houses are in supply disruption. There is no damage in equipment, however, equipment in inoperable due to loss of power. Walkdown unit of eight person departed at 18:45, March 11 and already arrived at 06:00, March 12. Recovery plan will be established by 12 afternoon. Time of recovery is not certain.

Eastern part of Joso: 453 houses were in supply disruption in Ushiku (supply restarted at 17:10, March 11)

471 houses were in supply disruption in Ushiku"shi Ushiku" cho(supply restarted at 22:36 March11)

77 houses are in supply disruption in Ryuugasaki(supply restarted at 16:20, March 11)

40 houses are in supply disruption in Nishi" ku, Yokohama"shi(supply restarted at 17:29, March 11)

Gas leaked from a Nozzle of an LNG tank at Sodegaura but no ignition <restored on 02:30, March 12)

*Gas Bureau of Sendai-shi: whole supply disruption (approx.360 thousand houses)

*Shiogama Gas Co.: approx.12,382 houses are in supply disruption. Shiogama"shi, Tagashiro"shi, Nanahama-shi and Rihu"syo are out of service due to no supply from Gas Bureau of Sendai

*Hachinohe Gas <several part of Hachinohe"shi): approx.1,300 houses are in supply disruption.

*Kamaishi Gas Co. : approx.10,000 houses are in supply disruption. First

News Release



floor of this Gas facility sank.

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*Hatano Gas Co.: Approx. 380 houses are in supply disruption. Restoration will be expected 13th of March.

*Keiyo Gas Co.: Leakage occurred at 5 locations of middle pressure conduit Leakage occurred at many parts of Low pressure conduits 5,445 houses in Urayasu"shi are in supply disruption.

Supply to Yachiyo Station stopped.

*Kujukuri choei Gas: Approx 258 houses are in supply disruption.

* Atsugi Gas Co: leakage occurred at 1 location of middle pressure conduit. *Fukushima Gas Co.: (A part of Fukushima .shi) About 2,726 houses are in supply disruption

*Tohoku Gas (part ofShirakawa"shi): 300 houses are in supply disruption *Joban kyodo Gas(Iwaki.shi): 14,000 houses (whole customer) are in

supply disruption

*Tobu Gas Fukushima"shisya: 7,500 houses are in supply disruption (Koriyama"shi, Iwaki"shi) leakage occurred at 2 locations of middle pressure conduit, leakage occurred at 54 locations of low pressure conduits and another leakage occurred on 85 locations. 39 houses in supply disruption.

*Tobu Gas (a part of Tsuchiura " shi) 7,500 houses in supply disruption
(a part of Mito.shi) 330 houses in supply disruption

*Joban Toshi Gas (Mito-shi) 60 houses in supply disruption

*Tosai Gas<Kasukabe"shi) Gas leakage occurred from conduit. 150 houses in apartment are in supply disruption. Supply restarted in the afternoon 12 March.

*Odawara Gas(Odawara-shi)

leakage occurred at 1 locations of low pressure branch conduit and 3 locations of ex"core inner conduit and have restored at 21:30 11 March. Other areas are under investigation.

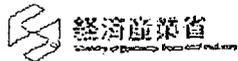
oCommunity Gas (as of 15:50, March 12)

Severe damage has not been reported to Japan Community Gas Association so far. No information is available about the damage in North-part of Ibaraki prefecture.

*Tokyo Gas Energy (North part of Ibaraki) Factory stopped supply to 943

6

News Release



houses in Nakago"New Town due to the leakage from pipe

*Sato Gas (based in Iwatsuki-ku, Saitama City) Iwatsuki-housing complex: Gas leakage occurred from conduit. 451 sites are in supply disruption.

*Syutoken Gas (based in Sakura-City) Chitose-housing complex:1,320 houses are in supply disruption

*Kashima Marui Gas (Kamisu"shi):Gas conduit was damaged. 527 houses are in supply disruption. Time of recovery is not certain.

*Nagashima Central Gas (Katori.sm) Tamatsukuri-housing complex, 222 houses are in supply disruption due to short circuit now under recovery works.

*Taihei Sangyo (Takahagi-sm) Hagigaoka-housing complex 112 houses are in supply disruption due to short circuit. Recovery has completed at 21:00 11 March. (Takahagi-sm) Ishidaki-housing complex 648 houses and (Hitachi .sm) Hitachi- Densen Akasaka. housing complex 222 houses are in supply disruption. Under recovery works.

*Taiyo Nissan Energy Kanto Kajima Branch: (Kamisu-shi) mitsubishi Chemicals Yatabe Complex: 90 houses are in supply disruption due to activation. Investigation is underway for possible gas leakage on the main pipe.

*Nihon Gas (Yaita-shv Narita Koufuku high residential complex: Production of gas is stopped due to partial damage of the specific production building. 140 houses are in supply disruption[

(Nasukarasuyama"shv Kounodai New Town: Gas leakage from Main Pipe.27 houses are in supply disruption.

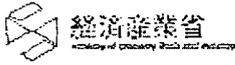
OtakO"shi) kajima Hinode Housing Complex: 1876 houses are in supply disruption due to damage in the main and branch/torch in and out pipes

(Tokai-mura) Arayadai Housing Complex of JAEA Gas supply was disrupted due to smell of gas in the specified gas production facility.

(Tokai-mura) Nagahori Housing Complex of JAEA 145 houses were in

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News Release



supply disruption due to brake of mid-pressure pipe. Affected parts are under repair..

(Hitachioota'shU Mayumigaoka New Town: 482 gas supply stopped due to autonomy request.

Unashiki"shU Yuisa Flat: There are possibilities of breaks in main and branch pipes and supply pipes. 94 houses are in supply disruption. Gas conduit is under repair.

*Imaichi Gas: Gas leakage occurred from conduit at the simple gas complex in Nikko'shi: 240 houses were in gas supply disruption.

*Nihon Gas: Gas leakage occurred from conduit at simple gas complex in the jurisdiction: 76 houses in Nasu"karasuyama-shi, 97 houses in Inashiki-shi, 594 houses in 'Ibkai"mura, Natsu"gun,370 houses in Yaita"shi, and 3,299 houses in Itako-shi were in gas supply disruption.

These areas other than Itako"shi will be restored on March 19. Residents in 1876 houses of Hinode housing complex in Itako"shi evacuated from this region due to liquefaction of the ground. Time of recovery is not certain.

212 houses in Noda.shi were in gas supply disruption. This area has been restored in March 11.

*Horikawa Industry <Bando city, Ibaraki Pref.) : Iwai Greenland liquefaction of the ground, 566 houses are in supply disruption.

Due to

*Tajima : 250 houses were in gas supply disruption at the simple gas complex in Hachiooji-city. This area will be restored within March 12.

*Iwatani Kanto (Saitama-shi) Sashiogi Housing Complex: 6 houses are stopped supply. Currently leakage location is under remedy.

oGas conduit Operators (as of 15:50, March12)

*JX Nikko Nisseki Energy: Hachinohe LNG Base

Premise, electric room and in-house electricity generator equipment, were flooded by the 2nd wave of tsunami and the gas supply was stopped.

8

News Release



Pipe line and bubble station Petroleum Resources Development around Sendai"shi appeared to be flooded with water. Disruption of gas supply does not pose impediment because demands for gas were also disrupted.

cHeat supply (as of 15:50, March12)

West side area at Morioka station: heat supply was stopped due to power failure.

*Yamagata Netsu Kyokyu (Yamagata"shi): Supply was stopped due to emergency shut down condition.

*Onahama Haiyu (Onahama, Iwaki-shi): stopped heat supply due to the breakage of pipe. Heat supply pipes underground might be affected. Time of recovery is not certain.

*"ffiTACffi NETSU ENERGY"(Hitachi City): stopped heat supply due to the electrical outage at 15:19, March 11.

*"CiliBA NETSU KYOKYU"(Chiba-city): stopped freezer, etc. at 16:19, March 11. Supply was stopped and walkdown is conducted at 16:19, March 11.

*"NISHI-IKEBUKURO NETSU KYOKYU": stopped freezer and boiler at 15:45, March 11.

*"TOKYO NETSU KYOKYU";

-stopped boiler in Takeshiba and Yurakucho areas at 15:20, March 11 -stopped supply to one of the building complex at Hikarigaoka for approx. 3 hours due to the leakage of pipe at 21:35, March 11(Restart supplying at 00:05, March 12)

*"Yokohama Business Park NETSU KYOKYU (Hodogaya-ku, Yokohama city)

15:50 Stopped steam and cold water supply to PREZZO building

16:20 restored by temporary repair

oComplex (as of 11:00, March 12)

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News Release



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.Cosmo Oil factory Chiba branch

A column of Butane Butylene storage tank was broken. Fire occurred due to gas leakage. One person suffered serious injury, 4 persons suffered minor injury.

*JX Nippon Oil&Energy Corporation Sendai oil factory (sendai-city, Miyagi prefecture)

. Fire occurred from an explosion of low temperature LPG tank

4. Action taken by NISA

<March 11)

14:46 Set up of the NISA Emergency Preparedness Headquarters (Tokyo) immediately after the earthquake

15:42: TEPCO reported to NISA in accordance with Article 10 of the Act on Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi, Units 1,2 and 3.

16:36: TEPCO judged the event in accordance with Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness regarding Fukushima Dai-ichi, Units 1 and 2.<notified to NISA at 16:45)

18:08: Unit 1 of Fukushima Dai-ichi notified NISA of the situation of the Article 10 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

18:33: Units 1,2 and 4 of Fukushima Dai-ichi notified NISA of the situation of the Article 10 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

19:03 : Government declared the state of nuclear emergency

20:50: Fukushima prefecture's emergency preparedness headquarters - issued a directive regarding the accident occurred at Fukushima-Dai-ichi Nuclear Power Station, TEPCO that the residents living in the area of 2km radius from Unit 1 of the Nuclear Power Station must evacuate.(The population of this area is 1,864)

21:23: Directives from Prime Minister to Governor of Fukushima, Mayor of Ooka and Mayor of Futaba were issued regarding the accident occurred at Fukushima-Dai-ichi Nuclear Power Station, TEPCO, pursuant to Paragraph 3, Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness as follows:

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News Release

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- Residents living in the area of 3km radius from Unit 1 of the Nuclear Power Station must evacuate.
- Residents living in the area of 10km radius from the Unit 1 must take sheltering.

<March 12>

5:22 Unit 1 of Fukushima Dai-ni notified NISA of the situation of the Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

5:32 Unit 2 of Fukushima Dai-ni notified NISA of the situation of the Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

05:44 Residents living in the area of 10km radius from unit 1 of the Nuclear Power Station must evacuate by the Prime Minister Direction.

06:07 Regarding Units 1,2 and 4 of Fukushima Dai-ni NPS, TEPCO reported NISA in accordance with Article 15 of Act on Special Measures Concerning Nuclear Emergency Preparedness.

6:50 According to the article 64, 3 of nuclear regulation act, government order to control the internal pressure in Fukushima -daiichi unit No.1 and 2

7:45 Directives from Prime Minister to Governor of Fukushima, Mayors of Hirono, Naraha, Thmioka, Ookuma and Futaba were issued regarding the accident occurred at Fukushima-Dai-ni Nuclear Power Station, TEPCO, pursuant to Paragraph 3, Article 15 of the Act for Special Measures Concerning Nuclear Emergency Preparedness as follows:

- Residents living in the area of 3km radius from Fukushima-Dai-ni Nuclear Power Station must evacuate.
- Residents living in the area of 10km radius from Fukushima-Dai-ni NPS must take sheltering

17:00 Notification pursuant to Article 15 of the Act for Special Measure Concerning Nuclear Emergency Preparedness since the radiation level exceeded the acceptable level of Fukushima Dai -ichi Nuclear Power Station.(NPS).

17:39 Prime Minister directed evacuation of the residents living within the 10 km radius from the Fukushima-Dai-ni NPS

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News Release



経済産業省

18:25

Prime Minister directed evacuation of the residents living within the 20km radius from the Fukushima Dai-ichi NPS

Directives from Prime Minister was issued regarding sea water injection to Unit No.1 of Fukushima Dai-ichi NPS.

According to the article 64, 3 of nuclear regulation act and concerning to directives from Prime Minister, government ordered to inject sea water Unit No.1 of Fukushima Dai-ichi NPS.

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News Release

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<Possible Exposure to Residents>

(1) Case for Travel from Futaba Public Welfare Hospital to Nihonmatsu Man and Woman Symbiosis Center, Fukushima Prefecture

i) No. of persons to be measured: About 60 persons

ii) Measured Result: Not yet

iii) Passage: Exposure could have happened while waiting to be picked up by helicopter at the Futaba high school ground

iv) Other

Prefectural Response Headquarters judged that there were no exposure to 35 persons who traveled from Futaba Public Welfare Hospital to Kawamata Saiseikai Hospital, Kawamata-machi by the private bus provided by Fukushima Prefecture.

(2) Case for Futaba-machi Residents Evacuated by Buses i) No. of Persons: About 100 persons

iii Measured Result: 9 persons out of 100 persons

No. of Counts

18,000cpm

30,000-36000cpm

40,000cpm

little less than

40,000cpm*

very small counts

No. of Persons

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*(This results was measured without shoes, though the first measurement exceeded 100,000cpm)

iii) Passage: Under investigation

iV) Other

Though persons evacuated in different location outside of the Prefecture (Miyagi Prefecture), all destinations are under confirmation.

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News Release



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Contact Person
Mr. Toshikazu Banagai
Director, International Affairs Office
NISAMETC
Phone: 81-(0)3-3501-1087

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From: LIA08 Hoc
Sent: Sunday, March 13, 2011 4:00 AM
To: LIA09 Hoc
Attachments: Status Fukushima Daiichi NPP 0200 UTC 13-March[1].pdf

Subject:

*/

Start:

Mon 4/4/2011 12:00 AM

End:

Tue 4/5/2011 12:00 AM

Show Time As:

Free

Recurrence:

(none)

Organizer:

LIA10 Hoc

From: LIA01 Hoc
Sent: Sunday, April 10, 2011 1:54 PM
To: LIA10 Hoc
Subject: test lia10

From: LIA07 Hoc
Sent: Sunday, March 27, 2011 10:15 PM
To: OST04 Hoc
Subject: FW: Radiation data by MEXT
Attachments: 20110328_01.pdf; 20110328_02.pdf; 20110328_03.pdf; 20110328_03_ll_unofficial.pdf; 20110328_04.pdf; 20110328_05.pdf; 20110328_06.pdf; 20110328_06_ll_unofficial.pdf; 20110328_07.pdf; 20110328_08.pdf; 20110328_09.pdf

Follow Up Flag: Follow up
Flag Status: Completed

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

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Sunday, March 27, 2011 10:04 PM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Radiation data by MEXT

From: JapanEmbassy, TaskForce[SMTP:JAPANEMBASSYTASKFORCE@STATE.GOV]
Sent: Sunday, March 27, 2011 10:02:47 PM

To: [redacted] (b)(6)

[redacted] (b)(6)

Subject: FW: Radiation data by MEXT
Auto forwarded by a Rule

Attached is radiation data sent to the Embassy from MEXT at 10:50AM on Monday, March 28.

This email is UNCLASSIFIED

From: LIA02 Hoc
Sent: Sunday, March 27, 2011 2:57 PM
To: LIA10 Hoc
Subject: is there anything new here to translate? thanks!
Attachments: On site_radiation_Monitoring_Data[1].pdf

(b)(6)

(b)(6)

3月27日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キロ) ②体育館付近(MP-5東側)(2号機より西北西約0.9キロ)
 ③西門付近(MP-5付近)(2号機より西約1.1キロ) ④正門付近前(MP-6付近)(2号機より西南西約1.0キロ)
 ⑤免震棟前(2号機より北西約0.5キロ) ⑥事務本館南側 ⑦正門
 MC:モニタリングカー 可機:可搬型MP

測定場所		③																							
時間	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50	
測定値(μSv/h)	134.6	134.6	134.4	134.3	134.4	134.0	134.0	134.0	133.9	133.8	133.6	133.6	133.4	133.2	133.1										
中性子	N.D																								
⑥本館南(μSv/h)	1.210	-	-	1.200	1.200	1.200	1.200	1.200	1.190	1.190	1.190	1.190	1.190	1.200	1.190										
⑦正門(μSv/h)	205	-	-	207	209	209	204	205	205	203	205	205	206	204	205	201									
③西門(μSv/h)	94	-	-	94.8	92.2	93.1	93	92.9	92.6	92	90.7	92.9	90.8	92.2	91.6	91									
風向	北西	北西	西北西	西北西	西	西北西	西北西	西北西	北西	西北西	西北西	西	西北西	西	西										
風速(m/s)	1.6	1.9	2.5	1.9	1.9	1.9	2.1	0.3	2.0	2.5	2.0	2.3	2.4	0.7	2.2	0.4									

測定場所		③																							
時間	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50	
測定値(μSv/h)																									
中性子																									
⑥本館南(μSv/h)																									
⑦正門(μSv/h)																									
③西門(μSv/h)																									
風向																									
風速(m/s)																									

測定場所		③																							
時間	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50	
測定値(μSv/h)																									
中性子																									
⑥本館南(μSv/h)																									
⑦正門(μSv/h)																									
③西門(μSv/h)																									
風向																									
風速(m/s)																									

3月27日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キ口) ②体育館付近(MP-5東側)(2号機より西北西約0.9キ口)
 ③西門付近(MP-5付近)(2号機より西約1.1キ口) ④正門付近前(MP-6付近)(2号機より西南西約1.0キ口)
 ⑤免震棟前(2号機より北西約0.5キ口) ⑥事務本館南側 ⑦正門
 MC:モニタリングカー 可搬:可搬型MP

測定場所		③																							
時間		0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
測定値($\mu\text{Sv/h}$)	AC	140.3	140.3	140.2	140.1	140.3	140.3	140.3	140.2	140.1	140.1	140.0	140.0	139.9	139.7	139.7	139.7	139.7	139.6	139.4	138.3	138.3	139.2	137.7	137.5
中性子		ND																							
⑥本館南($\mu\text{Sv/h}$)	可搬	1,310	-	-	1,320	-	-	1,310	-	-	1,310	-	-	1,310	-	-	1,310	-	-	1,300	-	-	1,300	-	-
⑦正門($\mu\text{Sv/h}$)		210	-	-	214	-	-	210	-	-	210	-	-	210	-	-	211	-	-	209	-	-	212	-	-
③西門($\mu\text{Sv/h}$)		102	-	-	99.5	-	-	101	-	-	101	-	-	98.3	-	-	99.9	-	-	100	-	-	100	-	-
風向		北西	北西	北北西	北西	北西	北西	北北西	北西	北西	北北東	西	南	西	西	北西	西	西北西	北西	西	北西	西	西	西	西
風速(m/s)		1.1	1.0	0.6	0.5	0.5	0.8	0.7	0.7	0.8	0.6	0.4	0.3	0.5	0.5	0.4	0.5	1.4	1.6	2.0	1.5	0.9	1.2	1.5	1.4

測定場所		③																							
時間		4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
測定値($\mu\text{Sv/h}$)	AC	137.5	137.5	137.4	137.5	137.4	137.3	137.1	137.2	136.9	137.0	136.7	136.7	136.6	136.6	136.6	136.2	136.4	136.2	136.3	136.2	136.1	136.0	136.0	135.8
中性子		ND																							
⑥本館南($\mu\text{Sv/h}$)	可搬	1,300	-	-	1,310	-	-	1,300	-	-	1,290	-	-	1,290	-	-	1,280	-	-	1,290	-	-	1,280	-	-
⑦正門($\mu\text{Sv/h}$)		208	-	-	208	-	-	211	-	-	208	-	-	209	-	-	210	-	-	209	-	-	211	-	-
③西門($\mu\text{Sv/h}$)		99.8	-	-	99.2	-	-	98	-	-	98.4	-	-	98.9	-	-	97.8	-	-	98.6	-	-	98.4	-	-
風向		西	北西	南西	西	北西	北西	南	北	北東	北	北	北	東北東	北東	東北東	北北西	北西	北西	西北西	西南西	西北西	西北西	西	西
風速(m/s)		1.2	1.2	1.4	1.1	1.0	1.0	0.7	0.5	0.6	0.7	0.6	0.4	0.5	0.5	0.4	0.5	0.5	1.7	2.2	1.7	2.3	2.0	2.3	2.4

測定場所		③																							
時間		8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
測定値($\mu\text{Sv/h}$)	AC	135.8	135.8	135.7	135.6	135.6	135.4	135.5	135.4	135.4	135.3	135.4	135.5	135.1	135.1	135.1	135.0	134.8	134.9	134.7	134.6	135.1	134.6	134.5	134.6
中性子		ND																							
⑥本館南($\mu\text{Sv/h}$)	可搬	1,280	-	-	1,260	-	-	1,250	-	-	1,240	-	-	1,230	-	-	1,230	-	-	1,230	-	-	1,100	-	-
⑦正門($\mu\text{Sv/h}$)		208	-	-	208	-	-	208	-	-	209	-	-	209	-	-	206	-	-	209	-	-	207	-	-
③西門($\mu\text{Sv/h}$)		97.5	-	-	97.9	-	-	96	-	-	95	-	-	95.7	-	-	96.5	-	-	94.1	-	-	94.6	-	-
風向		北	西南西	西	西	北西	西	北	西	南西	西北西	北北西	西	西	西	西	北	北西	西	北東	西北西	北	北西	北北西	北西
風速(m/s)		2.0	1.8	2.5	2.0	1.8	2.1	2.0	2.1	2.2	1.8	1.8	0.5	1.3	1.9	1.3	1.7	1.9	1.7	1.2	1.5	1.8	1.8	2.0	1.9

3月26日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キ口)
 - ②体育館付近(MP-5東側)(2号機より西北西約0.9キ口)
 - ③西門付近(MP-5付近)(2号機より西約1.1キ口)
 - ④正門付近前(MP-6付近)(2号機より西南西約1.0キ口)
 - ⑤免震棟前(2号機より北西約0.5キ口)
 - ⑥事務本館南側
 - ⑦正門
- MC:モニタリングカー 可搬:可搬型MP

測定場所		③																							
時間		12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	16:10	16:20	16:30	16:40	16:50
WC	測定値(μSv/h)	146.8	146.8	146.8	146.6	146.8	146.8	146.7	146.7	146.7	146.6	147.2	147.0	146.9	146.9	146.8	146.7	146.7	146.6	146.6	146.2	146.4	146.0	146.0	146.0
	中性子	N.D																							
可搬	⑥本館南(μSv/h)	1,330	-	-	1,340	-	-	1,340	-	-	1,330	-	-	1,320	-	-	1,320	-	-	1,310	-	-	1,300	-	-
	⑦正門(μSv/h)	221	-	-	222	-	-	220	-	-	221	-	-	222	-	-	220	-	-	217	-	-	218	-	-
	③西門(μSv/h)	欠測	-	-	98.7	-	-																		
	風向	北	西	北西	西	北北西	北	北西	西	北北西	北西	西北西	北西	西北西	西	西北西	北西	北	西						
	風速(m/s)	2.4	3.7	3.8	4.5	3.4	3.4	3.4	4.3	3.4	3.1	3.4	3.3	3.6	3.5	3.8	3.0	2.6	2.2	2.4	2.4	3.5	2.8	2.6	1.9

測定場所		③																							
時間		16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
WC	測定値(μSv/h)	146.9	146.8	146.8	146.5	146.4	146.4	146.3	146.2	145.2	145.0	145.0	144.6	144.6	144.7	144.4	143.9	144.1	144.2	143.9	143.8	143.5	143.5	143.3	143.4
	中性子	N.D																							
可搬	⑥本館南(μSv/h)	1,300	-	-	1,300	-	-	1,290	-	-	1,300	-	-	1,290	-	-	1,300	-	-	1,310	-	-	1,300	-	-
	⑦正門(μSv/h)	218	-	-	217	-	-	216	-	-	215	-	-	215	-	-	214	-	-	214	-	-	213	-	-
	③西門(μSv/h)	98	-	-	98	-	-	100	-	-	98	-	-	100	-	-	99	-	-	98	-	-	100	-	-
	風向	西北西	北北西	北西	西北西	北西	北西	北北西	西北西	北西	北西	北西	西北西	北西	北西	西北西	北西	北西	北	北北東	北	北西	北北西	東	北北西
	風速(m/s)	2.5	2.3	2.7	2.8	2.8	2.4	2.7	2.6	2.0	2.2	2.2	2.5	2.0	1.7	1.7	1.4	0.7	0.6	0.7	0.6	0.5	0.4	0.3	0.7

測定場所		③																							
時間		20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
WC	測定値(μSv/h)	143.0	143.1	143.0	143.0	142.8	142.9	142.8	142.7	142.8	142.5	142.6	142.0	141.8	141.5	141.3	141.2	141.1	141.1	140.9	140.8	140.8	140.8	140.7	140.4
	中性子	N.D																							
可搬	⑥本館南(μSv/h)	1,310	-	-	1,310	-	-	1,320	-	-	1,320	-	-	1,310	-	-	1,320	-	-	1,320	-	-	1,310	-	-
	⑦正門(μSv/h)	212	-	-	212	-	-	212	-	-	213	-	-	211	-	-	211	-	-	213	-	-	212	-	-
	③西門(μSv/h)	101	-	-	100	-	-	101	-	-	98.3	-	-	100	-	-	101	-	-	99.5	-	-	98.6	-	-
	風向	西北西	西北西	西北西	西	西南西	西	西北西	西北西	西北西	西	西	西南西	西	北	北西	西南西	西	西	西北西	西北西	西	西北西	西北西	西北西
	風速(m/s)	1.1	1.4	1.8	2.0	0.8	0.7	1.6	2.2	1.8	0.9	1.5	0.9	1.1	1.3	0.5	0.9	1.5	1.1	1.6	1.7	1.6	1.3	1.0	1.2

3月26日

福島第一(1F)

測定場所

- ①事務本館北(2号機より北西約0.5キ口)
 - ②体育館付近(MP-5東側)(2号機より北西約0.9キ口)
 - ③西門付近(MP-5付近)(2号機より西約1.1キ口)
 - ④正門付近前(MP-6付近)(2号機より西南西約1.0キ口)
 - ⑤免震棟前(2号機より北西約0.5キ口)
 - ⑥事務本館南側
 - ⑦正門
- MC:モニタリングカー 可搬:可搬型MP

測定場所		④																							
時 間		0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
MC	測定値(μSv/h)	184.4	184.0	183.8	183.2	182.8	182.7	182.5	182.4	182.3	182.1	181.8	180.8	179.9	178.1	176.6	175.5	174.4	173.0	172.4	171.0	170.7	169.8	169.2	169.5
	中性子	N.D																							
可搬	⑥本館南(μSv/h)	1.460	-	-	1.460	-	-	1.460	-	-	1.440	-	-	1.440	-	-	1.420	-	-	1.390	-	-	1.370	-	-
	⑦正門(μSv/h)	241	-	-	238	-	-	235	-	-	235	-	-	233	-	-	230	-	-	224	-	-	221	-	-
	③西門(μSv/h)	117	-	-	117	-	-	114	-	-	115	-	-	114	-	-	110	-	-	109	-	-	108	-	-
	風向	北西	北西	西	北西	北北西	北北西	北西	北西	西	北西	北西	北西	北	北北西	北北西	北	北北西	北	北	北北西	北北西	北西	北西	北西
	風速(m/s)	2.3	1.8	2.5	2.2	2.6	3.2	3.2	2.7	2.4	2.7	1.9	3.0	5.3	4.0	2.9	3.5	3.2	5.0	6.9	3.7	3.0	3.0	2.7	2.9

測定場所		④																								
時 間		4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50	
MC	測定値(μSv/h)	169.2	169.1	168.1	167.8	167.1	167.1	166.9	167.1	167.4	167.6	167.8	168.0	169.0	168.0	168.3	169.2	169.6	169.7	169.5	169.0	169.8	170.0	169.9	170.1	
	中性子	N.D																								
可搬	⑥本館南(μSv/h)	1.370	-	-	1.360	-	-	1.360	-	-	1.370	-	-	1.370	-	-	1.380	-	-	1.370	-	-	1.380	-	-	
	⑦正門(μSv/h)	219	-	-	217	-	-	218	-	-	217	-	-	221	-	-	221	-	-	219	-	-	219	-	-	
	③西門(μSv/h)	107	-	-	105	-	-	105	-	-	105	-	-	108	-	-	105	-	-	106	-	-	105	-	-	
	風向	北西	北西	北西	北西	北北西	北北西	北西	北	北北西	北西	北西	北西	北西	西北西	北西	北西	北北西	北西	西北西	西北西	北北西	北北西	北西	北	北北西
	風速(m/s)	2.6	2.8	2.6	2.3	2.7	3.2	6.1	3.4	3.0	2.7	2.7	2.9	2.5	2.7	2.7	2.5	2.2	2.4	2.3	2.6	2.8	2.3	2.9	2.7	

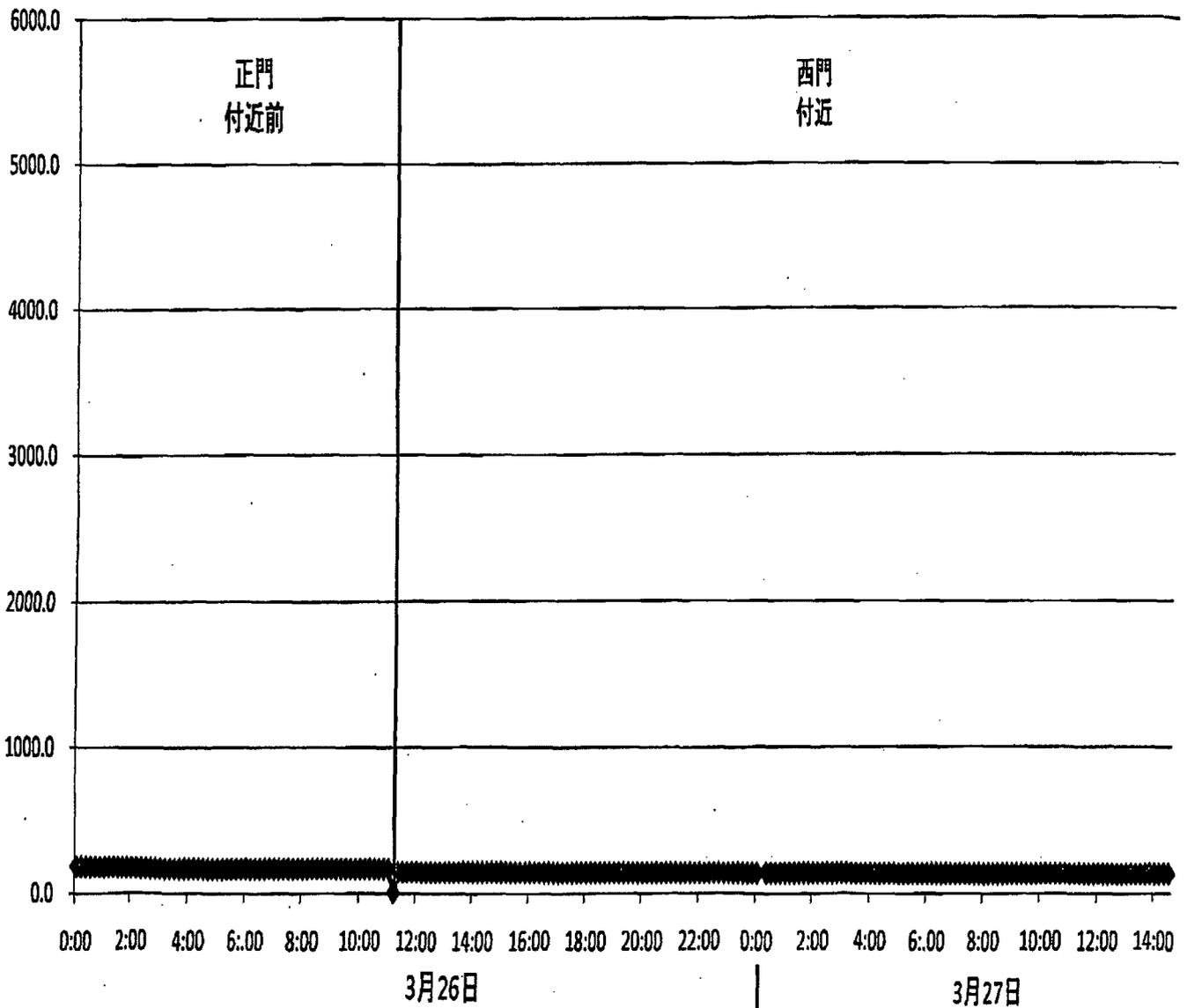
測定場所		④																		③					
時 間		8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
MC	測定値(μSv/h)	170.3	170.3	170.6	170.7	170.7	170.8	170.8	170.7	170.5	170.6	170.6	170.8	170.5	170.8	170.6	170.5	170.8	170.8	170.7	測定 位置 変更	146.7	146.7	146.5	146.9
	中性子	N.D		N.D	N.D	N.D																			
可搬	⑥本館南(μSv/h)	1.380	-	-	1.370	-	-	1.370	-	-	1.360	-	-	1.350	-	-	1.350	-	-	1.340		-	1.350	-	-
	⑦正門(μSv/h)	220	-	-	221	-	-	221	-	-	222	-	-	221	-	-	222	-	-	221		-	220	-	-
	③西門(μSv/h)	107	-	-	106	-	-	105	-	-	104	-	-	103	-	-	欠測	-	-	欠測	-	欠測	-	-	
	風向	北	北北西	北北西	北北東	北北西	北北西	北北東	北北東	北西	北北西	北	北	北北西	北西	北西	北北西	北北西	西北西	北西	北西	北北西	西	西	
	風速(m/s)	2.6	2.7	3.5	3.4	2.9	3.0	3.0	3.1	2.8	2.4	2.6	2.5	2.6	2.5	3.9	4.4	3.5	3.8	5.1	2.9	2.6	2.9	3.5	

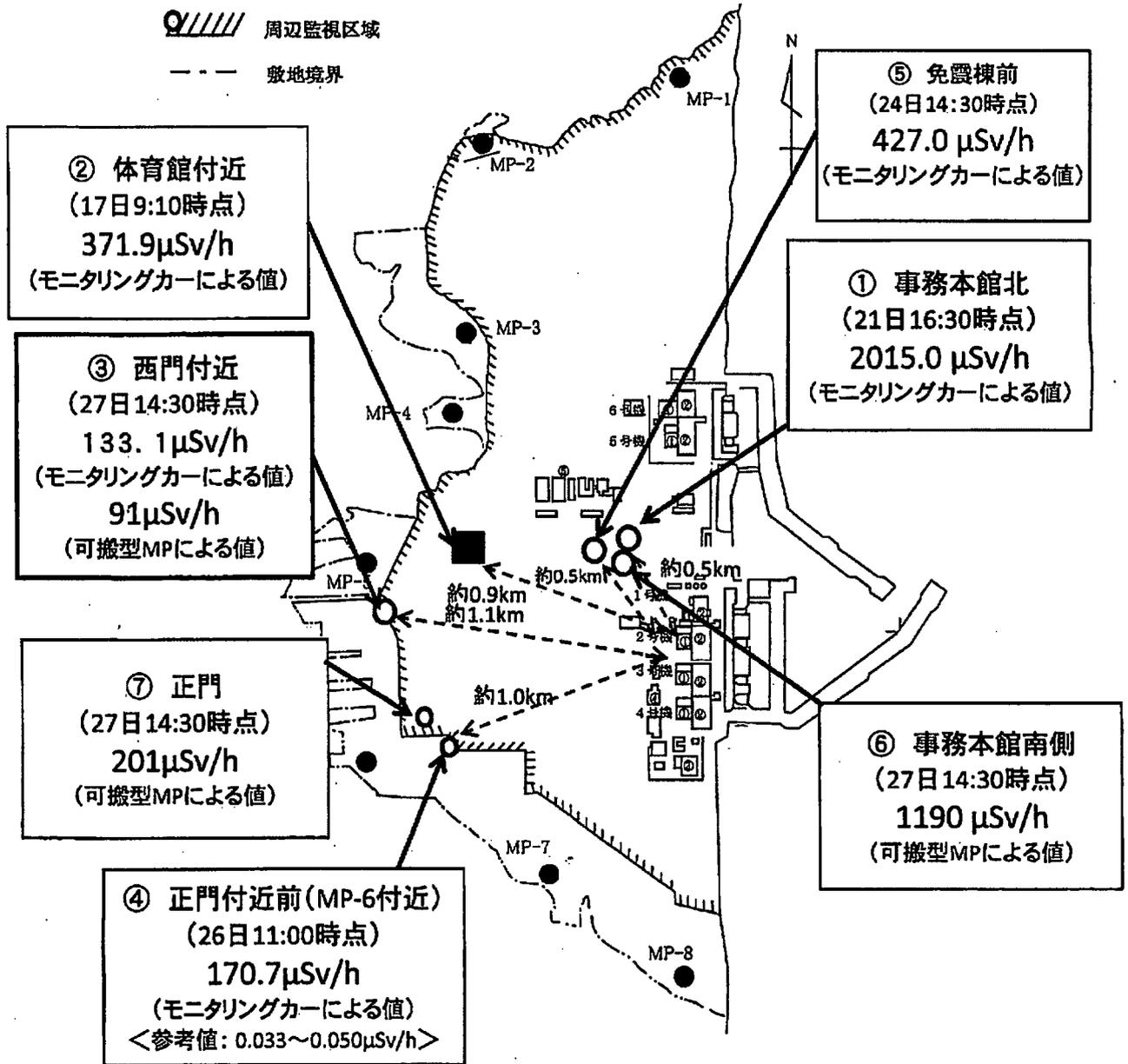
4

福島第一原子力発電所敷地内の線量率

(モニタリングカーによる測定値)

$\mu\text{Sv/h}$





島第二(2F) (事業者のモニタリングポスト)

3月27日		12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50	
モニタリングポスト																										
MP1(μSv/h)		9.903	9.910	9.947	9.937	9.907	9.887	9.890	9.870	9.863	9.817	9.857	9.850	9.833	9.833	9.830	9.777									
MP2(μSv/h)		5.650	5.613	5.643	5.620	5.653	5.627	5.603	5.620	5.617	5.617	5.597	5.583	5.583	5.593	5.563	5.560									
MP3(μSv/h)		9.313	9.367	9.333	9.333	9.293	9.323	9.267	9.310	9.283	9.277	9.263	9.280	9.277	9.247	9.250	9.267									
MP4(μSv/h)		7.107	7.110	7.113	7.110	7.113	7.107	7.090	7.127	7.110	7.080	7.067	7.053	7.047	7.063	7.043	7.067									
MP5(μSv/h)		6.467	6.467	6.473	6.540	6.467	6.467	6.473	6.467	6.467	6.473	6.473	6.467	6.467	6.467	6.467	6.467									
MP6(μSv/h)		7.747	7.743	7.720	7.717	7.703	7.703	7.740	7.670	7.667	7.680	7.700	7.693	7.683	7.677	7.680	7.657									
MP7(μSv/h)		欠測																								
風向		西北西	西	北西	西	西	北西	北西	西北西	北西	西北西	北西	西北西	北西	北西	北北西	北北西									
風速(m/s)		5.8	4.8	3.3	3.6	5.9	5.2	3.6	4.6	4.7	5.8	6.9	6.6	6.5	6.5	8.1	6.6									

3月27日		16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50	
モニタリングポスト																										
MP1(μSv/h)																										
MP2(μSv/h)																										
MP3(μSv/h)																										
MP4(μSv/h)																										
MP5(μSv/h)																										
MP6(μSv/h)																										
MP7(μSv/h)																										
風向																										
風速(m/s)																										

3月27日		20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50	
モニタリングポスト																										
MP1(μSv/h)																										
MP2(μSv/h)																										
MP3(μSv/h)																										
MP4(μSv/h)																										
MP5(μSv/h)																										
MP6(μSv/h)																										
MP7(μSv/h)																										
風向																										
風速(m/s)																										

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島第二(2F) (事業者のモニタリングポスト)

3月27日																								
二タリグポスト	0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50
MP1(μSv/h)	10.283	10.270	10.257	10.270	10.270	10.273	10.213	10.233	10.267	10.257	10.197	10.240	10.223	10.207	10.183	10.210	10.200	10.190	10.167	10.163	10.173	10.187	10.153	10.127
MP2(μSv/h)	5.863	5.870	5.877	5.870	5.857	5.853	5.870	5.837	5.863	5.850	5.837	5.863	5.830	5.807	5.817	5.833	5.807	5.797	5.833	5.817	5.783	5.823	5.787	5.780
MP3(μSv/h)	9.780	9.783	9.780	9.743	9.730	9.740	9.753	9.690	9.730	9.713	9.737	9.753	9.650	9.727	9.690	9.680	9.687	9.643	9.657	9.677	9.643	9.657	9.633	9.640
MP4(μSv/h)	7.500	7.467	7.487	7.493	7.450	7.457	7.467	7.467	7.437	7.443	7.440	7.423	7.433	7.440	7.440	7.413	7.403	7.380	7.397	7.423	7.397	7.363	7.363	7.370
MP5(μSv/h)	6.867	6.867	6.867	6.867	6.867	6.867	6.867	6.867	6.867	6.847	6.860	6.767	6.813	6.787	6.767	6.820	6.767	6.767	6.813	6.767	6.767	6.767	6.767	6.767
MP6(μSv/h)	8.083	8.077	8.063	8.080	8.037	8.037	8.027	8.023	8.030	8.030	8.027	8.007	7.980	7.993	7.983	8.003	7.990	7.987	7.983	7.957	7.943	7.970	7.927	7.987
MP7(μSv/h)	欠測																							
風向	北西	北西	西北西	西北西	西北西	北西	西北西	北西	西北西	西北西	北西	北西	北西	西北西	西北西	北西	西北西	北西	北西	北西	西北西	北西	北西	北北西
風速(m/s)	7.8	6.7	7.7	6.6	6.9	5.6	5.2	5.0	4.6	7.0	6.8	6.2	6.9	7.1	4.7	4.5	5.2	6.0	6.0	5.3	5.7	6.6	7.7	5.6

3月27日																								
二タリグポスト	4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50
MP1(μSv/h)	10.133	10.133	10.127	10.113	10.097	10.137	10.117	10.093	10.040	10.087	10.083	10.070	10.073	10.080	10.073	10.073	10.007	10.013	10.027	10.027	10.033	9.993	9.993	9.983
MP2(μSv/h)	5.803	5.780	5.780	5.777	5.783	5.753	5.777	5.773	5.727	5.753	5.730	5.747	5.740	5.733	5.750	5.737	5.710	5.723	5.723	5.707	5.683	5.707	5.683	5.723
MP3(μSv/h)	9.637	9.687	9.613	9.570	9.533	9.547	9.587	9.563	9.533	9.520	9.550	9.563	9.570	9.500	9.510	9.547	9.543	9.527	9.473	9.483	9.493	9.483	9.463	9.453
MP4(μSv/h)	7.357	7.363	7.363	7.377	7.350	7.353	7.333	7.327	7.320	7.347	7.327	7.320	7.320	7.283	7.300	7.277	7.297	7.290	7.273	7.257	7.263	7.227	7.267	7.230
MP5(μSv/h)	6.773	6.767	6.767	6.767	6.713	6.747	6.720	6.767	6.667	6.700	6.713	6.740	6.667	6.673	6.673	6.667	6.667	6.673	6.667	6.673	6.667	6.673	6.673	6.667
MP6(μSv/h)	7.957	7.927	7.967	7.933	7.917	7.953	7.907	7.937	7.910	7.917	7.903	7.913	7.903	7.900	7.877	7.890	7.860	7.890	7.870	7.867	7.867	7.857	7.893	7.843
MP7(μSv/h)	欠測	欠測	欠測	欠測																				
風向	北西	北北西	北西	北西	北西	西北西	北西	北西	北西	北西	西北西	西北西	西北西	西北西	西	西北西	西北西	西北西	西北西	西	西北西	西北西	西北西	北西
風速(m/s)	5.4	5.7	4.8	5.5	5.0	5.0	4.4	5.0	4.6	4.9	5.8	7.7	6.9	7.9	8.5	7.4	7.5	5.3	5.3	7.3	7.3	5.5	4.6	5.3

3月27日																								
二タリグポスト	8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50
MP1(μSv/h)	9.970	9.993	9.983	9.960	9.943	9.953	9.937	9.940	9.983	9.920	9.893	9.923	9.920	9.943	9.940	9.920	9.890	9.907	9.913	9.970	10.327	9.997	9.990	9.940
MP2(μSv/h)	5.700	5.697	5.680	5.680	5.687	5.687	5.700	5.643	5.687	5.650	5.637	5.677	5.687	5.640	5.643	5.650	5.670	5.647	5.673	5.643	5.913	5.680	5.670	5.660
MP3(μSv/h)	9.440	9.440	9.453	9.470	9.440	9.467	9.413	9.410	9.433	9.407	9.420	9.410	9.407	9.367	9.397	9.363	9.390	9.360	9.360	9.397	9.360	9.363	9.327	9.313
MP4(μSv/h)	7.270	7.207	7.260	7.200	7.203	7.240	7.223	7.187	7.183	7.177	7.210	7.223	7.180	7.180	7.227	7.173	7.157	7.180	7.153	7.157	7.140	7.137	7.110	7.120
MP5(μSv/h)	6.627	6.640	6.667	6.660	6.673	6.667	6.627	6.667	6.667	6.607	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667	6.667
MP6(μSv/h)	7.813	7.833	7.823	7.820	7.820	7.790	7.810	7.817	7.800	7.807	7.817	7.833	7.790	7.770	7.770	7.790	7.767	7.737	7.770	7.780	7.753	7.753	7.737	7.703
MP7(μSv/h)	欠測	欠測	欠測	欠測																				
風向	北西	北北西	北北西	北北西	北西	北	北北西	北北東	北東	北北東	北北東	北東	北東	北東	北北東	北	北北西	北	北西	西北西	西北西	西北西	西北西	西北西
風速(m/s)	4.8	3.6	4.7	3.0	2.1	3.9	4.0	1.6	3.3	2.4	2.8	2.2	3.0	1.7	2.8	3.1	3.9	3.0	3.6	2.5	3.0	2.8	3.3	2.1

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島第二(2F) (事業者のモニタリングポスト)

3月26日																								
モニタリングポスト	12:00	12:10	12:20	12:30	12:40	12:50	13:00	13:10	13:20	13:30	13:40	13:50	14:00	14:10	14:20	14:30	14:40	14:50	15:00	15:10	15:20	15:30	15:40	15:50
MP1(μ Sv/h)	10.817	10.807	10.767	10.743	10.757	10.747	10.717	10.743	10.710	10.713	10.727	10.727	10.683	10.660	10.677	10.677	10.667	10.687	10.663	10.673	10.640	10.607	10.610	10.653
MP2(μ Sv/h)	6.127	6.153	6.123	6.123	6.123	6.137	6.117	6.113	6.113	6.140	6.130	6.100	6.090	6.107	6.087	6.123	6.097	6.123	6.087	6.097	6.090	6.073	6.077	6.087
MP3(μ Sv/h)	10.157	10.200	10.173	10.170	10.190	10.170	10.187	10.147	10.123	10.170	10.130	10.153	10.110	10.117	10.123	10.080	10.113	10.093	10.103	10.140	10.077	10.073	10.083	10.030
MP4(μ Sv/h)	7.807	7.827	7.823	7.833	7.810	7.813	7.817	7.803	7.817	7.783	7.757	7.813	7.770	7.743	7.780	7.753	7.763	7.733	7.750	7.753	7.727	7.733	7.747	7.683
MP5(μ Sv/h)	7.160	7.153	7.153	7.153	7.153	7.160	7.153	7.153	7.160	7.160	7.153	7.113	7.100	7.133	7.107	7.113	7.107	7.160	7.160	7.080	7.153	7.113	7.160	7.053
MP6(μ Sv/h)	8.357	8.387	8.353	8.333	8.330	8.350	8.353	8.367	8.357	8.370	8.347	8.343	8.323	8.323	8.347	8.293	8.323	8.310	8.337	8.313	8.327	8.327	8.303	8.317
MP7(μ Sv/h)	欠測																							
風向	北北西	北西	北北西	北北西	北北西	北西	北西	北西	北北西	北西	北西	北西	北西	北西	北西	北北西	北西							
風速(m/s)	13.8	11.1	11.2	13.7	11.6	11.7	11.0	10.5	12.0	9.9	9.4	9.5	11.2	10.2	6.6	6.9	6.7	6.8	3.8	5.1	6.2	4.5	5.5	4.4

3月26日																								
モニタリングポスト	16:00	16:10	16:20	16:30	16:40	16:50	17:00	17:10	17:20	17:30	17:40	17:50	18:00	18:10	18:20	18:30	18:40	18:50	19:00	19:10	19:20	19:30	19:40	19:50
MP1(μ Sv/h)	10.587	10.637	10.600	10.590	10.543	10.583	10.590	10.570	10.557	10.553	10.543	10.500	10.537	10.573	10.520	10.520	10.510	10.473	10.487	10.500	10.427	10.503	10.457	10.460
MP2(μ Sv/h)	6.060	6.073	6.067	6.070	6.030	6.080	6.063	6.057	6.053	6.007	6.020	6.017	6.020	6.023	6.017	5.983	6.013	5.997	6.030	5.967	6.010	6.000	5.970	5.973
MP3(μ Sv/h)	10.070	10.043	10.070	10.063	10.003	10.017	10.007	10.047	10.003	10.037	10.010	10.007	10.000	9.937	9.980	9.977	9.957	9.977	9.973	9.970	9.957	9.930	9.937	9.913
MP4(μ Sv/h)	7.717	7.723	7.723	7.700	7.700	7.690	7.697	7.703	7.707	7.690	7.690	7.657	7.643	7.663	7.667	7.663	7.627	7.643	7.623	7.623	7.637	7.623	7.610	7.593
MP5(μ Sv/h)	7.053	7.060	7.053	7.053	7.053	7.053	7.060	7.060	7.053	7.060	7.060	7.060	7.060	7.060	7.060	7.053	7.060	7.060	7.013	7.007	7.060	7.027	6.967	6.960
MP6(μ Sv/h)	8.307	8.290	8.283	8.303	8.273	8.297	8.260	8.250	8.317	8.227	8.243	8.243	8.243	8.210	8.213	8.243	8.250	8.217	8.240	8.240	8.213	8.197	8.197	8.193
MP7(μ Sv/h)	欠測																							
風向	北西	北西	北西	北西	西北西	西北西	西北西	北北西	北西	北西	北北西	北北西	北北西	北西	北西	北西	西北西	西北西	北西	北西	北西	北西	北西	北西
風速(m/s)	6.6	4.4	2.3	3.7	5.4	7.4	6.9	5.0	3.6	3.3	3.3	6.6	11.1	7.9	7.6	6.2	6.9	8.6	7.2	6.5	5.3	4.4	5.6	6.1

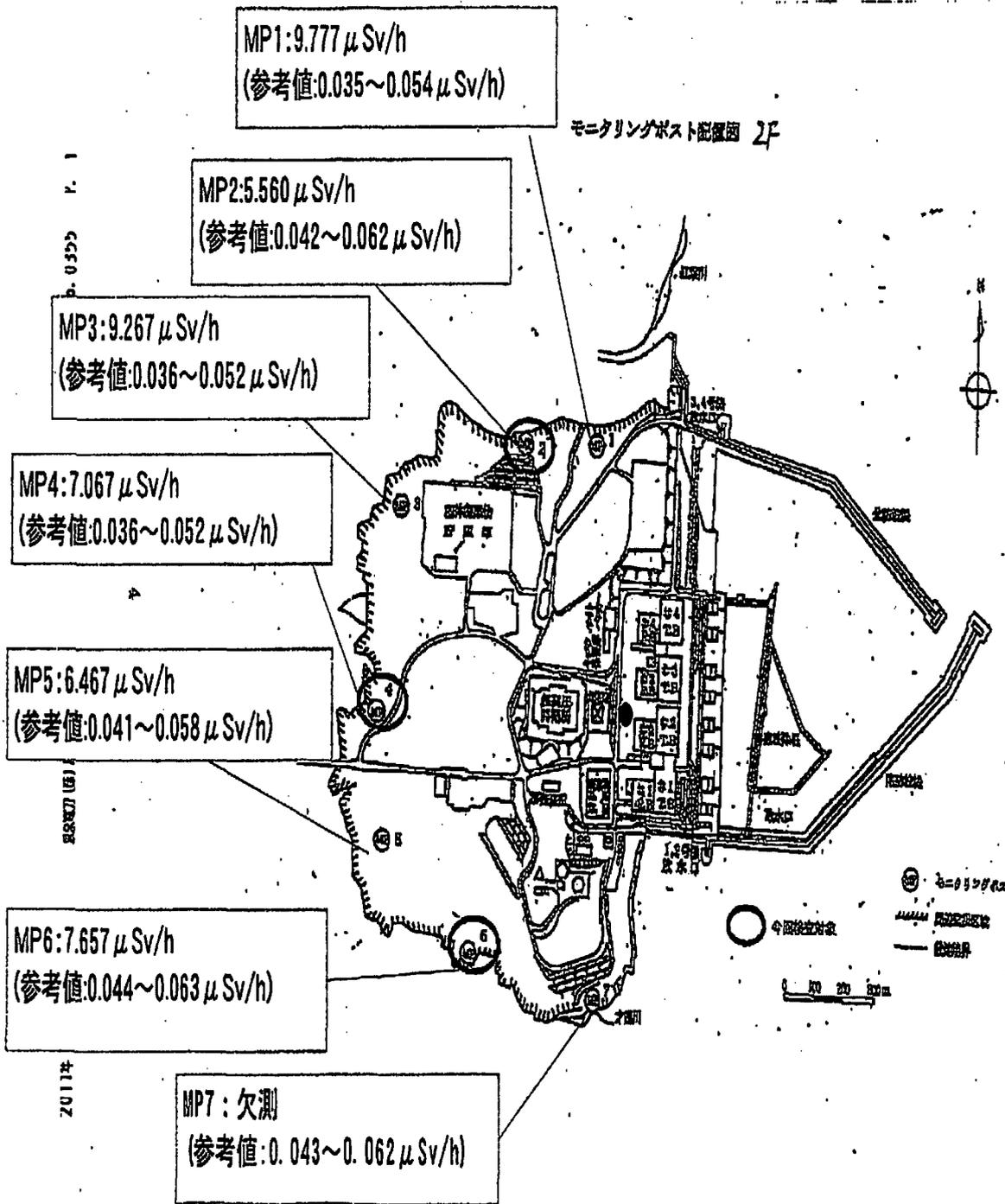
3月26日																								
モニタリングポスト	20:00	20:10	20:20	20:30	20:40	20:50	21:00	21:10	21:20	21:30	21:40	21:50	22:00	22:10	22:20	22:30	22:40	22:50	23:00	23:10	23:20	23:30	23:40	23:50
MP1(μ Sv/h)	10.433	10.423	10.437	10.427	10.423	10.440	10.400	10.360	10.430	10.387	10.370	10.347	10.383	10.370	10.353	10.353	10.363	10.340	10.353	10.343	10.323	10.317	10.323	10.297
MP2(μ Sv/h)	5.987	5.963	5.953	5.967	5.967	5.947	5.953	5.933	5.933	5.937	5.950	5.923	5.953	5.930	5.910	5.903	5.923	5.900	5.890	5.877	5.907	5.877	5.897	5.897
MP3(μ Sv/h)	9.953	9.920	9.907	9.923	9.920	9.930	9.890	9.890	9.857	9.873	9.853	9.860	9.840	9.810	9.833	9.847	9.813	9.817	9.800	9.803	9.797	9.777	9.747	9.777
MP4(μ Sv/h)	7.627	7.577	7.613	7.607	7.597	7.590	7.610	7.570	7.620	7.540	7.567	7.530	7.550	7.560	7.540	7.517	7.513	7.530	7.513	7.513	7.523	7.517	7.510	7.493
MP5(μ Sv/h)	6.960	7.013	6.960	6.960	6.960	6.967	6.960	6.960	6.960	6.960	6.960	6.913	6.967	6.907	6.913	6.913	6.913	6.887	6.867	6.887	6.913	6.893	6.867	6.867
MP6(μ Sv/h)	8.167	8.213	8.177	8.180	8.170	8.173	8.187	8.157	8.157	8.130	8.117	8.127	8.127	8.090	8.117	8.120	8.103	8.130	8.090	8.093	8.087	8.073	8.073	8.070
MP7(μ Sv/h)	欠測																							
風向	北西	北西	北西	北西	西北西	西北西	西北西	北西	西北西	北西	北西	北西	北西	西北西	西	西	西北西							
風速(m/s)	6.7	5.6	5.9	5.5	6.1	6.7	7.4	7.1	8.0	8.5	7.7	6.3	5.1	5.0	5.0	6.8	7.5	8.4	9.4	8.9	8.6	7.8	7.8	9.5

島第二(2F) (事業者のモニタリングポスト)

3月26日		0:00	0:10	0:20	0:30	0:40	0:50	1:00	1:10	1:20	1:30	1:40	1:50	2:00	2:10	2:20	2:30	2:40	2:50	3:00	3:10	3:20	3:30	3:40	3:50	
モニタリングポスト																										
MP1(μSv/h)		12.000	11.997	11.893	11.827	11.803	11.773	11.713	11.747	11.680	11.640	11.613	11.600	11.560	11.477	11.473	11.427	11.417	11.330	11.327	11.270	11.213	11.253	11.150	11.160	
MP2(μSv/h)		6.910	6.897	6.823	6.780	6.763	6.790	6.757	6.743	6.727	6.693	6.700	6.643	6.617	6.593	6.577	6.517	6.510	6.460	6.447	6.390	6.353	6.347	6.353	6.340	
MP3(μSv/h)		11.343	11.310	11.237	11.237	11.183	11.143	11.107	11.140	11.077	11.060	11.017	11.020	10.987	10.953	10.893	10.893	10.877	10.807	10.767	10.723	10.700	10.620	10.630	10.577	
MP4(μSv/h)		8.537	8.567	8.523	8.480	8.477	8.460	8.430	8.413	8.393	8.413	8.393	8.343	8.363	8.320	8.313	8.280	8.230	8.200	8.163	8.150	8.120	8.070	8.113	8.063	
MP5(μSv/h)		7.947	7.940	7.940	7.893	7.840	7.873	7.847	7.847	7.800	7.833	7.800	7.747	7.747	7.727	7.693	7.700	7.633	7.607	7.547	7.453	7.453	7.453	7.453	7.453	
MP6(μSv/h)		9.150	9.100	9.090	9.083	9.040	9.033	9.000	8.977	8.983	8.970	8.957	8.937	8.917	8.857	8.870	8.813	8.827	8.737	8.697	8.643	8.610	8.563	8.550	8.547	
MP7(μSv/h)		欠測																								
風向		北北西	北	北北西	北北西	北西	北北西	北北西	北西	北北西	北北西	北北西	北北西													
風速(m/s)		8.2	8.0	8.7	8.1	8.9	7.5	8.3	8.3	8.5	8.3	9.0	9.1	8.8	9.2	8.1	8.1	6.5	9.9	8.6	9.0	9.3	9.9	10.3	10.5	

3月26日		4:00	4:10	4:20	4:30	4:40	4:50	5:00	5:10	5:20	5:30	5:40	5:50	6:00	6:10	6:20	6:30	6:40	6:50	7:00	7:10	7:20	7:30	7:40	7:50	
モニタリングポスト																										
MP1(μSv/h)		11.170	11.113	11.153	11.127	11.050	11.037	11.043	11.053	11.000	11.003	11.027	11.030	11.030	10.953	10.993	10.983	10.977	10.963	10.973	10.920	10.937	10.960	10.933	10.917	
MP2(μSv/h)		6.330	6.303	6.290	6.283	6.263	6.243	6.277	6.250	6.213	6.263	6.283	6.247	6.247	6.243	6.237	6.227	6.237	6.267	6.227	6.227	6.257	6.237	6.237	6.217	
MP3(μSv/h)		10.613	10.580	10.610	10.530	10.487	10.527	10.493	10.503	10.480	10.473	10.470	10.470	10.433	10.440	10.460	10.427	10.410	10.430	10.443	10.437	10.413	10.433	10.447	10.420	
MP4(μSv/h)		8.060	8.067	8.037	8.037	8.020	8.003	7.983	7.993	8.000	8.000	7.983	7.943	7.963	7.970	8.017	7.957	7.970	7.970	7.977	7.950	7.963	7.977	7.963	7.943	
MP5(μSv/h)		7.347	7.380	7.353	7.353	7.353	7.353	7.347	7.353	7.353	7.353	7.353	7.353	7.353	7.333	7.353	7.327	7.307	7.353	7.353	7.353	7.253	7.353	7.353	7.353	
MP6(μSv/h)		8.547	8.547	8.520	8.497	8.477	8.483	8.447	8.460	8.443	8.453	8.463	8.477	8.433	8.443	8.447	8.437	8.437	8.497	8.467	8.467	8.453	8.403	8.453	8.433	
MP7(μSv/h)		欠測																								
風向		北北西																								
風速(m/s)		10.8	9.7	9.7	10.2	9.5	10.1	9.2	9.1	9.4	8.8	8.8	10.0	8.6	8.6	9.2	9.4	9.7	8.5	8.3	7.5	7.0	6.2	5.5	6.3	

3月26日		8:00	8:10	8:20	8:30	8:40	8:50	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	
モニタリングポスト																										
MP1(μSv/h)		10.933	10.933	10.933	10.877	10.920	10.883	10.893	10.910	10.867	10.860	10.893	10.870	10.973	10.903	10.913	10.887	10.850	10.840	10.833	10.873	10.817	10.837	10.803	10.817	
MP2(μSv/h)		6.217	6.230	6.213	6.223	6.233	6.220	6.203	6.203	6.183	6.220	6.223	6.217	6.240	6.190	6.183	6.190	6.190	6.177	6.180	6.160	6.173	6.167	6.133	6.163	
MP3(μSv/h)		10.437	10.360	10.380	10.370	10.367	10.403	10.340	10.393	10.323	10.380	10.363	10.367	10.320	10.280	10.213	10.233	10.170	10.230	10.237	10.243	10.207	10.217	10.220	10.230	
MP4(μSv/h)		7.957	7.933	7.913	7.927	7.930	7.900	7.957	7.933	7.930	7.933	7.913	7.900	7.887	7.813	7.810	7.840	7.833	7.807	7.820	7.837	7.777	7.850	7.863	7.823	
MP5(μSv/h)		7.347	7.347	7.253	7.353	7.293	7.273	7.253	7.280	7.353	7.280	7.293	7.253	7.253	7.200	7.207	7.227	7.153	7.180	7.253	7.153	7.253	7.160	7.200	7.153	
MP6(μSv/h)		8.420	8.433	8.427	8.440	8.460	8.467	8.433	8.433	8.417	8.427	8.413	8.460	8.437	8.353	8.317	8.337	8.320	8.337	8.340	8.333	8.300	8.357	8.370	8.353	
MP7(μSv/h)		欠測																								
風向		北北西	北北西	北北西	北	北	北	北北西	北	北	北	北	北	北	北	北	北	北	北	北	北北西	北北西	北北西	北西	北西	
風速(m/s)		7.1	7.3	8.9	7.1	7.9	7.9	8.6	8.2	8.6	8.3	6.6	7.0	6.1	5.8	7.4	6.9	7.4	10.9	12.0	12.8	11.3	10.5	11.1	10.2	



添付資料 (2)

各発電所等の環境モニタリング結果

単位: $\mu\text{Sv/h}$

通常の平常値の範囲	会社名	発電所名	3月26日													
			12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00		
0.023~0.027	北海道電力	泊発電所	0.028	0.026	0.032	0.031	0.030	0.026	0.027	0.025	0.025	0.025	0.025	0.025	0.025	0.033
0.024~0.060	東北電力	女川原子力発電所	0.89	0.88	0.89	0.88	0.86	0.85	0.84	0.84	0.84	0.84	0.84	0.83	0.83	0.83
0.012~0.060		東通原子力発電所	0.02	0.019	0.018	0.017	0.017	0.018	0.019	0.028	0.021	0.018	0.019	0.019	0.019	0.019
0.033~0.060	東京電力	福島第一原子力発電所 [※]	146.8	146.7	146.9	146.6	145.9	145.3	144.5	143.9	143.0	142.8	141.8	141.8	140.9	140.9
0.036~0.052		福島第二原子力発電所	10.157	10.187	10.110	10.103	10.070	10.007	10.000	9.973	9.953	9.890	9.840	9.800	9.800	9.800
0.011~0.159		柏崎刈羽原子力発電所	0.065	0.065	0.067	0.065	0.064	0.067	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0.065
0.036~0.053	日本原子力発電	東海第二発電所	0.830	0.827	0.818	0.814	0.813	0.808	0.803	0.805	0.802	0.798	0.798	0.792	0.792	0.792
0.039~0.110		敦賀発電所	0.073	0.078	0.076	0.073	0.076	0.079	0.076	0.076	0.073	0.072	0.072	0.078	0.074	
0.064~0.108	中部電力	浜岡原子力発電所	0.079	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078
0.0207~0.132	北陸電力	志賀原子力発電所	0.033	0.032	0.032	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.033
0.028~0.130	中国電力	島根原子力発電所	0.031	0.030	0.032	0.030	0.030	0.030	0.031	0.030	0.030	0.031	0.029	0.032	0.032	0.032
0.070~0.077	関西電力	美浜発電所	0.072	0.074	0.073	0.073	0.074	0.075	0.073	0.080	0.074	0.072	0.075	0.072	0.072	
0.045~0.047		高浜発電所	0.044	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.046	0.043	0.042	0.046	0.044	
0.036~0.040		大飯発電所	0.037	0.036	0.036	0.035	0.035	0.034	0.039	0.037	0.035	0.043	0.038	0.051	0.051	
0.011~0.080	四国電力	伊方発電所	0.014	0.016	0.014	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.015	0.014	0.015	
0.023~0.087	九州電力	玄海原子力発電所	0.027	0.027	0.026	0.026	0.026	0.027	0.026	0.026	0.027	0.027	0.028	0.027	0.027	
0.034~0.120		川内原子力発電所	0.038	0.037	0.037	0.037	0.034	0.037	0.040	0.040	0.039	0.04	0.039	0.036	0.036	
0.009~0.069	日本原燃(株)	六ヶ所 再処理事業所	0.016	0.017	0.018	0.018	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	
0.009~0.071		六ヶ所 埋没事業所	0.020	0.021	0.023	0.022	0.020	0.020	0.020	0.020	0.021	0.020	0.020	0.020	0.020	

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

通常の平常値の範囲	会社名	発電所名	3月27日												
			0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	
0.023~0.027	北海道電力	泊発電所	0.029	0.026	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.026	0.026		
0.024~0.060	東北電力	女川原子力発電所	0.83	0.82	0.82	0.81	0.81	0.81	0.81	0.80	0.80	0.79			
0.012~0.060		東通原子力発電所	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.018			
0.033~0.050	東京電力	福島第一原子力発電所 [※]	140.3	140.3	139.9	139.4	137.5	137.1	136.5	136.3	135.8	135.5			
0.036~0.052		福島第二原子力発電所	9.780	9.763	9.650	9.657	9.637	9.587	9.570	9.473	9.440	9.413			
0.011~0.159		柏崎刈羽原子力発電所	0.064	0.064	0.065	0.066	0.069	0.068	0.068	0.066	0.065	0.065			
0.036~0.053	日本原子力発電	東海第二発電所	0.790	0.788	0.785	0.781	0.784	0.782	0.780	0.776	0.776	0.771			
0.039~0.110		敦賀発電所	0.072	0.074	0.072	0.076	0.075	0.073	0.073	0.071	0.074	0.074			
0.064~0.108	中部電力	浜岡原子力発電所	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078			
0.0207~0.132	北陸電力	志賀原子力発電所	0.033	0.032	0.034	0.033	0.035	0.034	0.032	0.032	0.033	0.033			
0.028~0.130	中国電力	島根原子力発電所	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030			
0.070~0.077	関西電力	美浜発電所	0.073	0.074	0.074	0.078	0.074	0.071	0.073	0.071	0.074	0.073			
0.045~0.047		高浜発電所	0.043	0.044	0.046	0.044	0.044	0.043	0.044	0.043	0.043	0.043			
0.036~0.040		大飯発電所	0.051	0.049	0.042	0.045	0.041	0.047	0.039	0.035	0.035	0.034			
0.011~0.080	四国電力	伊方発電所	0.014	0.014	0.015	0.014	0.014	0.014	0.014	0.014	0.015	0.014			
0.023~0.087	九州電力	玄海原子力発電所	0.026	0.026	0.026	0.026	0.026	0.027	0.026	0.026	0.026	0.026			
0.034~0.120		川内原子力発電所	0.037	0.040	0.037	0.038	0.037	0.037	0.038	0.038	0.040	0.037			
0.009~0.069	日本原燃(株)	六ヶ所 再処理事業所	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016			
0.009~0.071		六ヶ所 埋没事業所	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020	0.020			

※福島第一原子力発電所については、作業状況により若干測定時間のずれ及び測定位置の変更が生じることもございます。

東京電力福島第一原子力発電所敷地内の核種分析結果

採取場所: 1F南放水口付近(1~4u放水口から南側約330m地点)

採取方法: 海水を汲みあげ採取

測定方法: 試料500mlを福島第二に運搬し、Ge半導体検出器で測定

測定時間: 1,000秒

核種	3月21日 14:30			3月22日 6:30			3月23日 8:50			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	
Co-58	5.955E-02	3.349E-02	0.1	N.D	2.138E-02	-	5.0E-02	2.6E-02	0.1	1E+00
I-131	5.066E+00	4.245E-02	126.7	1.190E+00	2.293E-02	29.8	5.9E+00	3.6E-02	146.9	4E-02
I-132	2.136E+00	1.925E-01	0.7	1.362E+00	7.721E-02	0.5	5.4E+00	1.4E-01	1.8	3E+00
Cs-134	1.486E+00	4.030E-02	24.8	1.504E-01	1.769E-02	2.5	2.5E-01	2.7E-02	4.2	6E-02
Cs-136	2.132E-01	2.358E-02	0.7	2.350E-02	1.056E-02	0.1	2.5E-02	2.4E-02	0.1	3E-01
Cs-137	1.484E+00	4.204E-02	16.5	1.535E-01	1.626E-02	1.7	2.5E-01	2.7E-02	2.8	9E-02
Zr-95							2.3E-01	7.8E-02	0.3	9E-01
Ru-105							8.7E-01	6.2E-01	0.3	3E+00
Ru-106							3.7E-01	2.0E-01	3.7	1E-01
Te-129							4.0E+00	3.9E+00	0.4	1E+01
Te-132							4.0E-01	3.6E-02	2.0	2E-01
La-140							1.3E-02	1.0E-02	0.0	4E-01

核種	3月24日 10:25			3月25日 8:30			3月26日 8:20			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/③)	
Co-60				5.9E-02	2.0E-02	0.3				2.0E-01
Mo-99				2.1E-01	1.7E-01	0.2				1.0E+00
I-131	4.2E+00	2.3E-02	103.9	5.0E+01	6.2E-02	1250.8	3.0E+01	4.0E-02	750.0	4.0E-02
I-132	1.7E+00	4.3E-01	0.6	3.3E+00	7.7E-02	1.1	2.0E+00	6.3E-02	0.7	3.0E+00
Cs-134	4.5E-01	1.7E-02	7.4	7.0E+00	3.9E-02	117.3	4.7E+00	3.1E-02	78.3	6.0E-02
Cs-136	6.1E-02	1.7E-02	0.2	8.0E-01	3.9E-02	2.7	5.2E-01	3.1E-02	1.7	3.0E-01
Cs-137	4.4E-01	1.5E-02	4.9	7.2E+00	3.5E-02	79.6	4.8E+00	2.7E-02	53.3	9.0E-02
Tc-99m							6.8E-02	4.4E-02	0.0	4.0E+01
Te-132	8.0E-02	2.1E-02	0.4	2.2E-01	4.0E-02	1.1				2.0E-01
Ba-140				1.2E+00	1.5E-01	3.9	7.7E-01	1.2E-01	2.6	3.0E-01
La-140	2.1E-02	1.2E-02	0.1	5.8E-01	1.3E-02	1.4	3.5E-01	1.0E-02	0.9	4.0E-01

核種	3月26日 14:30 1F南放水口付近(1~4u放水口から南側約330m地点)			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限 度に対する 割合 (①/②)	
Co-58	7.3E-02	4.7E-02	0.1	1.0E+00
Co-60				2.0E-01
Mo-99				1.0E+00
I-131	7.4E+01	6.5E-02	1850.5	4.0E-02
I-132	3.8E+00	7.4E-02	1.3	3.0E+00
Cs-134	1.2E+01	4.9E-02	196.7	6.0E-02
Cs-136	1.3E+00	5.2E-02	4.2	3.0E-01
Cs-137	1.2E+01	4.9E-02	133.4	9.0E-02
Tc-99m	1.2E-01	6.0E-02	0.0	4.0E+01
Te-129	3.0E+00	2.5E+00	0.3	1.0E+01
Te-129m	1.3E+00	1.0E+00	4.3	3.0E-01
Te-132	1.0E+00	5.2E-02	5.2	2.0E-01
Ba-140	1.8E+00	2.0E-01	6.0	3.0E-01
La-140	8.7E-01	1.6E-01	2.2	4.0E-01

採取場所: 1F 5~6放水口北側(5~6u放水口から北側約30m地点)
 採取方法: 海水を汲みあげ採取
 測定方法: 試料500mlを福島第二に運搬し、Ge半導体検出器で測定
 測定時間: 1,000秒

核種	3月23日 9:10			3月24日 10:40			3月25日 8:50			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	1F 5~6放水口北側(5~6u放水口から北側約30m地点)			1F 5~6放水口北側(5~6u放水口から北側約30m地点)			1F 5~6放水口北側(5~6u放水口から北側約30m地点)			
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	
Co-58	5.7E-02	3.1E-02	0.1							1E+00
I-131	2.7E+00	2.5E-02	66.6	9.5E-01	1.3E-02	23.7	1.1E+01	2.3E-02	283.8	4E-02
I-132	2.9E+00	7.7E-02	1.0	4.5E-01	2.1E-01	0.2	1.9E-01	4.1E-02	0.1	3E+00
Cs-134	1.8E+00	2.4E-02	29.9	1.1E-01	9.2E-03	1.8	1.7E+00	1.9E-02	28.0	6E-02
Cs-136	2.3E-01	2.5E-02	0.8	1.1E-02	6.5E-03	0.0	2.0E-01	1.7E-02	0.7	3E-01
Cs-137	1.9E+00	2.4E-02	21.4	1.1E-01	8.7E-03	1.2	1.7E+00	1.8E-02	18.5	9E-02
Tc-99m	8.3E-02	2.5E-02	0.0				3.4E-02	2.5E-02	0.0	4E+01
Te-129	7.3E+00	3.8E+00	0.7							1E+01
Te-129m	1.3E+00	6.1E-01	4.2							3E-01
Te-132	1.6E+00	2.1E-02	7.8	1.4E-01	1.0E-02	0.7	1.3E-01	2.1E-02	0.6	2E-01
Ba-140	1.3E-01	9.4E-02	0.4				2.8E-01	7.2E-02	0.9	3E-01
La-140	5.5E-02	1.2E-02	0.1				1.3E-01	6.8E-03	0.3	4E-01

核種	3月26日 8:40			3月26日 14:50			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	1F 5~6放水口北側(5~6u放水口から北側約30m地点)			1F 5~6放水口北側(5~6u放水口から北側約30m地点)			
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	
Co-58							1.0E+00
I-131	2.9E+01	3.6E-02	725.0	1.3E+01	3.7E-02	314.3	4.0E-02
I-132	1.1E-01	5.7E-02	0.0	3.2E-01	5.9E-02	0.1	3.0E+00
I-135	1.0E+00	2.6E-01	1.3				8.0E-01
Cs-134	5.0E+00	3.1E-02	83.3	2.2E+00	3.0E-02	36.3	6.0E-02
Cs-136	5.4E-01	2.9E-02	1.8	2.5E-01	3.0E-02	0.8	3.0E-01
Cs-137	5.1E+00	2.6E-02	56.7	2.2E+00	2.9E-02	24.2	9.0E-02
Tc-99m							4.0E+01
Te-129							1.0E+01
Te-129m							3.0E-01
Te-132				6.7E-02	3.6E-02	0.3	2.0E-01
Ba-140	8.6E-01	1.2E-01	2.9	3.4E-01	1.0E-01	1.1	3.0E-01
La-140	3.2E-01	8.3E-03	0.8	1.5E-01	7.8E-03	0.4	4.0E-01

東京電力福島第二原子力発電所敷地内の核種分析結果

採取場所:2F北放水口付近(3,4号放水口付近)(1Fから約10km)

採取方法:海水をくみ上げ採取

測定方法:試料500mlをGe半導体検出器で測定

測定時間:1,000秒

核種	3月21日 23:15			3月22日 14:28			3月23日 13:51			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	
Te-132										3.0E+00
Co-58	5.704E-03	7.570E-03	0.0	N.D	1.526E-02	-				1.0E+00
Ru-105							3.4E-02	2.5E-02	0.01	3E+00
Ru-106										1E-01
I-131	1.085E+00	1.284E-02	27.1	1.138E+00	1.993E-02	28.5	7.4E-01	2.7E-02	18.6	4.0E-02
I-132	1.597E-01	4.392E-02	0.1	N.D	8.791E-02	-	2.0E-01	5.8E-02	0.1	3.0E+00
Cs-134	4.815E-02	9.213E-03	0.8	4.631E-02	1.350E-02	0.8	5.1E-02	2.0E-02	0.8	6.0E-02
Cs-136	6.682E-03	4.722E-03	0.0	N.D	7.849E-03	-				3.0E-01
Cs-137	5.283E-02	8.822E-03	0.6	3.962E-02	1.406E-02	0.4	5.5E-02	2.0E-02	0.6	9.0E-02

核種	3月24日 9:30			3月25日 10:00			3月26日 15:15			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	
Te-132				1.3E-02	7.4E-03	0.004				3.0E+00
Co-58										1E+00
Ru-105	5.6E-02	4.4E-02	0.02							3E+00
Ru-106										1E-01
I-131	1.1E+00	5.2E-02	28.4	4.3E-01	1.0E-02	10.7	4.1E-01	2.1E-02	10.3	4E-02
I-132	1.2E-01	8.8E-02	0.04	5.8E-02	2.2E-02	0.02				3E+00
Cs-134	9.9E-02	3.8E-02	1.6	2.6E-02	7.4E-03	0.4	2.6E-02	1.8E-02	0.4	6E-02
Cs-136	6.8E-02	4.9E-02	0.2	4.4E-03	3.2E-03	0.01	2.7E-02	1.9E-02	0.3	3E-01
Cs-137	9.4E-02	4.1E-02	1.0	3.4E-02	5.9E-03	0.4				9E-02

※ 0.0E-0とは、0.0×10-0と同じ意味である。

採取場所: 2F岩沢海岸付近(1,2号放水口から南側に約7,000m地点)

採取方法: 海水をくみ上げ採取

測定方法: 試料500mlをGe半導体検出器で測定

測定時間: 1,000秒

検出核種 (半減期)	3月21日 23:45			3月22日 15:06			3月23日 14:25			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	
Te-132										3.0E+00
Co-58	N.D	6.845E-03	-	N.D	1.301E-02					1.E+00
Ru-105							3.3E-02	2.8E-02	0.01	3.0E+00
Ru-106							1.2E-01	1.2E-01	1.25	1E-01
I-131	6.558E-01	1.226E-02	16.4	6.664E-01	1.862E-02	16.7	7.6E-01	2.7E-02	19.1	4.0E-02
I-132	1.205E-01	4.146E-02	0.0	N.D	7.915E-02		3.3E-01	5.3E-02	0.1	3.0E+00
Cs-134	3.110E-02	8.657E-03	0.5	3.925E-02	1.135E-02	0.7	3.3E-02	2.1E-02	0.5	6.0E-02
Cs-136	5.474E-03	4.840E-03	0.0	N.D	6.784E-03					3.0E-01
Cs-137	3.292E-02	8.303E-03	0.4	4.361E-02	1.129E-02	0.5	4.3E-02	2.1E-02	0.5	9.0E-02

核種	3月24日 8:45			3月25日 9:10			3月26日 15:50			③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	
Te-132										3.0E+00
Co-58										1.E+00
Ru-105										3.0E+00
Ru-106										1E-01
I-131	5.0E-01	1.0E-02	12.6	3.7E-01	1.0E-02	9.2	3.0E-01	9.6E-03	7.6	4.0E-02
I-132	N.D	1.9E-02	-	1.2E-01	2.6E-02	0.04				3.0E+00
Cs-134	3.5E-02	7.0E-03	0.6	2.0E-02	6.7E-03	0.3	1.3E-02	7.1E-03	0.2	6.0E-02
Cs-136	5.3E-03	5.1E-03	0.02	4.2E-03	3.3E-03	0.01				3.0E-01
Cs-137	3.8E-02	7.0E-03	0.4	2.2E-02	6.0E-03	0.2	1.4E-02	6.8E-03	0.2	9.0E-02

※ 0.0E-0とは、0.0×10⁻⁰と同じ意味である。

採取場所: 2F富岡川河口付近(3.4u放水口から北側約2,000m地点)(IFから約8km)

採取方法: 海水をくみ上げ採取

測定方法: 試料500mlをGe半導体検出器で測定

測定時間: 1,000秒

検出核種 (半減期)	3月22日 0:38									③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	
Te-132										3.0E+00
Co-58	1.028E-02	1.253E-02	0.0							1.E+00
Ru-105										3.0E+00
Ru-106										1E-01
I-131	3.211E+00	1.694E-02	80.3							4.0E-02
I-132	8.761E-01	4.236E-02	0.3							3.0E+00
Cs-134	7.535E-02	1.102E-02	1.3							6.0E-02
Cs-136	1.159E-02	7.718E-03	0.0							3.0E-01
Cs-137	7.760E-02	1.186E-02	0.9							9.0E-02

核種										③周辺監視区 域外の水中の 濃度限度 (Bq/cm ³)
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する 割合 (①/③)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	水中濃度限度 に対する割合 (①/③)	
Te-132										3.0E+00
Co-58										1.E+00
Ru-105										3.0E+00
Ru-106										1E-01
I-131										4.0E-02
I-132										3.0E+00
Cs-134										6.0E-02
Cs-136										3.0E-01
Cs-137										9.0E-02

※ 0.0E-0とは、0.0×10-0と同じ意味である。

福島第一原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第一 事務本館北側		
	日時	3月19日	3月20日	3月21日
		11:53~12:13(放水前)	1:41~2:01	10:19~10:39
	採取方法	モニタリングカーにてダスト採取		
風向・風速	W 4.7m/s (11:50現在)	SW 2.1m/s (1:40現在)	NW 2.6m (10:10現在)	
試料測定	日時	3/19 14:12~	3/21 13:28~	3/21 13:48~
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3月19日 採取分			3月20日 採取分			3月21日 採取分			③放射線業務従事者の呼吸する空气中の濃度限度 (Bq/cm ³)※
		①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)	
揮発性	I-131	5.9E-03	3.4E-05	5.94	2.3E-03	1.3E-05	2.30	1.5E-03	1.1E-05	1.52	1.0E-03
	I-132	2.2E-03	8.8E-05	0.03	ND	-	-	2.5E-04	2.7E-05	0.004	7.0E-02
	I-133	3.8E-05	2.9E-05	0.01	ND	-	-	ND	-	-	5.0E-03
	Cs-134	ND	-	-	4.0E-05	8.3E-06	0.02	3.1E-05	8.6E-06	0.016	2.0E-03
	Cs-137	ND	-	-	3.9E-05	8.4E-06	0.01	3.6E-05	7.9E-06	0.01	3.0E-03
粒子状	Co-58	ND	-	-	ND	-	-	ND	-	-	1.0E-02
	I-131	1.1E-03	1.6E-05	1.07	1.3E-03	6.8E-06	1.29	9.2E-06	5.0E-06	0.01	1.0E-03
	I-132	3.8E-04	5.0E-05	0.01	ND	-	-	1.1E-04	1.2E-05	0.00	7.0E-02
	Cs-134	2.2E-05	1.7E-05	0.01	2.8E-05	4.8E-06	0.01	3.4E-05	5.4E-06	0.02	2.0E-03
	Cs-136	ND	-	-	5.6E-06	5.4E-06	0.001	4.5E-06	3.3E-06	0.0005	1.0E-02
	Cs-137	2.4E-05	1.8E-05	0.01	2.9E-05	5.0E-06	0.01	3.8E-05	4.7E-06	0.01	3.0E-03
その他の検出核種	Ru-106	2.1E-04	2.1E-04	0.36	3.8E-05	3.4E-05	0.06	ND	-	-	6.0E-04
	Te-129	ND	-	-	ND	-	-	1.3E-03	3.8E-04	0.00	4.0E-01
	Te-129m	ND	-	-	1.4E-04	1.2E-04	0.03	ND	-	-	4.0E-03
	Te-132	6.7E-05	1.8E-05	0.01	5.1E-04	6.0E-06	0.07	3.9E-04	4.3E-06	0.06	7.0E-03
	Ce-144	ND	-	-	5.0E-03	4.6E-04	7.08	ND	-	-	7.0E-04

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0×10⁻⁰と同じ意味である。

福島第一原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第一 正門		
	日時	3/22 1:10~1:30	3/23 2:1~2:21	3/24 5:27~5:47
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	W 0.5m/s (1:10現在)	N 3.2m/s(2:00現在)	ESE 0.8m/s (5:30現在)
試料測定	日時	3/22 14:50~	3/23 14:54~	3/24 22:03~
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3/22採取分			3/23採取分			3/24採取分			③放射線業務従事者の呼吸する空气中の濃度限度 (Bq/cm3)※
		①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm3)	②検出限界濃度 (Bq/cm3)	空气中濃度限度に対する割合(①/②)	
揮発性	Co-58	ND	-	-	ND	-	-	ND	-	-	1.0E-02
	I-131	2.2E-03	1.6E-05	2.24	6.7E-04	9.6E-06	0.67	1.5E-03	1.0E-05	1.49	1.0E-03
	I-132	ND	-	-	ND	-	-	ND	-	-	7.0E-02
	I-133	ND	-	-	ND	-	-	ND	-	-	5.0E-03
	Cs-134	1.1E-05	1.1E-05	0.01	2.2E-05	7.6E-06	0.01	3.2E-05	7.9E-06	0.02	2.0E-03
	Cs-137	1.3E-05	1.0E-05	0.00	2.3E-05	7.6E-06	0.01	3.1E-05	7.3E-06	0.01	3.0E-03
粒子状	Co-58	ND	-	-	5.1E-06	5.1E-06	0.00	ND	-	-	1.0E-02
	I-131	4.7E-04	7.4E-06	0.47	4.3E-04	5.0E-06	0.43	5.0E-04	4.8E-06	0.50	1.0E-03
	I-132	ND	-	-	ND	-	-	ND	-	-	7.0E-02
	Cs-134	1.6E-05	5.9E-06	0.01	1.7E-05	4.2E-06	0.01	1.1E-05	4.6E-06	0.01	2.0E-03
	Cs-136	ND	-	-	3.0E-06	2.7E-06	0.00	ND	-	-	1.0E-02
	Cs-137	1.9E-05	5.3E-06	0.01	1.3E-05	4.2E-06	0.00	1.2E-05	3.8E-06	0.00	3.0E-03
その他の検出核種	Zr-95	ND	-	-	ND	-	-	2.5E-05	6.0E-06	0.00	8.0E-02
	Te-129	ND	-	-	2.3E-01	1.2E-01	0.58	4.6E+00	9.5E-01	11.39	4.0E-01
	Te-129m	ND	-	-	ND	-	-	3.4E-04	9.9E-05	0.08	4.0E-03
	Te-132	6.7E-05	1.1E-05	0.01	4.3E-04	4.5E-06	0.06	3.6E-04	4.4E-04	0.05	7.0E-03
	Ce-144	ND	-	-	1.3E-03	3.7E-04	1.89	ND	-	-	7.0E-04

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0×10⁰と同じ意味である。

福島第一原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第一 正門		
	日時	3/25 2:01~2:21	3/26 2:00~2:20	
	採取方法	モニタリングカーにてダスト採取		
	風向・風速	ESE 0.8m/s (5:30現在)	NNW 2.9m/s (2:20現在)	
試料測定	日時	3/25 13:38~	3/26 12:24~	
	測定方法	試料を2Fに持ち込みGe半導体型核種分析装置にて分析		
	測定時間	500s		

2. 結果

	核種	3/25採取分			3/26採取分						②放射線業務従事者の呼吸する空气中の濃度限度(Bq/cm ³)※
		①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)				
揮発性	Co-58	ND	-	-	ND	-	-				1.0E-02
	I-131	8.8E-04	2.1E-05	0.88	3.0E-04	7.9E-06	0.30				1.0E-03
	I-132	ND	-	-	ND	-	-				7.0E-02
	I-133	ND	-	-	ND	-	-				5.0E-03
	Cs-134	3.2E-05	1.7E-05	0.02	1.2E-05	7.2E-06	0.01				2.0E-03
	Cs-136	ND	-	-	6.2E-06	3.7E-06	0.00				1.0E-02
	Cs-137	2.4E-05	1.8E-05	0.01	8.8E-06	6.9E-06	0.00				3.0E-03
粒子状	Co-58	ND	-	-	ND	-	-				1.0E-02
	I-131	3.2E-04	1.1E-05	0.32	2.6E-04	1.1E-05	0.26				1.0E-03
	I-132	ND	-	-	ND	-	-				7.0E-02
	Cs-134	1.6E-05	9.5E-06	0.01	1.8E-05	9.8E-06	0.01				2.0E-03
	Cs-136	ND	-	-	ND	-	-				1.0E-02
	Cs-137	1.6E-05	9.2E-06	0.01	1.6E-05	1.0E-05	0.01				3.0E-03
その他の検出核種	Zr-95	ND	-	-	ND	-	-				8.0E-02
	Ru-105	3.1E-04	4.4E-05	0.00	6.0E-05	3.9E-05	0.00				8.0E-02
	Te-129	ND	-	-	5.2E-02	3.4E-02	0.13				4.0E-01
	Te-129m	ND	-	-	ND	-	-				4.0E-03
	Te-132	8.2E-05	1.0E-05	0.01	1.6E-04	6.0E-06	0.02				7.0E-03

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0×10⁻⁰と同じ意味である。

福島第二原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1
	日時	3月19日	3月19日	3月20日	3月20日
		9:15~9:25	18:18~18:28	11:27~11:37	17:10~17:20
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
風向・風速	-	-	-	-	
試料測定	日時	3/19 10:39~	3/19 19:08~	3/20 16:17~	3/20 21:11~
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	1000s	1000s	500s	500s

2. 結果

核種	3月19日 採取分①			3月19日 採取分②			3月20日 採取分①			3月20日 採取分②			③放射線業務従事者の呼吸する空气中の濃度限度(Bq/cm ³)※	
	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度 (Bq/cm ³)	②検出限界濃度 (Bq/cm ³)	空气中濃度限度に対する割合(①/②)		
揮発性	I-131	2.7E-04	5.6E-05	0.27	2.5E-04	5.7E-05	0.25	5.3E-05	1.2E-05	0.05	2.2E-04	4.3E-05	0.22	1.0E-03
	I-132	2.4E-04	1.7E-04	0.00	1.2E-04	1.2E-04	0.00	ND	-	-	2.6E-04	2.5E-04	0.00	7.0E-02
	I-133	ND	-	-	5.0E-03									
	Cs-134	6.3E-05	5.9E-05	1.06	ND	-	-	ND	-	-	ND	-	-	2.0E-03
	Cs-136	ND	-	-	1.7E-04	1.6E-04	0.02	ND	-	-	ND	-	-	1.0E-02
粒子状	Co-58	ND	-	-	1.0E-02									
	I-131	1.4E-04	3.1E-05	0.14	1.3E-04	3.1E-05	0.13	2.6E-05	6.0E-06	0.03	ND	-	-	1.0E-03
	I-132	1.2E-04	9.0E-05	0.00	ND	-	-	ND	-	-	1.8E-03	8.9E-04	0.03	7.0E-02
	I-133	ND	-	-	2.4E-04	2.2E-04	0.05	ND	-	-	ND	-	-	5.0E-03
	Cs-134	ND	-	-	2.0E-03									
	Cs-136	ND	-	-	1.0E-02									
	Cs-137	ND	-	-	3.0E-03									
その他核種	Ru-105	ND	-	-	2.1E-04	2.0E-04	0.00	ND	-	-	ND	-	-	8.0E-02
	Te-132	ND	-	-	ND	-	-	4.2E-06	3.4E-06	0.00	ND	-	-	7.0E-03

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0x10⁰と同じ意味である。

福島第二原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1
	日時	3月21日	3月21日	3月22日	3月22日
		10:40~10:50	18:11~18:19	10:02~10:10	16:43~16:51
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
風向・風速	-	-	-	-	
試料測定	日時	3/21 12:15~	3/21 19:00~	3/22 11:53~	3/22 17:32~
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	500s	500s	500s	500s

2. 結果

核種	3月21日 採取分①			3月21日 採取分②			3/22採取分①			3/22採取分②			③放射線業務従事者の呼吸する空气中の濃度限度(Bq/cm ³)※	
	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)		
揮発性	Co-58	ND	-	-	2.9E-05	2.1E-05	0.00	ND	-	-	ND	-	-	4.0E-01
	I-131	2.3E-04	1.7E-05	0.23	1.6E-04	1.9E-05	0.16	1.416E-04	2.272E-05	0.14	1.349E-04	2.216E-05	0.13	1.0E-03
	I-132	2.4E-04	2.4E-05	0.003	8.1E-04	1.9E-05	0.01	ND	-	-	ND	-	-	7.0E-02
	I-133	ND	-	-	5.0E-03									
	Cs-134	ND	-	-	1.7E-05	1.7E-05	0.01	2.646E-05	1.636E-05	0.01	1.865E-05	1.747E-05	0.01	2.0E-03
	Cs-137	1.8E-05	1.3E-05	0.01	ND	-	-	2.316E-05	1.739E-05	0.01	2.146E-05	1.731E-05	0.01	3.0E-03
粒子状	Co-58	ND	-	-	1.3E-05	9.9E-06	0.00	ND	-	-	ND	-	-	1.0E-02
	I-131	1.5E-04	9.6E-06	0.151	1.2E-04	1.0E-05	0.12	6.939E-05	1.155E-05	0.07	7.919E-05	1.190E-05	0.08	1.0E-03
	I-132	2.5E-04	1.3E-05	0.004	3.9E-04	1.6E-05	0.01	ND	-	-	4.153E-05	3.357E-05	0.00	7.0E-02
	Cs-134	4.4E-05	9.3E-06	0.02	3.0E-05	1.0E-05	0.02	1.293E-05	9.476E-06	0.01	1.353E-05	9.812E-06	0.01	2.0E-03
	Cs-136	ND	-	-	1.0E-02									
	Cs-137	4.7E-05	8.0E-06	0.02	3.3E-05	9.7E-06	0.01	1.024E-05	8.838E-06	0.00	1.369E-05	8.361E-06	0.00	3.0E-03
その他核種	Ru-105	ND	-	-	1.2E-04	8.6E-05	0.00	ND	-	-	ND	-	-	8.0E-02
	Ru-106	ND	-	-	1.4E-04	7.6E-05	0.24	ND	-	-	ND	-	-	6.0E-04
	Te-129	4.5E-04	2.9E-04	0.00	9.3E-04	2.2E-04	0.00	2.316E-03	1.784E-03	0.01	ND	-	-	4.0E-01
	Te-129m	6.4E-04	2.0E-04	0.16	ND	-	-	ND	-	-	ND	-	-	4.0E-03
	Te-132	7.6E-04	6.6E-04	0.11	1.4E-03	6.8E-06	0.21	2.191E-05	1.649E-05	0.00	ND	-	-	7.0E-03

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0×10⁰と同じ意味である。

福島第二原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1
	日時	3/23 9:40~9:48	3/23 16:06~16:14	3/24 9:47~9:55	3/24 17:46~17:54
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
	風向・風速	-	-	-	-
試料測定	日時	3/23 15:00~	3/23 17:38~	3/24 10:39~	3/25 0:40~
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	500s	500s	500s	500s

2. 結果

核種	3/23採取分①			3/23採取分②			3/24採取分①			3/24採取分②			③放射線業務従事者の呼吸する空气中の濃度限度(Bq/cm ³)※	
	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/②)		
揮発性	Co-58	ND	-	-	1.460E-05	1.353E-05	0.00	ND	-	-	ND	-	-	1.0E-02
	I-131	2.7E-04	3.9E-05	0.27	2.1E-04	1.4E-05	0.21	1.9E-04	1.5E-05	0.19	1.7E-04	1.4E-05	0.17	1.0E-03
	I-132	2.8E-04	2.2E-04	0.00	2.8E-04	2.8E-05	0.00	3.0E-04	2.5E-05	0.00	ND	-	-	7.0E-02
	I-133	ND	-	-	5.0E-03									
	Cs-134	4.3E-05	3.0E-05	0.02	2.3E-05	1.2E-05	0.01	2.8E-05	1.3E-05	0.01	1.6E-05	1.2E-05	0.01	2.0E-03
	Cs-137	ND	-	-	2.0E-05	1.3E-05	0.01	3.0E-05	1.2E-05	0.01	2.9E-05	1.1E-05	0.01	3.0E-03
粒子状	Co-58	ND	-	-	1.0E-02									
	I-131	1.5E-04	2.1E-05	0.15	8.2E-05	7.9E-06	0.08	1.1E-04	7.3E-06	0.11	6.4E-05	2.1E-05	0.06	1.0E-03
	I-132	ND	-	-	2.6E-04	1.5E-05	0.00	1.7E-04	1.0E-05	0.00	ND	-	-	7.0E-02
	Cs-134	ND	-	-	1.7E-05	8.5E-06	0.01	2.1E-05	6.7E-06	0.01	ND	-	-	2.0E-03
	Cs-136	ND	-	-	1.0E-02									
	Cs-137	ND	-	-	1.7E-05	6.9E-06	0.01	2.0E-05	6.6E-06	0.01	2.1E-05	1.7E-05	0.01	3.0E-03
その他の検出核種	Ru-106	ND	-	-	8.210E-05	5.694E-05	0.14	ND	-	-	ND	-	-	6.0E-04
	Te-129	ND	-	-	9.278E-04	2.649E-04	2.320E-03	7.6E-04	1.3E-04	1.894E-03	1.4E-02	9.5E-03	0.04	4.0E-01
	Te-129m	ND	-	-	ND	-	-	5.7E-04	1.7E-04	0.14	4.6E-04	2.8E-04	0.11	4.0E-03
	Te-132	1.5E-04	2.2E-05	0.02	7.064E-04	6.527E-06	1.009E-01	5.6E-04	5.7E-06	0.08	3.5E-04	1.1E-05	0.05	7.0E-03

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0×10⁻⁰と同じ意味である。

福島第二原子力発電所敷地内における空气中放射性物質の核種分析結果について

1. 採取・測定条件

試料採取	場所	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1	福島第二 MP-1
	日時	3/25 9:41~9:48	3/25 17:32~17:40	3/26 10:52~10:59	3/26 16:22~16:29
	採取方法	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取	モニタリングカーにてダスト採取
	風向・風速	-	-	-	-
試料測定	日時	2011/3/26 12:20~	2011/3/26 12:33~	2011/3/26 12:35~	2011/3/26 19:19~
	測定方法	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析	Ge半導体型核種分析装置にて分析
	測定時間	500s	500s	500s	500s

2. 結果

核種	3/25採取分①			3/25採取分②			3/26採取分①			3/26採取分②			③放射線業務従事者の呼吸する空气中の濃度限度(Bq/cm ³)※	
	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/③)	①放射能濃度(Bq/cm ³)	②検出限界濃度(Bq/cm ³)	空气中濃度限度に対する割合(①/③)		
揮発性	Co-58	ND	-	-	1.0E-02									
	I-131	2.1E-04	3.2E-05	0.21	1.7E-04	1.3E-05	0.17	1.0E-04	1.3E-05	0.10	1.6E-04	3.4E-05	0.16	1.0E-03
	I-132	1.6E-04	1.0E-04	0.00	2.2E-04	2.0E-05	0.00	1.6E-04	2.4E-05	0.00	ND	-	-	7.0E-02
	I-133	ND	-	-	5.0E-03									
	Cs-134	6.9E-05	3.2E-05	0.03	2.6E-05	1.2E-05	0.01	1.3E-05	1.3E-05	0.01	ND	-	-	2.0E-03
	Cs-137	ND	-	-	3.5E-05	1.1E-05	0.01	1.6E-05	1.0E-05	0.01	ND	-	-	3.0E-03
粒子状	Co-58	ND	-	-	1.0E-02									
	I-131	1.0E-04	1.6E-05	0.10	6.8E-05	7.0E-06	0.07	8.4E-05	1.7E-05	0.08	8.8E-04	1.7E-04	0.88	1.0E-03
	I-132	6.0E-05	5.0E-05	0.00	1.1E-04	1.2E-05	0.00	ND	-	-	ND	-	-	7.0E-02
	Cs-134	ND	-	-	1.0E-05	6.1E-06	0.01	1.8E-05	1.6E-05	0.01	1.8E-04	1.6E-04	0.09	2.0E-03
	Cs-136	ND	-	-	1.0E-02									
	Cs-137	ND	-	-	1.1E-05	5.8E-06	0.00	1.7E-05	1.6E-05	0.01	2.1E-04	1.6E-04	0.07	3.0E-03
その他の検出核種	Ru-105	ND	-	-	7.3E-05	5.3E-05	0.00	ND	-	-	ND	-	-	8.0E-02
	Ru-106	ND	-	-	6.0E-04									
	Te-129	ND	-	-	5.7E-04	1.5E-04	0.00	5.9E-04	3.4E-04	1.475E-03	ND	-	-	4.0E-01
	Te-129m	ND	-	-	4.4E-04	1.3E-04	0.11	4.1E-04	2.4E-04	1.025E-01	ND	-	-	4.0E-03
	Te-132	1.1E-04	1.6E-05	0.02	3.9E-04	4.8E-06	0.06	2.3E-04	8.4E-06	0.03	3.5E-04	3.0E-05	0.05	7.0E-03

※ 人が呼吸する空气中の放射性核種の3ヶ月間についての平均濃度に対して、法令にて定められている濃度限度。

※ 0.0E-0とは、0.0×10⁻⁰と同じ意味である。

号考

H23. 3. 27

福島第一 各号機T/B建屋地下階溜まり水の測定結果について

核種 (半減期)	放射性物質濃度 (Bq/cm ³)			
	1号機 (2回目) 3/26 試料採取	2号機 3/26 試料採取	3号機 (2回目) 3/26 試料採取	4号機 3/24 試料採取
	水表面線量率 60mSv/h	水表面線量率 >1,000mSv/h	水表面線量率 750mSv/h	水表面線量率 0.50mSv/h
Co-56 (約77日)	検出限界未満	1.6×10 ⁵	検出限界未満	検出限界未満
Co-58 (約71日)	検出限界未満	検出限界未満	検出限界未満	2.7×10 ¹
Co-60 (約5年)	検出限界未満	検出限界未満	2.7×10 ²	検出限界未満
Mo-99 (約66時間)	検出限界未満	検出限界未満	検出限界未満	1.0×10 ⁰
Tc-99m (約6時間)	検出限界未満	8.7×10 ⁴	2.2×10 ³	6.5×10 ¹
Ru-106 (約370日)	検出限界未満	検出限界未満	検出限界未満	3.3×10 ⁰
Ag-108m (約418年)	検出限界未満	2.5×10 ⁵	検出限界未満	検出限界未満
Te-129 (約70分)	検出限界未満	検出限界未満	検出限界未満	2.6×10 ¹
Te-129m (約34日)	検出限界未満	検出限界未満	検出限界未満	1.3×10 ¹
Te-132 (約3日)	検出限界未満	検出限界未満	検出限界未満	1.4×10 ¹
I-131 (約8日)	1.5×10 ⁵	1.3×10 ⁷	3.2×10 ⁵	3.6×10 ²
I-132 (約2時間)	検出限界未満	検出限界未満	検出限界未満	1.3×10 ¹
I-134 (約53分)	検出限界未満	2.9×10 ⁹	検出限界未満	検出限界未満
Cs-134 (約2年)	1.2×10 ⁵	2.3×10 ⁶	5.5×10 ⁴	3.1×10 ¹
Cs-136 (約13日)	1.1×10 ⁴	2.5×10 ⁵	6.5×10 ³	3.7×10 ⁰
Cs-137 (約30年)	1.3×10 ⁵	2.3×10 ⁶	5.6×10 ⁴	3.2×10 ¹
Ba-140 (約13日)	検出限界未満	4.9×10 ⁵	1.9×10 ⁴	検出限界未満
La-140 (約2日)	検出限界未満	1.9×10 ⁵	3.1×10 ³	7.4×10 ¹

以上

From: LIA02 Hoc
Sent: Sunday, March 27, 2011 2:58 PM
To: LIA10 Hoc
Subject: is there new info here for translation? thanks!
Attachments: NISA_METI_News_Release_No57 (Japanese)[1].pdf

平成23年3月27日

原子力安全・保安院

地震被害情報（第57報） （3月27日15時30分現在）

原子力安全・保安院が現時点で把握している東京電力(株)福島第一原子力発電所、福島第二原子力発電所、東北電力(株)女川原子力発電所、日本原子力発電(株)東海第二、電気、ガス、熱供給、コンビナート被害の状況は、以下のとおりです。

前回からの変更点は以下のとおり。

1. 原子力発電所関係

○福島第一原子力発電所

- ・3号機について、コンクリートポンプ車（50t/h）が放水
（27日12:34～14:36）
- ・南放水口付近の海水核種分析の結果、 ^{131}I （ヨウ素）が $7.4 \times 10^1 \text{Bq/cm}^3$
（周辺監視区域外の水中濃度限度の 1850.5 倍）検出された。（26日14:30）

2. 産業保安関係

別紙参照

(別紙)

1 発電所の運転状況【自動停止号機数：10基】

○東京電力(株)福島第一原子力発電所（福島県双葉郡大熊町及び双葉町）

(1) 運転状況

- 1号機（46万kW）（自動停止）
- 2号機（78万4千kW）（自動停止）
- 3号機（78万4千kW）（自動停止）
- 4号機（78万4千kW）（定検により停止中）
- 5号機（78万4千kW）（定検により停止中、20日14:30冷温停止）
- 6号機（110万kW）（定検により停止中、20日19:27冷温停止）

(2) モニタリングの状況

別添参照

(3) 主なプラントパラメーター（27日14:00現在）

	1号機	2号機	3号機	4号機	5号機	6号機
原子炉圧力*1 [MPa]	0.475(A) 0.517(B)	0.083(A) 0.081(B)	0.133(A) 0.002(C)	—	0.108	0.106
原子炉格納容器圧力 (D/W) [kPa]	270	110	107.6	—	—	—
原子炉水位*2 [mm]	-1650(A) -1600(B)	-1200(A) 不明(B)	-1900(A) -2300(B)	—	1930	2035
原子炉格納容器内 S/C水温 [°C]	—	—	—	—	—	—
原子炉格納容器内 S/C圧力 [kPa]	270	D/S (調査中)	180.6	—	—	—
使用済燃料プール 水温度 [°C]	—	67	—	指示不良	37.8	21.0
備考	3/27 9:00 現在の値	3/27 9:00 現在の値	3/27 10:10 現在の値	3/24 11:00 現在の値	3/27 14:00 現在の値	3/27 14:00 現在の値

* 1 : 絶対圧に換算

* 2 : 燃料頂部からの数値

(4) 各プラントの状況

< 1号機関係 >

- ・原子力災害対策特別措置法第15条（非常用炉心冷却装置注水不能）通報（11日 16:36）
- ・ベント操作（12日 10:17）
- ・1号機の原子炉圧力容器内に消火系ラインを用いて海水注入開始（12日 20:20）→14日 01:10 一時中断
- ・1号機で爆発音。（12日 15:36）
- ・消火系に加え、給水系を使うことにより炉心への注水量を増量（ $2\text{m}^3/\text{h}$ → $18\text{m}^3/\text{h}$ ）（23日 02:33）。その後、給水系のみに切替（約 $11\text{m}^3/\text{h}$ ）（23日 9:00）
- ・中央制御室の照明が復帰（24日 11:30）
- ・引き続き白煙の吐出確認（26日 8:00 現在）
- ・タービン建屋地下の溜まり水を測定した結果、主な核種として ^{131}I （ヨウ素）が $2.1 \times 10^5 \text{Bq}/\text{cm}^3$ 、 ^{137}Cs （セシウム）が $1.8 \times 10^6 \text{Bq}/\text{cm}^3$ 、検出された。
- ・原子炉圧力容器へ淡水注入中。（27日 15:30 現在）

< 2号機関係 >

- ・原子力災害対策特別措置法第15条（非常用炉心冷却装置注水不能）通報（11日 16:36）
- ・ベント操作（13日 11:00）
- ・3号機の建屋の爆発に伴い、原子炉建屋ブローアウトパネル開放（14日 11時過ぎ）
- ・原子炉圧力容器の水位が低下傾向（14日 13:18）。原子力災害対策特別措置法第15条事象（原子炉冷却機能喪失）である旨、受信（14日 13:49）
- ・原子炉圧力容器内に消火系ラインを用いて海水注入作業開始（14日 16:34）
- ・原子炉圧力容器の水位が低下傾向（14日 22:50）
- ・ベント操作（15日 0:02）
- ・2号機で爆発音するとともに、サプレッションプール（圧力抑制室）の圧力低下（15日 6:10）。同室に異常が発生したおそれ（15日 6:20頃）
- ・外部送電線から予備電源変電設備までの受電を完了し、そこから負荷側へのケーブル敷設を実施（19日 13:30 現在）
- ・使用済燃料プールに海水を 40 t 注入（冷却系配管に消防車のポンプを接続）（20日 15:05～17:20）
- ・2号機のパワーセンター受電（20日 15:46）

- ・白煙が発生（21日 18:22）
- ・白煙はほとんど見えない程度に減少（22日 7:11 現在）
- ・使用済燃料プールに海水を 18 t 注入（22日 16:07～17:01）
- ・使用済燃料プールに、使用済燃料プール冷却系を用いて海水を注入（25日 10:30～12:19）
- ・引き続き白煙の吐出確認（26日 8:00 現在）
- ・中央制御室の照明が復帰（26日 16:46）
- ・原子炉圧力容器へ淡水注入中（27日 15:30 現在）

< 3号機関係 >

- ・原子力災害対策特別措置法第 15 条（非常用炉心冷却装置注水不能）通報（13日 05:10）
- ・ベント操作（12日 20:41）
- ・ベント操作（13日 8:41）
- ・3号機の原子炉圧力容器内に消火系ラインから真水注入開始（13日 11:55）
- ・3号機の原子炉圧力容器内に消火系ラインから海水注入開始（13日 13:12）
- ・3号機及び1号機の注入をくみ上げ箇所の海水が少なくなったため停止（14日 1:10）
- ・3号機の海水注入を再開（14日 3:20）
- ・ベント操作（14日 5:20）
- ・3号機の格納容器圧力が異常上昇（14日 7:44）。原子力災害対策特別措置法第 15 条事象である旨、受信（14日 7:52）
- ・3号機で1号機と同様に原子炉建屋付近で爆発（14日 11:01）
- ・3号機から白い湯気のような煙が発生（16日 8:30 頃）
- ・3号機の格納容器が破損しているおそれがあるため、中央制御室（共用）から作業員退避（16日 10:45）。その後、作業員は中央制御室に復帰し、注水作業再開（16日 11:30）
- ・自衛隊ヘリにより3号機への海水の投下を4回実施（17日 9:48、9:52、9:58、10:01）
- ・警察庁機動隊が放水のため現場到着（17日 16:10）
- ・自衛隊消防車により放水（17日 19:35）。
- ・警察庁機動隊による放水（17日 19:05～19:13）
- ・自衛隊消防車5台が放水（17日 19:35、19:45、19:53、20:00、20:07）
- ・自衛隊消防車6台（6 t 放水／台）が放水（18日 14 時前～14:38）
- ・米軍消防車1台が放水（18日 14:45 終了）
- ・東京消防庁ハイパーレスキュー隊が放水（20日 3:40 終了）

- ・ 3号機の格納容器内圧力が上昇（20日 11:00 現在 320kPa）。圧力下げるための準備を進めていたが、直ちに放出を必要とする状況ではないと判断し、圧力監視を継続（21日 12:15 120 kPa）
- ・ ケーブル引き込みの現地調査（20日 11:00～16:00）
- ・ 東京消防庁ハイパーレスキュー隊が3号機の使用済燃料プールに放水（20日 21:30～21日 03:58）
- ・ 灰色がかかった煙が発生（21日 15:55 頃）
- ・ 煙が収まっていることを確認（21日 17:55）
- ・ 灰色がかかった煙は白みがかかった煙に変化し終息に向かっていると思われる（22日 7:11 現在）
- ・ 東京消防庁及び大阪市消防局が放水（約 180t）（22日 15:10～16:00）
- ・ 中央制御室の照明が復帰（22日 22:43）
- ・ 使用済燃料プールに使用済燃料プール冷却系から海水 35t 注入（23日 11:03～13:20）
- ・ 原子炉建屋からやや黒色がかかった煙が発生（23日 16:20 頃）。23日 23:30 頃及び 24日 4:50 頃に確認したところ止んでいる模様。
- ・ 使用済燃料プールに使用済燃料プール冷却系を用いて海水約 120 t を注入（24日 5:35 頃～16:05 頃）
- ・ 東京消防庁の支援を受けた川崎市消防局が放水（25日 13:28～16:00）
- ・ 引き続き白煙の吐出確認（26日 8:00 現在）
- ・ コンクリートポンプ車（50 t / h）が放水（27日 12:34～14:36）
- ・ 原子炉圧力容器へ淡水注入中。（27日 15:30 現在）

< 4号機関係 >

- ・ 原子炉圧力容器のシュラウド工事のため、原子炉圧力容器内に燃料はなし。
- ・ 使用済燃料プール水温度が上昇（3月 14日 4:08 時点 84℃）
- ・ 4号機のオペレーションエリアの壁が一部破損していることを確認（15日 6:14）。
- ・ 4号機で火災発生。（15日 9:38）事業者によると、自然に火が消えていることを確認（15日 11:00 頃）
- ・ 4号機で火災が発生（16日 5:45 頃）。事業者は現場での火災は確認できず（16日 6:15 頃）。
- ・ 自衛隊が使用済燃料プールへ放水（20日 9:43）
- ・ ケーブル引き込みの現地調査（20日 11:00～16:00）
- ・ 自衛隊が使用済燃料プールへ放水（20日 18:30 頃～19:46）
- ・ 自衛隊消防車 13台が使用済燃料プールに放水（21日 06:37～08:41）

- ・パワーセンターまでのケーブル敷設工事完了（21日 15:00頃）
- ・パワーセンター受電（22日 10:35）
- ・コンクリートポンプ車（50 t / h）が約 150 t 放水（22日 17:17～20:32）
- ・コンクリートポンプ車（50 t / h）が約 130 t 放水（23日 10:00～13:02）
- ・コンクリートポンプ車（50 t / h）が約 150 t 放水（24日 14:36～17:30）。
- ・コンクリートポンプ車（50 t / h）が約 150 t 放水（25日 19:05～22:07）
- ・使用済燃料プールに、使用済燃料プール冷却系を用いて海水を注入（25日 06:05～10:20）
- ・引き続き白煙の吐出確認（26日 08:00 現在）

< 5号機、6号機関係 >

- ・6号機の非常用ディーゼル発電機（D/G）1台目（B）は運転により電力供給。復水補給水系（MUWC）を用いて原子炉圧力容器及び使用済燃料プールへ注水。
- ・6号機の非常用ディーゼル発電機（D/G）2台目（A）起動。（19日 4:22）
- ・5号機の残留熱除去系（RHR）ポンプ（C）（19日 5:00）及び6号機の残留熱除去系（RHR）ポンプ（B）（19日 22:14）が起動し、除熱機能回復。使用済燃料プールを優先的に冷却（電源：6号の非常用ディーゼル発電機）（19日 5:00）
- ・5号機、冷温停止（20日 14:30）
- ・6号機、冷温停止（20日 19:27）
- ・5号機及び6号機、起動用変圧器まで受電（20日 19:52）
- ・5号機、電源を非常用ディーゼル発電機から外部電源に切り替え（21日 11:36）
- ・6号機、電源を非常用ディーゼル発電機から外部電源に切り替え（22日 19:17）
- ・5号機の仮設の残留熱除去海水系（RHRS）ポンプが、仮設から本設の電源への切り替えの際、自動停止（23日 17:24）。
- ・5号機の仮設のRHRSポンプの修理が完了（24日 16:14）し、冷却を再開（24日 16:35）。
- ・6号機の仮設の残留熱除去海水系（RHRS）ポンプが、仮設から本設の電源へ切り替え（25日 15:38、15:42）

< 使用済燃料共用プール >

- ・18日 6：00過ぎ、プールはほぼ満水であることを確認
- ・共用プールに注水（21日 10:37～15:30）
- ・電源供給を開始（24日 15:37）し、冷却を開始（24日 18:05）。

- ・ 27日8:00時点でのプール水温度は39°C程度

<その他>

- ・ 南放水口付近の海水核種分析の結果、 ^{131}I (ヨウ素) が $7.4 \times 10^1 \text{Bq/cm}^3$ 、
(周辺監視区域外の水中濃度限度の 1850.5倍) 検出された。(26日14:30)

○東京電力(株)福島第二原子力発電所 (福島県双葉郡楢葉町及び富岡町)

(1) 運転状況

- 1号機 (110万kW) (自動停止、14日17:00冷温停止)
- 2号機 (110万kW) (自動停止) 14日18:00冷温停止)
- 3号機 (110万kW) (自動停止、12日12:15冷温停止)
- 4号機 (110万kW) (自動停止、15日7:15冷温停止)

(2) モニタリングポスト等の指示値

別添参照

(3) 主なプラントパラメーター (27日14:00現在)

	単位	1号機	2号機	3号機	4号機
原子炉圧力* ¹	MPa	0.15	0.13	0.10	0.13
原子炉水温	°C	28.3	28.6	36.0	28.6
原子炉水位* ²	mm	9296	10296	7880	8785
原子炉格納容器内 サプレッションプール水温	°C	25	26	26	27
原子炉格納容器内 サプレッションプール圧力	kPa (abs)	107	107	103	104
備考		冷温停止中	冷温停止中	冷温停止中	冷温停止中

* 1 : 絶対圧に換算

* 2 : 燃料頂部からの数値

(4) その他異常等に関する報告

- ・ 1号機にて原子力災害対策特別措置法第10条通報 (11日18:08)
- ・ 1、2、4号機にて同法第10条通報 (11日18:33)
- ・ 1号機にて原子力災害対策特別措置法第15条事象 (圧力抑制機能喪失) 発生 (12日5:22)
- ・ 2号機にて原子力災害対策特別措置法第15条事象 (圧力抑制機能喪失) 発生 (12日5:32)
- ・ 4号機にて原子力災害対策特別措置法第15条事象 (圧力抑制機能喪失) 発生 (12日6:07)

○東北電力(株)女川原子力発電所（宮城県牡鹿郡女川町、石巻市）

（1）運転状況

- 1号機（52万4千kW）（自動停止、12日0:58冷温停止）
- 2号機（82万5千kW）（自動停止、地震時点で冷温停止）
- 3号機（82万5千kW）（自動停止、12日1:17冷温停止）

（2）モニタリングポスト等の指示値

MP2付近（敷地最北敷地境界）：

約0.98 μ Sv/h（25日16:00）→約0.86 μ Sv/h（26日16:00）

（3）その他異常に関する報告

- ・タービン建屋地下1階の発煙は消火確認（11日22:55）
- ・原子力災害対策特別措置法第10条通報（13日13:09）

2 産業保安

○電気（3月27日15:30現在）

・東北電力（3月27日13:00現在）

停電戸数：約19万戸（延べ停電戸数 約486万戸）

停電地域：青森県 三八の一部地域（約4百戸）

岩手県 一部地域（約3万5千戸）

宮城県 一部地域（約12万戸）

福島県 一部地域（約3万8千戸）

・東京電力

停電は3月19日01:00までに復旧済（延べ停電戸数 約405万戸）

・北海道電力

停電は3月12日14:00までに復旧済（延べ停電戸数 約3千戸）

・中部電力

停電は3月12日17:11に復旧済（延べ停電戸数 約4百戸）

[参考情報] 現在停止中の発電所（原子力発電所を除く）

・東京電力（27日09:00現在）※地震により停止中の発電所

広野火力発電所 2, 4号機

常陸那珂火力発電所 1号機

鹿島火力発電所 2, 3, 5, 6号機

・東北電力（27日13:00現在）

仙台火力発電所 4号機

新仙台火力発電所 1, 2号機

原町火力発電所 1, 2号機

○都市ガス（3月27日15:30現在）

- ・供給停止戸数^{*}約42万戸（延べ供給停止戸数 約50万戸）

^{*}供給停止戸数には、家屋倒壊等が確認された戸数を含む。

○一般ガス（3月27日15:30現在）

死亡事故：地震との関係も含め原因詳細調査中。

- ・盛岡ガス（盛岡市）死者1名、負傷者10名

14日08:00 デパートの地下での爆発

- ・東部ガス（いわき市）死者1名

12日11:30 一般住宅での漏えいガスに着火

北海道、山形県、秋田県においては、供給停止の報告はない。

各社の供給停止状況は以下の通り。（家屋倒壊等が確認された戸数は含まない。）

- ・仙台市営ガス 305,770 戸供給停止
- ・塩釜ガス（塩釜市）9,515 戸供給停止
- ・釜石ガス（釜石市）6,342 戸供給停止
- ・常磐共同ガス（いわき市）11,055 戸供給停止
- ・京葉ガス（浦安市）1,977 戸供給停止
- ・東北ガス（白河市）18 戸供給停止
- ・常磐都市ガス（いわき市）362 戸供給停止
- ・気仙沼市営ガス（気仙沼市）1,400 戸供給停止
- ・石巻ガス（石巻市）14,771 戸供給停止

○簡易ガス（3月27日15:30現在）（家屋倒壊等が確認された戸数は含まない。）

各社の供給停止状況は以下の通り。

- ・宮城ガス（仙台市）2,058 戸供給停止
（黒川郡富谷町）2,318 戸供給停止
- ・岩沼市農業協同組合（岩沼市）753 戸供給停止
- ・釜石瓦斯（釜石市）1,134 戸供給停止
- ・仙台市ガス局（岩沼市）342 戸供給停止
- ・仙台プロパン（亶理郡山元町）360 戸供給停止
- ・仙南ガス（白石市）409 戸供給停止
（岩沼市）252 戸供給停止
（柴田郡柴田町）1,806 戸供給停止
- ・カメイ（東松島市矢本町）243 戸供給停止
- ・いわきガス（いわき市）594 戸供給停止

- ・相馬ガス（相馬市）143 戸供給停止
- ・三重商会（大船渡市）81 戸供給停止
- ・八木又商店（大船渡市）105 戸供給停止
- ・名取岩沼農業協同組合（岩沼市）586 戸供給停止
（名取市）105 戸供給停止
- ・ガス&ライフ（東松島市）498 戸供給停止
- ・仙台エルピーガス（仙台市）3,594 戸供給停止

○熱供給（3月27日 15:30 現在）

- ・小名浜配湯（いわき市小名浜）供給停止

○LPGガス（3月27日 15:30 現在）

死亡事故：地震との関係も含め原因詳細調査中

- ・福島県いわき市 死者1名
13日午前中 共同住宅でガス爆発

○コンビナート（3月27日 15:30 現在）

- ・コスモ石油千葉製油所（千葉縣市原市）
LPG貯槽の支柱が折れ、破損。ガス漏れ火災。
重傷者1名、軽傷5名。3月21日午前鎮火。
- ・JX日鉱日石エネルギー(株)仙台製油所（宮城県仙台市）
出荷設備エリアで爆発、火災が発生。3月15日午後鎮火。

3 原子力安全・保安院等の対応

【3月11日】

- 14：46 地震発生と同時に原子力安全・保安院に災害対策本部設置
- 15：42 福島第一原子力発電所にて原子力災害対策特別措置法第10条通報
- 16：36 福島第一原子力発電所1、2号機にて事業者が同法第15条事象（非常用炉心冷却装置注水不能）発生判断（16:45 通報）
- 18：08 福島第二原子力発電所1号機にて原子力災害対策特別措置法第10条通報
- 18：33 福島第二原子力発電所1、2、4号機にて原子力災害対策特別措置法第10条通報
- 19：03 緊急事態宣言（政府原子力災害対策本部及び同現地対策本部設置）
- 20：50 福島県対策本部は、福島第一原子力発電所1号機の半径2kmの住人に避難指示を出した。（2km以内の住人は1,864人）

- 21:23 内閣総理大臣より、福島県知事、大熊町長及び双葉町長に対し、東京電力(株)福島第一原子力発電所で発生した事故に関し、原子力災害対策特別措置法第15条第3項の規定に基づく指示を出した。
- ・福島第一原子力発電所から半径3km圏内の住民に対する避難指示。
 - ・福島第一原子力発電所から半径10km圏内の住民に対する屋内退避指示。
- 24:00 池田経済産業副大臣現地対策本部到着
- 【3月12日】
- 5:22 福島第二原子力発電所1号機にて事業者が原子力災害対策特別措置法第15条事象（圧力抑制機能喪失）発生判断（6:27 通報）
- 5:32 福島第二原子力発電所2号機にて事業者が原子力災害対策特別措置法第15条事象（圧力抑制機能喪失）発生判断（6:27 通報）
- 5:44 総理指示により福島第一原子力発電所の10km圏内に避難指示
- 6:07 福島第二原子力発電所4号機にて原子力災害対策特別措置法第15条事象（圧力抑制機能喪失）発生
- 6:50 原子炉等規制法第64条第3項の規定に基づき、福島第一原子力発電所第1号機及び第2号機に設置された原子炉格納容器内の圧力を抑制することを命じた。
- 7:45 内閣総理大臣より、福島県知事、広野町長、楢葉町長、富岡町長及び大熊町長に対し、東京電力(株)福島第二原子力発電所で発生した事故に関し、原子力災害対策特別措置法第15条第3項の規定に基づく指示を出した。
- ・福島第二原子力発電所から半径3km圏内の住民に対する避難指示。
 - ・福島第二原子力発電所から半径10km圏内の住民に対する屋内退避指示。
- 17:00 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 17:39 内閣総理大臣が福島第二原子力発電所の避難区域
- ・福島第二原子力発電所から半径10km圏内の住民に対する避難を指示。
- 18:25 内閣総理大臣が福島第一原子力発電所の避難区域
- ・福島第一原子力発電所から半径20km圏内の住民に対する避難を指示。
- 19:55 福島第一原子力発電所1号機の海水注入について総理指示
- 20:05 総理指示を踏まえ、原子炉等規制法第64条第3項の規定に基づ

き、福島第一原子力発電所第1号機の海水注入等を命じた。

20:20 福島第一原子力発電所1号機の海水注入を開始

【3月13日】

- 5:38 福島第一原子力発電所3号機にて原子力災害対策特別措置法第15条事象（全注水機能喪失）である旨、受信。
当該サイトについて、東京電力において現在、電源及び注水機能の回復と、ベントのための作業を実施中。
- 9:01 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 9:08 福島第一原子力発電所3号機の圧力抑制及び真水注入を開始
- 9:20 福島第一原子力発電所3号機の耐圧ベント弁開放
- 9:30 福島県知事、大熊町長、双葉町長、富岡町長、浪江町長に対し、原子力災害対策特別措置法に基づき、放射能除染スクリーニングの内容について指示
- 9:38 福島第一原子力発電所1号機にて原子力災害対策特別措置法第15条通報
- 13:09 女川原子力発電所にて原子力災害対策特別措置法第10条通報
- 13:12 福島第一原子力発電所3号機の注入を真水から海水に切り替え
- 14:36 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月14日】

- 1:10 福島第一原子力発電所1号機及び3号機の注入をくみ上げ箇所の海水が少なくなったため停止。
- 3:20 福島第一原子力発電所3号機の海水注入を再開
- 4:40 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 5:38 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 7:52 福島第一原子力発電所3号機にて原子力災害対策特別措置法第15条事象（格納容器圧力異常上昇）である旨、受信。
- 13:25 福島第一原子力発電所2号機にて原子力災害対策特別措置法第15条事象（原子炉冷却機能喪失）である旨、受信。
- 22:13 福島第二原子力発電所にて原子力災害対策特別措置法第10条通報
- 22:35 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月15日】

- 0 : 0 0 国際原子力（IAEA）専門家派遣の受け入れを決定
IAEA天野事務局長による原子力発電所の被害に関する専門家派遣の意向を受け、原子力安全・保安院はIAEAによる知見ある専門家の派遣を受け入れることとした。なお、実際の受け入れ日程等については、今後調整を行う。
- 0 : 0 0 米国原子力規制委員会（NRC）専門家派遣の受け入れを決定
- 7 : 2 1 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 7 : 2 4 （独）日本原子力研究開発機構東海研究開発センター核燃料サイクル工学研究所にて原子力災害対策特別措置法第10条通報
- 7 : 4 4 （独）日本原子力研究開発機構原子力科学研究所にて原子力災害対策特別措置法第10条通報
- 8 : 5 4 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 10 : 3 0 経済産業大臣が原子炉等規制法に基づき、4号機の消火及び再臨界の防止、2号機の原子炉内への早期注水及びドライウエルのベントの実施について指示
- 10 : 5 9 今後の事態の長期化を考慮し、現地対策本部の機能を福島県庁内へ移転することを決定。
- 11 : 0 0 内閣総理大臣が福島第一原子力発電所の避難区域
・炉内の状況を考慮して、新たに福島第一原子力発電所から半径20km圏～30km圏内の住民に対する屋内退避を指示
- 16 : 3 0 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信
- 22 : 0 0 経済産業大臣が原子炉等規制法に基づき、4号機の使用済燃料プールへの注水の実施を指示
- 23 : 4 6 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象（敷地境界放射線量異常上昇）である旨、受信

【3月18日】

- 13 : 0 0 文部科学省にて、福島第一、第二原子力発電所の緊急時における全国的モニタリング調査の強化を決定
- 15 : 5 5 原子炉等規制法第62条の3に基づき、東京電力(株)福島第一原子力発電所第1・2・3・4号機における事故故障等（原子炉建屋内の放射性物質の非管理区域への漏えい）の報告を受理
- 16 : 4 8 原子炉等規制法第62条の3に基づき、日本原子力発電(株)東海第二発電所における事故故障等（非常用ディーゼル発電機2C海水

ポンプ用電動機の故障)の報告を受理

【3月19日】

- 7 : 4 4 6号機の非常用ディーゼル発電機2台目(A)起動
5号機の残留熱除去系(RHR)ポンプ(C)が起動し、使用済燃料プールの冷却を開始(電源:6号機の非常用ディーゼル発電機)の旨を受信
- 8 : 5 8 福島第一原子力発電所にて原子力災害対策特別措置法第15条事象(敷地境界放射線量異常上昇)である旨、受信

【3月20日】

- 2 3 : 3 0 原子力災害対策現地本部から、放射能除染スクリーニングレベルの基準を以下のとおり変更する旨、県知事及び関係市町村長(富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村)宛に指示

【3月21日】

- 7 : 4 5 原子力災害対策現地本部から「安定ヨウ素剤の服用について」として、安定ヨウ素剤の服用は、本部の指示を受け、医療関係者の立ち会いのもとで服用するものであり、個人の判断で服用しない旨の指示を、県知事及び関係市町村長(富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村)宛に発出
- 1 6 : 4 5 原子力災害対策現地本部長から「屋内退避圏内での暖房器具の使用に係る換気について」として、一酸化炭素中毒等の防止の観点及び被ばく低減の観点から、屋内において換気を必要とする暖房器具を使用する場合の対応について屋内退避圏内の住民に周知する旨の指示を福島県知事及び市町村長(いわき市、田村市、南相馬市、広野町、川内村、浪江町、葛尾村、飯館村)宛に発出。
- 1 7 : 5 0 原子力災害対策本部長から、ハウレンソウ及びカキナ、原乳について当分の間、出荷を控えるよう、関係事業者等に要請することの指示を福島県、茨城県、栃木県及び群馬県の各知事宛に発出。

【3月22日】

- 1 6 : 0 0 原子力安全委員会緊急技術助言組織から、3月22日付け東京電力の「海水分析結果について」に関する原子力安全・保安院からの助言依頼について、回答(助言)を受理。

【3月25日】

原子力安全・保安院は、東京電力株式会社に対し、3月24日に発生した福島第一原子力発電所3号機タービン建屋における作業員の被ばくに関し、再発防止の観点から、直ちに放射線管理を見直

し、改善するよう、口頭で指示。

<被ばくの可能性（3月27日 15:30 現在）>

1. 住民の被ばく

- (1) 二本松市福島県男女共生センターにおいて、双葉厚生病院からの避難者約60名を含む133名の測定を行い、13,000cpm以上の23名に除染を実施した。
- (2) この他、福島県が用意した民間バスで、双葉厚生病院から川俣町済生会川俣病院へ移動した35名については、県対策本部は被ばくしていないと判断。
- (3) バスにより避難した双葉町の住民約100名について、100名のうち、9名について測定した結果、以下の通りだった。県外(宮城県)に分かれて避難したが、その後合流して二本松市福島男女共生センターへ移動。

カウント数	人数
18,000cpm	1名
30,000~36,000cpm	1名
40,000cpm	1名
40,000cpm 弱*	1名
ごく小さい値	5名

※（1回目の測定では100,000cpmを超え、その後靴を脱いで測定した結果計測されたもの）

- (4) 3月12日から3月15日にかけて、大熊町のオフサイトセンターにおいて、スクリーニングを開始。現在までに162名が検査済み。初め除染の基準値を6,000cpmとし、110名が6,000cpm未満、41名が6,000cpm異常の値を示した。後に基準値を13,000cpmと引き上げた際には、8名が13,000cpm未満、3名が13,000cpm以上の値を示した。
検査を受けた162名のうち、5名が除染処置を施した後、病院へ搬送された。
- (5) 福島県において、避難した10km圏内の入院患者と病院関係者の避難を実施。関係者のスクリーニングを行った結果、3名について除染後も高い数値が検出されたため、第2次被ばく医療機関へ搬送。この搬送に関係した消防職員60名のスクリーニングで3名について、バックグラウンドの2倍以上程度の放射線が検出されたため、60名に対し除染を行った。
- (6) 福島県は3月13日からスクリーニングを開始。避難所を巡回、保健所等13ヶ所（常設）で実施中。3月25日までに91,768人に対し実施。そのうち、100,000cpm以上の値を示した者は98人であったが、100,000cpm以上の数値を示した者についても脱衣等をし、再計測したと

ころ、100,000cpm以下に減少し、健康に影響を及ぼす事例はみられなかった。

2. 従業員等の被ばく

福島第一原子力発電所で作業していた従業員で100mSvを超過した作業員は、24日福島第一原子力発電所3号機タービン建屋において、ケーブル敷設作業を行っていた作業員3名（全員協力社員）の線量が170mSv以上であることが確認され、計19名となっている。

なお、当該作業員3名のうち、2名については、両足の皮膚に放射性物質の付着を確認し、ベータ線熱傷の可能性があると判断されたことから、24日に福島県立医科大学附属病院へ搬送し、その後、25日に作業員3名とも千葉県にある放射線医学総合研究所に到着。検査の結果、2人の足の被ばく量は2～6Svと推定され、足及び内部被ばく共に治療が必要となるレベルではなかったが、3名とも、入院して経過を見ることとなった。28日午後には3名の方すべて退院する予定。

また、当該作業員が踏み入れた水について調査した結果、水表面の線量率は約400mSv/h、採取水のガンマ線核種分析の結果、資料の濃度は各核種合計で約 $3.9 \times 10^6 \text{Bq/cm}^3$ であった。

3. その他

- (1) 福島第一原発で作業していた自衛隊員4名が爆発により負傷。うち、1名は放医研に搬送され、検査の結果、外傷のみで、被ばくによる健康被害はないと判断され、3月17日に退院。防衛省において、その他自衛官の被ばくは確認されず。
- (2) 警察官について、警察庁において2名の除染の実施を確認。異常の報告はなし。
- (3) 3月24日、川俣町保健センター等において、1～15歳までの66名の小児に対する甲状腺の検査を実施。問題となるレベルではなかった。

<放射能除染スクリーニングレベルに関する指示>

- (1) 3月20日、原子力災害対策現地本部から、放射能除染スクリーニングレベルの基準を以下のとおり変更する旨、県知事及び関係市町村長（富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯舘村）宛に指示。

旧：γ線サーベイメーターにより40ベクレル/c m²または6,000cpm

新：1マイクロシーベルト/時（10cm離れた場所での線量率）またはこれに相当する100,000cpm

<避難時における安定ヨウ素剤投与の指示>

- (1) 3月16日、原子力災害対策現地本部から、「避難区域（半径20km）からの避難時における安定ヨウ素剤投与の指示」を県知事及び市町村（富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村）宛に発出。
- (2) 3月21日、原子力災害対策現地本部から「安定ヨウ素剤の服用について」として、安定ヨウ素剤の服用は、本部の指示を受け、医療関係者の立ち会いのもとで服用するものであり、個人の判断で服用しない旨の指示を、県知事及び関係市町村長（富岡町、双葉町、大熊町、浪江町、川内村、楢葉町、南相馬市、田村市、葛尾村、広野町、いわき市、飯館村）宛に発出。

<負傷者の状況（3月27日08:00現在）>

1. 地震による被害

- ・社員2名（軽傷）
- ・協力会社2名（うち1名両足骨折）
- ・行方不明2名（社員。4号タービン建屋内）
- ・急病人1名発生（脳梗塞、救急車搬送、県情報）
- ・管理区域外にて社員1名が左胸の痛みを訴えて救急車を要請（意識あり）
- ・社員2名が中央制御室での全面マスク着用中に不調を訴え、福島第二の産業医の受診を受けるべく搬送

2. 福島第一原子力発電所1号機の爆発による負傷

- ・1号機付近で爆発と発煙が発生した際に4名が1号タービン建屋付近（管理区域外）で負傷。川内診療所で診療。

3. 福島第一原子力発電所3号機の爆発による負傷

- ・社員4名
- ・協力会社3名
- ・自衛隊4名（うち1名は内部被ばくの可能性を考慮し、「(独)放射線医学総合研究所」へ搬送。診察の結果内部被ばくはなし。3月17日退院）

4. その他の被害

- ・福島第二原子力発電所内の診療所に変電所から腹痛を訴える人が来たが、被ばくをしていないことからいわき市の診療所へ搬送。

<住民避難の状況（3月27日 15:30 現在）>

3月15日 11:00、内閣総理大臣の指示により、福島第一原子力発電所半径20kmから30km圏内の住民に対して、屋内退避を指示。その旨を福島県及び関係自治体へ連絡。

福島第一原子力発電所20km圏外及び福島第二原子力発電所10km圏外への避難は、措置済。

- ・福島第一原子力発電所20kmから30km圏内の屋内退避について、徹底中。
- ・福島県と連携して、屋内退避圏内の住民の生活支援等を実施。

<飲食物への指示>

原子力災害対策本部長より、福島県、茨城県、栃木県、群馬県の知事に対して、以下の品目について、当分の間、出荷等を控えるよう指示。

(1) 出荷制限・摂取制限品目（3月23日現在）

都道府県	出荷制限品目	摂取制限品目
福島県	非結球性葉菜類、結球性葉菜類、アブラナ科の花畜類（ハウレンソウ、キャベツ、ブロッコリー、カリフラワー、小松菜、茎立菜、信夫冬菜、アブラナ、ちぢれ菜、山東菜、紅葉苔、カキナなど）、カブ、原乳	非結球性葉菜類、結球性葉菜類及びアブラナ科の花畜類（ハウレンソウ、キャベツ、ブロッコリー、カリフラワー、小松菜、茎立菜、信夫冬菜、アブラナ、アブラナ、ちぢれ菜、山東菜、紅葉苔、カキナなど）
茨城県	ハウレンソウ、カキナ、パセリ、原乳	
栃木県	ハウレンソウ、カキナ	
群馬県	ハウレンソウ、カキナ	

(2) 水道水の飲用制限の要請（3月27日 15:30 現在）

制限範囲	水道事業（対象自治体）
利用するすべての住民	飯舘村簡易水道事業（福島県飯舘村）
乳児 ・対応を継続している水道事業	郡山市上水道事業（福島県郡山市） 南相馬市水道事業（福島県南相馬市） 川俣町水道事業（福島県川俣町） いわき市上水道事業（福島県いわき市） 田村市水道事業（福島県田村市）

<p>・対応を継続している水道用水供給事業</p>	<p>東海村上水道事業（茨城県東海村） 水府地区北部簡易水道事業（茨城県常陸太田市） 北茨城市水道事業（茨城県北茨城市） 笠間市水道事業（茨城県笠間市） 古河市水道事業（茨城県古河市） 取手市水道事業（茨城県取手市） 北千葉広域水道用水供給事業</p>
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<屋内退避圏内での暖房器具の使用に係る換気についての指示>

3月21日、原子力災害対策現地本部長から「屋内退避圏内での暖房器具の使用に係る換気について」として、一酸化炭素中毒等の防止の観点及び被ばく低減の観点から、屋内において換気を必要とする暖房器具を使用する場合の対応について屋内退避圏内の住民に周知する旨の指示を福島県知事及び市町村長（いわき市、田村市、南相馬市、広野町、川内村、浪江町、葛尾村、飯館村）宛に発出。

<消防機関の活動状況>

- ・ 3月22日、11:00～14:00頃：新潟市消防局及び浜松市消防局が大型除染システムの東京電力による設営を指導。
- ・ 3月23日、8:30～9:30、13:30～14:30：新潟市消防局及び浜松市消防局が大型除染システムの東京電力による運用を指導。

（本発表資料のお問い合わせ）

原子力安全・保安院

原子力安全広報課：渡辺、金城

電話：03-3501-1505

03-3501-5890

(参考)

【東北地方太平洋沖地震】

1. 災害概要

(1) 発生日時：平成 23 年 3 月 11 日（金） 14：46 発生

(2) 発生場所：震源三陸沖（北緯 38 度、東経 142.9 度）

深さ 10km、マグニチュード 9.0

(3) 各地の震度

○震度 4 以上の地域

震度 7 宮城県北部

震度 6 強 茨城県北部、茨城県南部

震度 5 強 青森県三八上北

震度 5 弱 新潟県中越

震度 4

○震度 4 以上の市町村

震度 6 強 福島県楢葉町、富岡町、大熊町、双葉町

震度 6 弱 宮城県石巻市、女川町（発電所の震度計による）、東海村

震度 5 弱 新潟県刈羽村

震度 4 青森県六ヶ所村、東通村、新潟県柏崎市、神奈川県横須賀市

震度 1 北海道泊村

From: LIA02 Hoc
Sent: Sunday, March 27, 2011 2:56 PM
To: LIA10 Hoc
Subject: Please translate if it's new...thanks!
Attachments: Plant Parameter Data[1].pdf

福島第一原子力発電所 フラント関連パラメータ

3月27日 14:00 現在

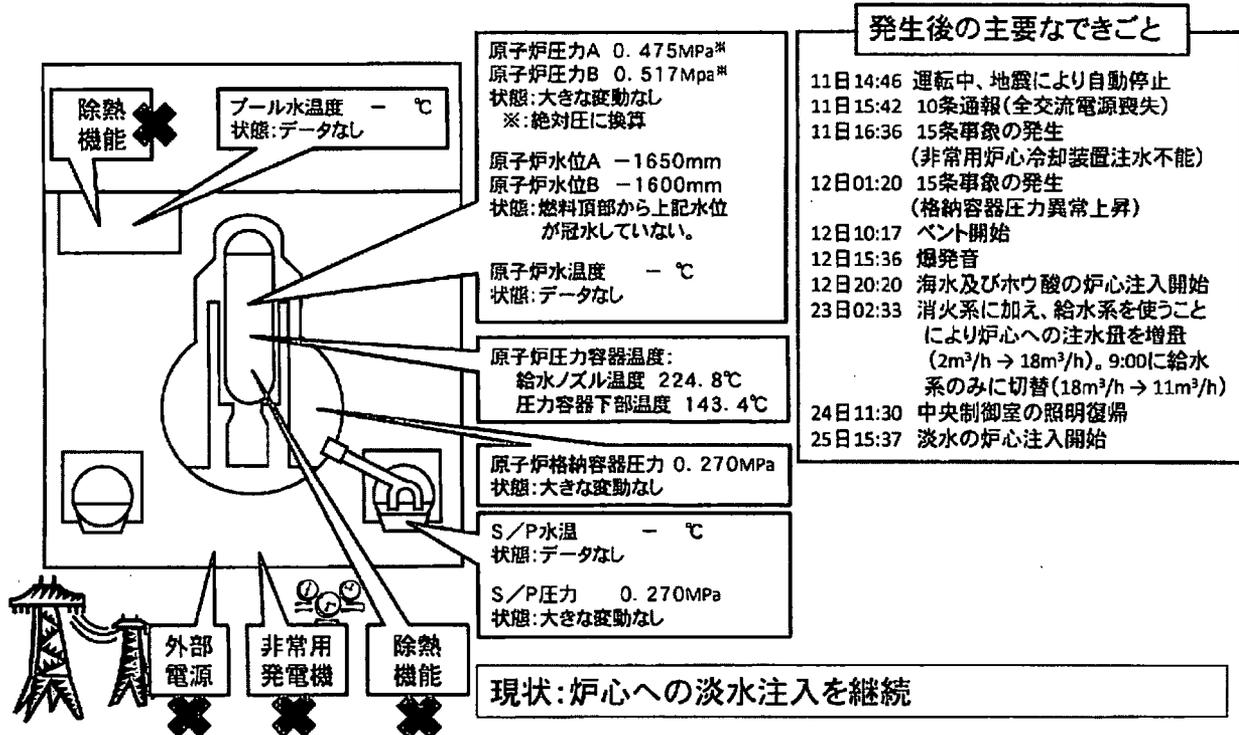
※1: 計器不良
※2: ナータ採取対象外

号機	1u	2u	3u	4u	5u	6u
注水状況	給水ポンプを用いた淡水注入中。 流量 120l/min (3/25 15:37) 仮設計器	消火ポンプを用いた淡水注入中。 流量 270~280l/min (3/26 17:22) 仮設計器	消火ポンプを用いた淡水注入中。 流量 220l/min (3/26 18:00) 仮設計器	停止中	停止中	停止中
原子炉水位	燃料域A: -1650mm 燃料域B: -1600mm (3/27 9:00 現在)	燃料域A: -1200mm (3/27 9:00 現在)	燃料域A: -1900mm 燃料域B: -2300mm (3/27 10:10 現在)	※2	停止域 1930mm (3/27 14:00 現在)	停止域 2035mm (3/27 14:00 現在)
原子炉圧力	0.374MPa g (A) 0.416MPa g (B) (3/27 9:00 現在)	-0.016MPa g (A) -0.020MPa g (B) (3/27 9:00 現在)	0.032MPa g (A) -0.099MPa g (C) (3/27 10:10 現在)	※2	0.007MPa g (3/27 14:00 現在)	0.005MPa g (3/27 14:00 現在)
原子炉水温度	(系統設置がないため採取不可)			※2	30.3℃ (3/27 14:00 現在)	29.1℃ (3/27 14:00 現在)
原子炉圧力容器温度	給水ノズル温度: 224.8℃ 圧力容器下部温度: 143.4℃ (3/27 9:00 現在)	給水ノズル温度: 123.6℃ 圧力容器下部温度: 111.2℃ (3/27 9:00 現在)	給水ノズル温度: 136℃(観音中) 圧力容器下部温度: 121.6℃ (3/27 10:10 現在)	4u 原子炉内に昇降体(燃料)なし 5,6u 原子炉水温度にて監視中		
D/W・S/C圧力	D/W 0.270MPa abs S/C 0.270MPa abs (3/27 9:00 現在)	D/W 0.110MPa abs S/C ダウンスケール(観音中) (3/27 9:00 現在)	D/W 0.1076MPa abs S/C 0.1806MPa abs (3/27 10:10 現在)	※2		
CAMS	D/W 3.46×10 ⁵ Sv/h S/C 2.22×10 ⁵ Sv/h (3/27 9:00 現在)	D/W 4.16×10 ⁵ Sv/h S/C 1.41×10 ⁵ Sv/h (3/27 9:00 現在)	D/W 3.37×10 ⁵ Sv/h S/C 1.31×10 ⁵ Sv/h (3/27 10:10 現在)	※2		
D/W 監視使用圧力	0.384MPa g(0.485MPa abs)	0.384MPa g(0.485MPa abs)	0.384MPa g(0.485MPa abs)	※2		
D/W 監視使用圧力	0.427MPa g(0.528MPa abs)	0.427MPa g(0.528MPa abs)	0.427MPa g(0.528MPa abs)	※2		
使用核燃料プール	※1	67℃ (3/27 9:00 現在)	※1	※1	37.8℃ (3/27 14:00 現在)	21.0℃ (3/27 14:00 現在)
FPC(炉内サリカ)レベル	4500mm (3/27 9:00 現在)	5750mm (3/27 9:00 現在)	※1	5850mm (3/27 10:10 現在)	※2	
電源	外部電源受電中 (P/C2C)		外部電源受電中 (P/C4D)		外部電源受電中	
その他情報	・ 3号機 原子炉圧力容器温度について、データ採取を行い、状況推移を継続調査中。 ・ 2号機 S/C圧力について、状況推移を継続調査中。			共用プール: 39℃程度 (3/27 08:00)		

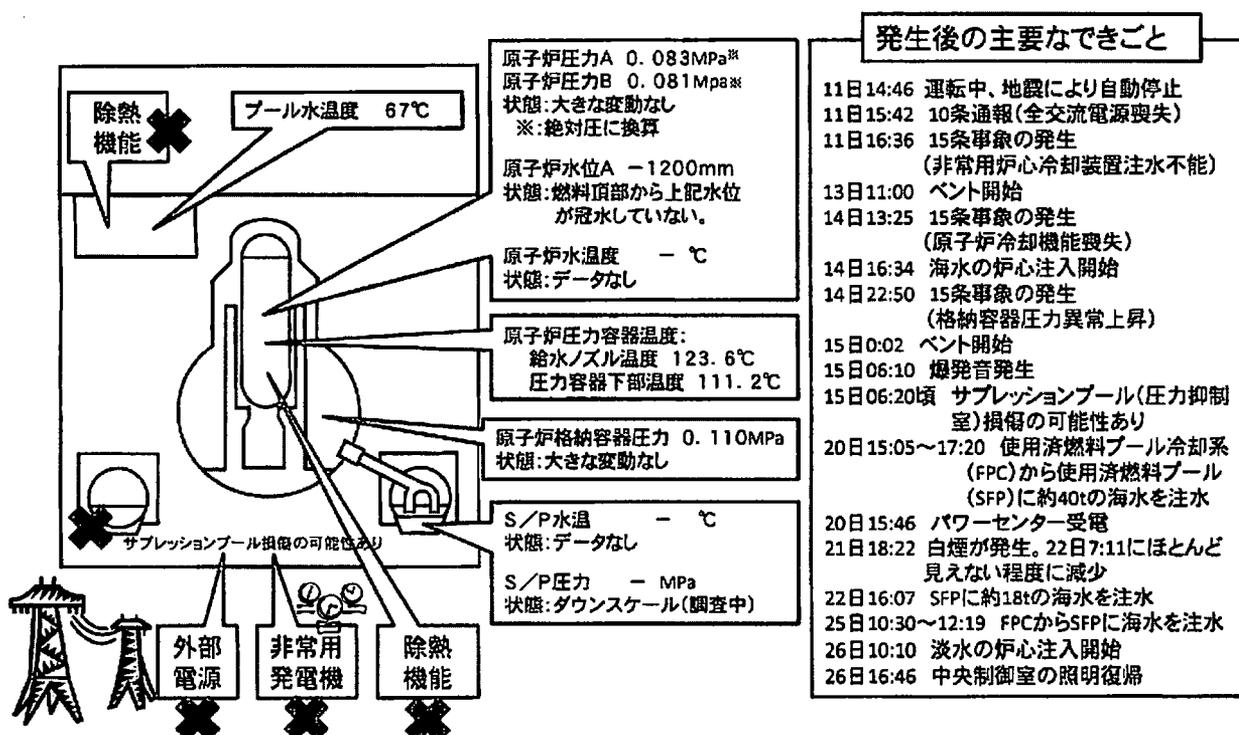
圧力換算 ゲージ圧(MPa g) = 絶対圧(MPa abs) - 大気圧(標準大気圧 0.1013 MPa)

絶対圧(MPa abs) = ゲージ圧(MPa g) + 大気圧(標準大気圧 0.1013 MPa)

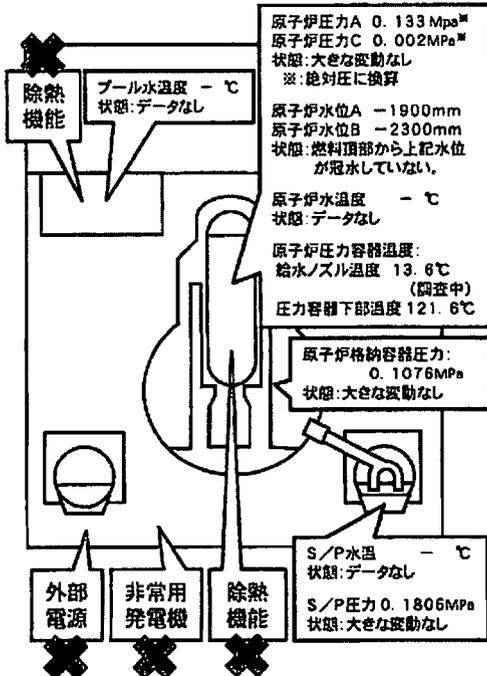
福島第一原子力発電所1号機の状況 (3月27日 14:00現在)



福島第一原子力発電所2号機の状況 (3月27日 14:00現在)



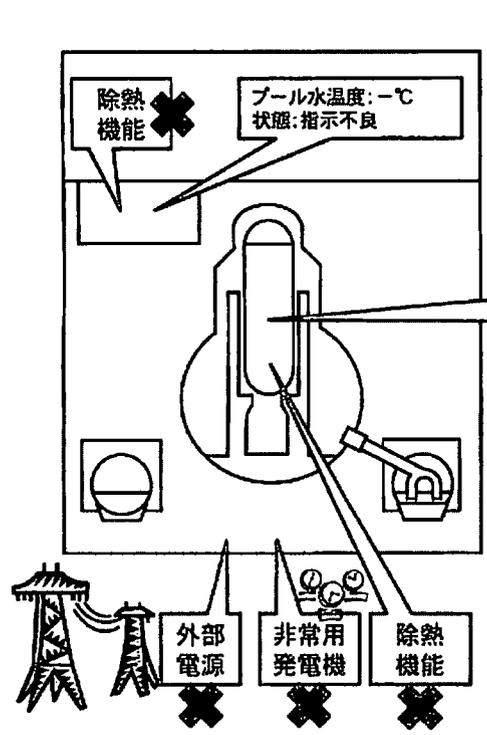
福島第一原子力発電所3号機の状況 (3月27日 14:00現在)



- ### 発生後の主要なできごと
- 11日14:46 運転中、地震により自動停止
 - 11日15:42 10条通報(全交流電源喪失)
 - 12日20:41 ベント開始
 - 13日05:10 15条事象の発生(非常用炉心冷却装置注水不能)
 - 13日08:41 ベント開始
 - 13日13:12 海水及びホウ酸の炉心注入開始
 - 14日05:20 ベント開始
 - 14日07:44 15条事象の発生(格納容器圧力異常上昇)
 - 14日11:01 爆発音
 - 16日08:30頃 白煙が発生
 - 17日09:48~10:01 自衛隊ヘリによる放水
 - 17日19:05~19:15 警備の高圧放水車による放水
 - 17日19:35~20:09 自衛隊の消防車により放水
 - 18日14時前~14:38 自衛隊消防車6台による地上放水~14:45 米軍消防車1台による地上放水
 - 19日0:30~01:10 東京消防庁ハイパーレスキュー隊放水
 - 19日14:10~20日3:40 東京消防庁ハイパーレスキュー隊放水
 - 20日11:00 格納容器内圧力が上昇(320kPa)。その後、低下。
 - 20日21:36~21日3:58 東京消防庁ハイパーレスキュー隊放水
 - 21日15:55頃 灰色がかった煙が発生。17:55に煙が収まっていることを確認
 - 22日15:10~16:00 東京消防庁ハイパーレスキュー隊及び大阪市消防局放水
 - 22日22:46 中央制御室の照明復帰
 - 23日11:03-13:20 使用済燃料プール冷却系(FPC)から使用済燃料プール(SFP)に約35tの海水を注水
 - 23日16:20頃 黒煙が発生。23:30頃及び24日4:50に煙の発生が止んでいることを確認。
 - 24日05:35~16:05 FPCからSFPに約120tの海水を注水
 - 25日13:28~16:00 東京消防庁の支援を受けた川崎市消防局による放水
 - 25日18:02 淡水の炉心注入開始
 - 27日12:34~14:36 コンクリートポンプ車による放水

現状:
プールへの海水注入及び炉心への淡水注入を継続

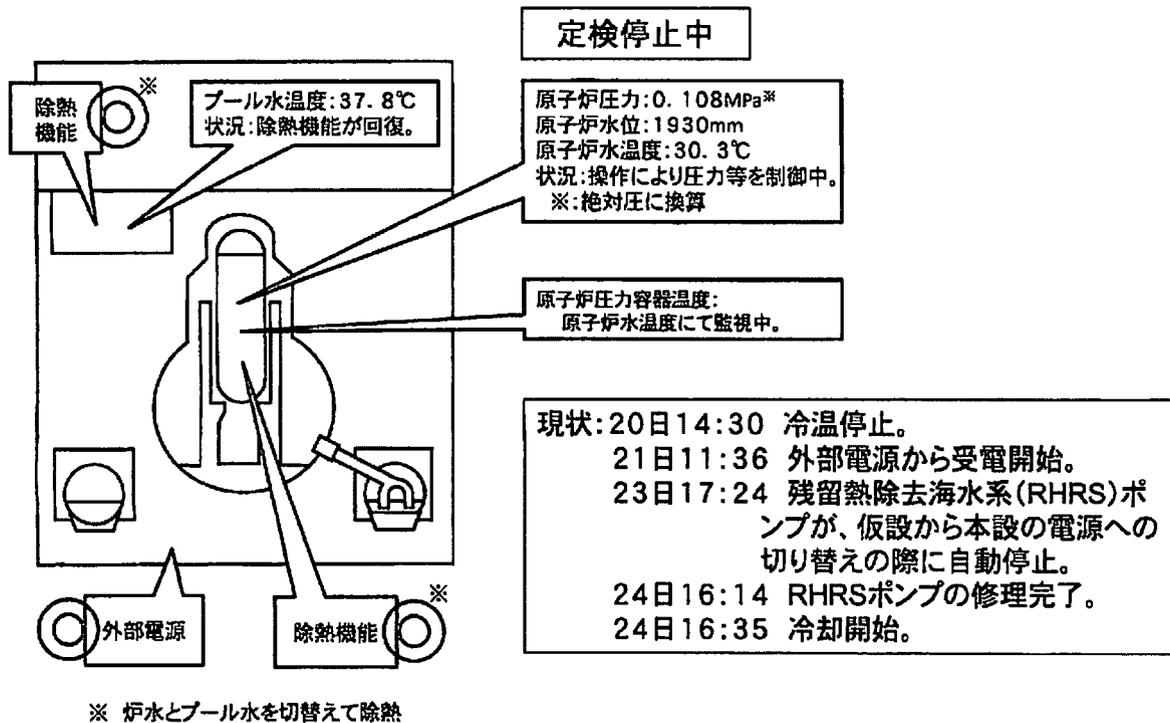
福島第一原子力発電所4号機の状況 (3月27日 14:00現在)



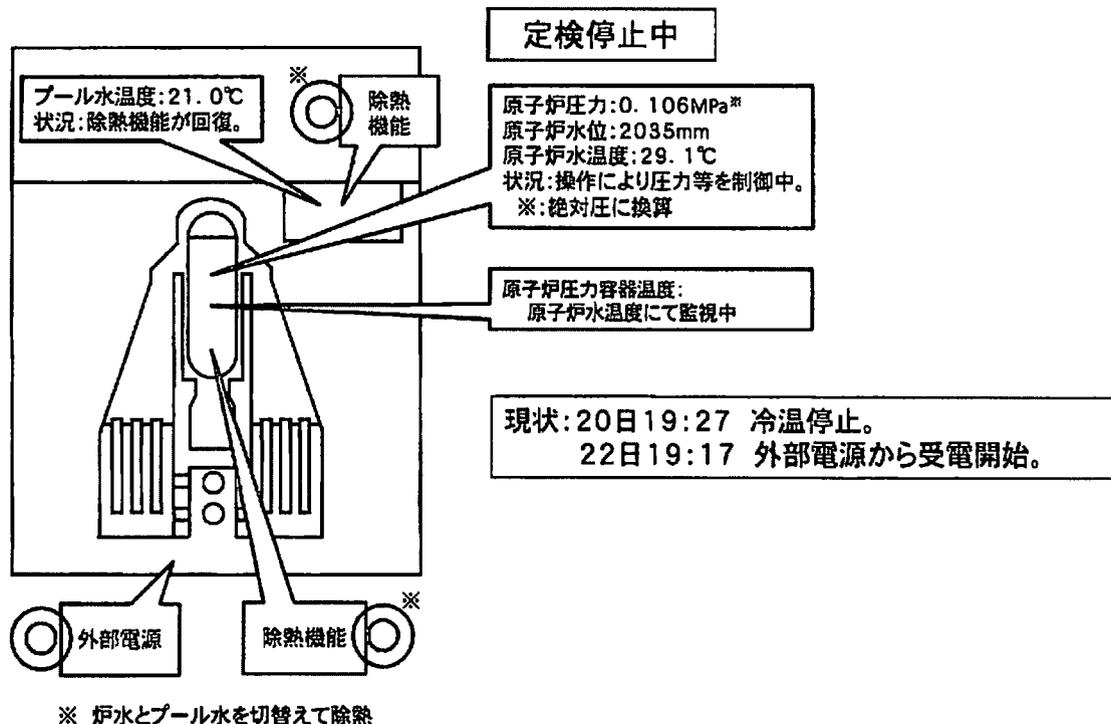
- ### 定検停止中
- ### 発生後の主要なできごと
- 地震発生時、定期検査により停止中
 - 14日04:08 使用済燃料プール温度84℃
 - 15日06:14 4Fの壁が一部破損の確認
 - 15日09:38 3階部分で火災(12:25鎮火)
 - 16日05:45 4号機で火災。事業者によると現場での火は確認できず(06:15)
 - 20日08:21~9:40 自衛隊による使用済燃料プール(SFP)への放水
 - 20日18:30頃 ~ 19:46 自衛隊によるSFPへの放水
 - 21日06:37~08:41 自衛隊によるSFPへの放水
 - 21日15:00頃 パワーセンターまでのケーブル敷設完了
 - 22日10:35 パワーセンター受電
 - 22日17:17~20:32 コンクリートポンプ車による放水
 - 23日10:00~13:02 コンクリートポンプ車による放水
 - 24日14:36~17:30 コンクリートポンプ車による放水
 - 25日06:05~10:20 使用済燃料プール冷却系(FPC)からSFPに海水を注入
 - 25日19:05~22:07 コンクリートポンプ車による放水

現状:原子炉圧力容器に燃料体が存在しない
プールへの海水注入を継続

福島第一原子力発電所5号機の状況 (3月27日 14:00現在)



福島第一原子力発電所6号機の状況 (3月27日 14:00現在)



From: Walls, Craig
Sent: Sunday, March 27, 2011 2:52 AM
To: LIA10 Hoc
Attachments: Data sheet 3-21-2011 11h42m_AA_NEW.docx

March 21 Sharing ← ERC Radiation Team

Fukushima Daiichi – (1F)

Measurement sites:

- <1> North of main administrative building (about 0.5 km in north west direction from Unit 2)
- <2> Near gymnasium (East of MP-5) (about 0.9 km in west north west direction from Unit 2)
- <3> Near West Gate (near MP-5) (about 1.1 km in west direction from Unit 2)
- <4> In front of Main Gate (near MP-6) (about 1.0 km in west south west direction from Unit 2)

1.

Measurement site	<1>																							
Monitoring car																								
Measurements (μSv/h)																								
Neutron																								
Wind direction	WNW	W	W	WNW	WNW	WNW	W	W	W	NW	NW	NW	W	NW	NW	N	W	ESE	WNW	W	NW	NW	WNW	WNW
Wind speed (m/s)																								

2.

Measurement site	<1>																							
Monitoring car																								
Measurements (μSv/h)																								
Neutron																								
Wind direction	NW	NW	WNW	WNW	WNW	W	E	E	ENE	E	E	NE	SW	SW	NE	E	E	NNE	NNE	WNW	NE	NW	WSW	W
Wind speed (m/s)																								

3.

Measurement site	<1>																						
Monitoring car																							

March 20

Fukushima Daiichi – (1F)

Measurement sites:

- <1> North of main administrative building (about 0.5 km in north west direction from Unit 2)
- <2> Near gymnasium (East of MP-5) (about 0.9 km in west north west direction from Unit 2)
- <3> Near West Gate (near MP-5) (about 1.1 km in west direction from Unit 2)
- <4> In front of Main Gate (near MP-6) (about 1.0 km in west south west direction from Unit 2)

7.

Measurement site	<1>																							
Monitoring car																								
Measurements (μSv/h)																								
Neutron																								
Wind direction	SW	W	SW	WSW	WSW	NW	NW	W	NE	SW	W	SW	WNW	W	W	NW	NW	WNW	WSW	SE	NNE	W	S	W
Wind speed (m/s)																								

8.

Measurement site	<1>			<3>										<1>										
Monitoring car																								
Measurements (μSv/h)																								
Neutron																								
Wind direction	NW	S	SW	NNW	N	NNW	WNW	N	NNE	NE	N	NE	NE	ENE	ENE	ENE	E	ENE	ESE	SSE	NE	NE	N	NE
Wind speed (m/s)																								

<1> → <3> Near West Gate (near MP-5) (about 1.1 km west from Unit 2) *Moved to take measurements at a fixed point
 <3> → <1> North of Main Administrative Building (about 0.5 km from Unit 2) *Moved to the nearby location to measure the effects of water spraying activities

9.

Measurement site	<1>																						
------------------	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Fukushima First (Dai-ichi) Nuclear Power Plant

////// Perimeter monitoring zone

--- Site boundary

[Map]

<2> Near gymnasium

<1> North of Main Administrative Building

About 0.9 km

About 0.5 km

<3> Near West Gate

About 1.1 km

<4> In front of Main Gate

About 1.0 km

MP7(μ Sv/h)	Data missing (D/M)	D/M																						
Wind direction	NW	NNW	NNW	N	N	N	NE	NN	NN	NN	NE	NE	NN	NN	NN	N	NN	N	N	N	N	N	N	N
Wind speed (m/s)																								

15

March 21

Monitoring post																								
MP1(μ Sv/h)																								
MP2(μ Sv/h)																								
MP3(μ Sv/h)																								
MP4(μ Sv/h)																								
MP5(μ Sv/h)																								
MP6(μ Sv/h)																								
MP7(μ Sv/h)	Data Missing (D/M)	D/M																						
Wind direction	N	N	N	NN	NN	N	NN	N	N	N	N	N	N	N	N	N	N	NN						
Wind speed (m/s)																								

← NEW

MP1(μSv/h)																									
MP2(μSv/h)																									
MP3(μSv/h)																									
MP4(μSv/h)																									
MP5(μSv/h)																									
MP6(μSv/h)																									
MP7(μSv/h)	Data missing (D/M)	D/M																							
Wind direction	NE	WNW	SSE	ENE	NNE	NNE	N	N	N	NNW	NNW	NNW	N	N	NNW	NNW	N	N	N	N	NNW	NNW	NNW	NNW	
Wind speed (m/s)																									

RESULTS OF ENVIRONMENTAL MONITORING OF EACH NUCLEAR POWER PLANT

Unit: $\mu\text{Sv/h}$

22.

Range of normal values	Company name	Power Plant (PP) name	March 20											
	Hokkaido Electric Power Co.	Tomari PP												
	Tohoku Electric Power Co.	Onagawa NPP												
		Totsu NPP												
	Tokyo Electric Power Co.	Fukushima First NPP												
		Fukushima Second NPP												
		Kashiwazaki Kariba NPP												
	Japan Atomic Power Co.	Tokai Second PP												
		Tsuruga PP												
	Chubu Electric Power Co.	Hamaoka NPP												
	Hokuriku Electric Power Co.	Shiga NPP												
	Chugoku Electric Power Co.	Shimane NPP												
	Kansai Electric Power Co.	Mihama PP												
		Takahama PP												
		Osaka PP												

	Chugoku Electric Power Co.	Ikata PP											
	Kyushu Electric Power Co.	Genkai NPP											
		Kawauchi NPP											
	Japan Nuclear Fuel Ltd.	Rokkasho Reprocessing Office											
		Rokkasho Burial Disposal Office											

*As for Fukushima Daiichi NPP, there may be slight shifting of measurement time and measurement site change depending on work status.

23.

Range of normal values	Company name	Power Plant (PP) name	March 21										
	Hokkaido Electric Power Co.	Tomari PP											
	Tohoku Electric Power Co.	Onagawa NPP											
		Totsu NPP											
	Tokyo Electric Power Co.	Fukushima First NPP											
		Fukushima Second NPP											
		Kashiwazaki Kariba NPP											
	Japan Atomic Power Co.	Tokai Second PP											
		Tsuruga PP											
	Chubu Electric Power Co.	Hamaoka NPP											

	Hokuriku Electric Power Co.	Shiga NPP											
	Chugoku Electric Power Co.	Shimane NPP											
	Kansai Electric Power Co.	Mihama PP											
		Takahama PP											
		Osaka PP											
	Chugoku Electric Power Co.	Ikata PP											
	Kyushu Electric Power Co.	Genkai NPP											
		Kawauchi NPP											
	Japan Nuclear Fuel Ltd.	Rokkasho Reprocessing Office											
		Rokkasho Burial Disposal Office											

*As for Fukushima Daiichi NPP, there may be slight shifting of measurement time and measurement site change depending on work status.

As of 3/21 (Mon) 9:00

From: LIA01 Hoc
Sent: Saturday, March 26, 2011 1:10 PM
To: LIA10 Hoc
Subject: FW:
Attachments: Untitled

From: OST02 HOC
Sent: Saturday, March 26, 2011 12:53 PM
To: LIA01 Hoc
Subject: FW:

Please forward to appropriate personnel, if necessary.

thanks

From: RST01 Hoc
Sent: Saturday, March 26, 2011 12:38 PM
To: OST02 HOC
Subject: RE:

This one.

From: OST02 HOC
Sent: Saturday, March 26, 2011 12:23 PM
To: RST01 Hoc
Subject: RE:

Per below, please specific which communication for translator.

thanks

From: RST01 Hoc
Sent: Saturday, March 26, 2011 11:14 AM
To: OST02 HOC
Subject: RE:

Please consider putting this through the translator in the Liaison Team room prior to broadcasting it out.

Thanks, Eric

From: OST02 HOC
Sent: Saturday, March 26, 2011 10:16 AM
To: RST01 Hoc; PMT02 Hoc; PMT01 Hoc; PMT11 Hoc
Subject:

From: LIA07 Hoc
Sent: Saturday, March 26, 2011 8:30 AM
To: OST04 Hoc
Subject: FW: Radiation data by MEXT
Attachments: 20110326_26.pdf; 20110325_25_Rev.pdf

Save them in M under rad reading. Not for books.

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

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Saturday, March 26, 2011 8:19 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Radiation data by MEXT

From: NITOPS[SMTP:NITOPS@NNSA.DOE.GOV]
Sent: Saturday, March 26, 2011 8:18:38 AM
To: CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Cc: NITOPS
Subject: FW: Radiation data by MEXT
Auto forwarded by a Rule

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration U.S. Department of Energy nitops@nnsa.doe.gov nit@doe.gov 202-586-8100

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

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Saturday, March 26, 2011 8:15 AM

To: [redacted] (b)(6)

[redacted] (b)(6)

Subject: FW: Radiation data by MEXT

fyi

This email is UNCLASSIFIED

on behalf of the Japan Emergency Command Center, +81-3-3224- 5533

Lynda Hinds
Staff Assistant to Ambassador John V. Roos U.S. Embassy
1-10-5 Akasaka, Minato-ku
Tokyo 107-8420
Tel. (03) 3224- 5370

Twitter.com/AmbassadorRoos

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

From: saigai03@mext.go.jp [mailto:saigai03@mext.go.jp]

Sent: Saturday, March 26, 2011 9:12 PM

To: Cherry, Ronald C

Cc: [REDACTED] (b)(6)

[REDACTED] (b)(6)

Subject: Radiation data by MEXT

Dear Mr. Cherry,

Please see attached the document.

File 20110325_25_Rev.pdf is revised version of 20110325_25.pdf.

Yellow cells have been renewed.

Sincerely yours,
Eiko SENAMI

	都道府県名	定時降下物		
		I-131	Cs-137	備考
1	北海道(札幌市)	不検出	不検出	
2	青森県(青森市)	不検出	不検出	
3	岩手県(盛岡市)	2.8	0.34	
4	宮城県	-	-	震災被害によって計測不能
5	秋田県(秋田市)	不検出	不検出	
6	山形県(山形市)	150	150	
7	福島県	-	-	震災対応により計測不能
8	茨城県(ひたちなか市)	480	99	
9	栃木県(宇都宮市)	570	54	測定中であったが、到達
10	群馬県(前橋市)	27	不検出	
11	埼玉県(さいたま市)	160	17	
12	千葉県(市原市)	130	23	
13	東京都(新宿区)	173	37	
14	神奈川県(茅ヶ崎市)	39	7.7	測定中であったが、到達
15	新潟県(新潟市)	不検出	不検出	
16	富山県(射水市)	不検出	不検出	
17	石川県(金沢市)	不検出	不検出	
18	福井県(福井市)	不検出	不検出	
19	山梨県(甲府市)	9.2	不検出	
20	長野県(長野市)	不検出	不検出	
21	岐阜県(各務原市)	-	-	機器調整中
22	静岡県(御前崎市)	4.6	8.0	
23	愛知県(名古屋市)	不検出	不検出	
24	三重県(四日市市)	不検出	不検出	
25	滋賀県(大津市)	不検出	不検出	
26	京都府(京都市)	不検出	不検出	
27	大阪府(大阪市)	不検出	不検出	
28	兵庫県(神戸市)	不検出	不検出	
29	奈良県(奈良市)	不検出	不検出	
30	和歌山県(和歌山市)	不検出	不検出	
31	鳥取県(東伯郡)	不検出	不検出	
32	島根県(松江市)	不検出	不検出	
33	岡山県(岡山市)	不検出	不検出	
34	広島県(広島市)	不検出	不検出	
35	山口県(山口市)	不検出	不検出	
36	徳島県(徳島市)	不検出	不検出	
37	香川県(高松市)	不検出	不検出	
38	愛媛県(八幡浜市)	不検出	不検出	
39	高知県(高知市)	不検出	不検出	
40	福岡県(太宰府市)	不検出	不検出	
41	佐賀県(佐賀市)	不検出	不検出	
42	長崎県(大村市)	不検出	不検出	
43	熊本県(宇土市)	不検出	不検出	
44	大分県(大分市)	-	-	機器調整中
45	宮崎県(宮崎市)	不検出	不検出	
46	鹿児島県(鹿児島市)	不検出	不検出	
47	沖縄県(南城市)	不検出	不検出	

*文部科学省が各都道府県等からの報告に基づき作成

	都道府県名	定時降下物		
		I-131	Cs-137	備考
1	北海道(札幌市)	不検出	不検出	
2	青森県(青森市)	不検出	不検出	
3	岩手県(盛岡市)	190	2.5	
4	宮城県	-	-	震災被害によって計測不能
5	秋田県(秋田市)	2.2	不検出	
6	山形県(山形市)	7,500	1,200	
7	福島県(福島市)	-	-	震災対応により計測不能
8	茨城県(ひたちなか市)	860	160	
9	栃木県(宇都宮市)	670	63	
10	群馬県(前橋市)	37	不検出	
11	埼玉県(さいたま市)	91	16	
12	千葉県(市原市)	320	86	
13	東京都(新宿区)	220	12	
14	神奈川県(茅ヶ崎市)	28	14	
15	新潟県(新潟市)	不検出	不検出	
16	富山県(射水市)	不検出	不検出	
17	石川県(金沢市)	不検出	不検出	
18	福井県(福井市)	不検出	不検出	
19	山梨県(甲府市)	不検出	10	
20	長野県(長野市)	不検出	不検出	
21	岐阜県(各務原市)	-	-	機器調整中
22	静岡県(御前崎市)	不検出	不検出	
23	愛知県(名古屋市)	不検出	不検出	
24	三重県(四日市市)	不検出	不検出	
25	滋賀県(大津市)	不検出	不検出	
26	京都府(京都市)	不検出	不検出	
27	大阪府(大阪市)	不検出	不検出	
28	兵庫県(神戸市)	不検出	不検出	
29	奈良県(奈良市)	不検出	不検出	
30	和歌山県(和歌山市)	不検出	不検出	
31	鳥取県(東伯郡)	不検出	不検出	
32	島根県(松江市)	1.3	不検出	
33	岡山県(岡山市)	不検出	不検出	
34	広島県(広島市)	不検出	不検出	
35	山口県(山口市)	不検出	不検出	
36	徳島県(徳島市)	不検出	不検出	
37	香川県(高松市)	不検出	不検出	
38	愛媛県(八幡浜市)	不検出	不検出	
39	高知県(高知市)	不検出	不検出	
40	福岡県(太宰府市)	不検出	不検出	
41	佐賀県(佐賀市)	不検出	不検出	
42	長崎県(大村市)	不検出	不検出	
43	熊本県(宇土市)	不検出	不検出	
44	大分県(大分市)	-	-	機器調整中
45	宮崎県(宮崎市)	不検出	不検出	
46	鹿児島県(鹿児島市)	不検出	不検出	
47	沖縄県(南城市)	不検出	不検出	

*文部科学省が各都道府県等からの報告に基づき作成

From: Hoc, PMT12
Sent: Monday, March 28, 2011 1:53 PM
To: PMT02 Hoc; PMT09 Hoc; PMT11 Hoc
Subject: FW: Radiation data by MEXT
Attachments: 20110328_18.pdf; 20110328_18_ll_unofficial.pdf; 20110328_19.pdf; 20110328_20.pdf; 20110328_21.pdf; 20110328_22.pdf

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

From: NITOPS [mailto:NITOPS@nnsa.doe.gov]
Sent: Monday, March 28, 2011 8:05 AM
To: CMHT; HOO Hoc; NARAC; PMT01 Hoc; PMT02 Hoc; Hoc, PMT12
Cc: NITOPS
Subject: FW: Radiation data by MEXT

Nuclear Incident Team (NIT)
Office of Emergency Response (NA-42)
National Nuclear Security Administration U.S. Department of Energy nitops@nnsa.doe.gov nit@doe.gov 202-586-8100

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

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Monday, March 28, 2011 7:17 AM
To: [REDACTED] (b)(6)

[REDACTED] (b)(6)

Subject: FW: Radiation data by MEXT

Jennifer Clever
Japan Emergency Command Center
U.S. Embassy, Tokyo

SBU

This email is UNCLASSIFIED-----Original Message-----

From: saigai03@mext.go.jp [mailto:saigai03@mext.go.jp]

Sent: Monday, March 28, 2011 8:13 PM

To: Cherry, Ronald C

Cc: [REDACTED] (b)(6)

[REDACTED] (b)(6)

Subject: Radiation data by MEXT

Dear Mr. Cherry,

Please see attached the document.

Sincerely yours,
Eiko SENAMI

From: RST01 Hoc
Sent: Thursday, March 31, 2011 4:09 AM
To: RST02 Hoc; RST07 Hoc; RST03 Hoc
Cc: FOIA Response.hoc Resource
Subject: FW: Radiation level at Fukushima NO.1 NPP as of March 31,09:00'
Attachments: image001.png; TEPCO-Rad Data at Plant-March 31, 0900.xlsx

From: OST01 HOC
Sent: Thursday, March 31, 2011 3:48 AM
To: PMT02 Hoc; PMT11 Hoc; Hoc, PMT12; RST01 Hoc; ET07 Hoc
Cc: FOIA Response.hoc Resource
Subject: FW: Radiation level at Fukushima NO.1 NPP as of March 31,09:00'

From: HOO Hoc [mailto:HOO.Hoc@nrc.gov]
Sent: Thursday, March 31, 2011 3:47 AM
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC
Subject: FW: Radiation level at Fukushima NO.1 NPP as of March 31,09:00'

From: JapanEmbassy, TaskForce[SMTP:JAPANEMBASSYTASKFORCE@STATE.GOV]
Sent: Thursday, March 31, 2011 3:45:48 AM
To: (b)(6)

(b)(6)

Subject: FW: Radiation level at Fukushima NO.1 NPP as of March 31,09:00'
Auto forwarded by a Rule

fyi

on behalf of the Japan Emergency Command Center, +81-3-3224- 5533

Lynda Hinds
Staff Assistant to Ambassador John V. Roos
U.S. Embassy
1-10-5 Akasaka, Minato-ku
Tokyo 107-8420
Tel. (03) 3224- 5370

[Twitter.com/AmbassadorRoos](https://twitter.com/AmbassadorRoos)



From: Sano, Mikako
Sent: Thursday, March 31, 2011 4:26 PM
To: 'pemberWJ@nv.doe.gov'; Morales, Russell A; Cherry, Ronald C; Duncan, Aleshia D; JapanEmbassy, TaskForce
Cc: 'russ@earthtabi.com'; Uchida, Koichi; Walcott, Naomi; 'Chiba, Akiko'; [REDACTED] (b)(6)
Subject: Radiation level at Fukushima NO.1 NPP as of March 31,09:00'

Attached is TEPCO's radiation level at Fukushima No.1 NPP of March 31, 09:00.

You can see TEPCO's original data on Fukushima No.1NPP and No.2 NPP in the web. Below.
<http://www.tepco.co.jp/en/nu/monitoring/index-e.html>

Russ, I would like to inform you that I will suspend updates of the data because of lack of man power. Chiba-san of NSF has been kindly sharing the work with me, but she will be out of the country next week. If you need to keep updating the data, please let me know. I will consult with my supervisor to find out the solution.

Mikako Sano

From: Sano, Mikako
Sent: Wednesday, March 30, 2011 3:24 PM
To: 'pemberWJ@nv.doe.gov'; Morales, Russell A; Cherry, Ronald C; Duncan, Aleshia D; JapanEmbassy, TaskForce
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; [REDACTED] (b)(6); Uchida, Koichi; Walcott, Naomi
Subject: Radiation level at Fukushima NO.1 NPP as of March 30,09:00

Attached is TEPCO's radiation level at Fukushima No.1 NPP of March 30, 09:00.

You can see TEPCO's original data on Fukushima No.1NPP and No.2 NPP in the web. Below.
<http://www.tepco.co.jp/en/nu/monitoring/index-e.html>

Mikako Sano

From: Sano, Mikako
Sent: Tuesday, March 29, 2011 10:03 AM
To: pemberWJ@nv.doe.gov; Morales, Russell A; Cherry, Ronald C; Duncan, Aleshia D; Walcott, Naomi; JapanEmbassy, TaskForce
Cc: russ@earthtabi.com; 'Akiko Chiba'; [REDACTED] (b)(6); Uchida, Koichi
Subject: Radiation level at Fukushima NO.1 NPP as of March 29,09:00

Attached is TEPCO's radiation level at Fukushima No.1 NPP of March 28, 09:00.

You can see TEPCO's original data on Fukushima No.1NPP and No.2 NPP in the web. Below.
<http://www.tepco.co.jp/en/nu/monitoring/index-e.html>

Mikako Sano

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Saturday, March 26, 2011 1:35 PM
To: pemberWJ@nv.doe.gov; Morales, Russell A; Cherry, Ronald C; Duncan, Aleshia D; Walcott, Naomi; JapanEmbassy, TaskForce
Cc: russ@earthtabi.com; 'Akiko Chiba'; [redacted (b)(6)]; Sano, Mikako; Uchida, Koichi
Subject: Radiation level at Fukushima NO.1 NPP as of March 26, 0800

Attached is TEPCO's radiation level at Fukushima No.1 NPP of March 26, 08:00.

You can see TEPCO's original data on Fukushima No.1NPP and No.2 NPP in the web. Below.
<http://www.tepco.co.jp/en/nu/monitoring/index-e.html>

Mikako Sano (remote)

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Saturday, March 26, 2011 12:57 AM
To: 'pemberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'; 'Walcott, Naomi'; 'JapanEmbassyTaskForce@state.gov'; 'Uchidakx@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; [redacted (b)(6)]; 'Sano, Mikako'
Subject: RE: Radiation level at Fukushima NO.1 NPP as of March 22, 06:00

Attached is TEPCO's radiation level at Fukushima No.1 NPP of March 25, 06:00.
You can see TEPCO's original data on Fukushima NO.1NPP and No.2 NPP in the web. Below.
<http://www.tepco.co.jp/en/nu/monitoring/index-e.html>

Mikako Sano (remote)

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Tuesday, March 22, 2011 12:39 PM
To: 'Mikako Sano'; 'pemberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'; 'Walcott, Naomi'; 'JapanEmbassyTaskForce@state.gov'; 'Uchidakx@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; [redacted (b)(6)]; 'Sano, Mikako'
Subject: Radiation level at Fukushima NO.1 NPP as of March 22, 06:00

Attached is TEPCO's radiation level at Fukushima No1. NPP as of March 22, 06:00.

Mikako Sano (remote)

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Tuesday, March 22, 2011 12:12 PM
To: 'pemberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'; 'Walcott, Naomi'; 'JapanEmbassyTaskForce@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; 'Sano, Mikako'; [redacted (b)(6)]
Subject: R adiation level at Fukushima NO.1 NPP as of March 21, 23:50

Attached is TEPCO's radiation level at Fukushima No.1 NPP as of March 21, 23:50.

Mikako Sano (remote)

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Monday, March 21, 2011 12:43 PM
To: 'pemberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; 'Sano, Mikako'
Subject: Radiation level at Fukushima NO.1 NPP as of March 20, 23:50

Attached is radiation level at Fukushima No.1 NPP as of March 20, 23:50.

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Sunday, March 20, 2011 6:38 PM
To: 'Mikako Sano'; 'pemberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; 'Sano, Mikako'
Subject: Radiation level at Fukushima NO.1 NPP as of March 19, 23:30

Attached is radiation level at Fukushima No.1 NPP as of March 19 23:30

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Sunday, March 20, 2011 10:20 AM
To: 'pemberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; 'Sano, Mikako'
Subject: Radiation level at Fukushima NO.1 NPP as of March 18 23:50

Attached is radiation level at Fukushima No.1 as of March 18, 23:50.

Mikako Sano

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Saturday, March 19, 2011 1:50 PM
To: 'remberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cAherryrc@state.gov'; 'duncanad@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; 'Sano, Mikako'
Subject: RE: Radiation level at Fukushima NO.1 NPP as of March 18 12:00

From: Mikako Sano [mailto:mi-sano@nifty.com]
Sent: Saturday, March 19, 2011 1:03 PM
To: 'remberWJ@nv.doe.gov'; 'moralesRA@state.gov'; 'cherryrc@state.gov'; 'duncanad@state.gov'
Cc: 'russ@earthtabi.com'; 'Akiko Chiba'; 'Sano, Mikako'
Subject: Radiation level at Fukushima NO.1 NPP as of March 18 12:00

Attached is radiation level at Fukushima No.1 NPP as of March 18, 12:00.
A limited addressees are included in the list because I'm sending e-mails from home. Please share the info with officials concerned.

Thanks,

Mikako Sano

From: LIA02 Hoc
Sent: Saturday, March 26, 2011 7:15 AM
To: LIA10 Hoc
Subject: FW: Radiation data by MEXT
Attachments: 20110326_15.pdf

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

From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]
Sent: Saturday, March 26, 2011 1:26 AM

To: [redacted] (b)(6)

[redacted] (b)(6)

Subject: FW: Radiation data by MEXT

Jennifer Clever
Japan Emergency Command Center
U.S. Embassy, Tokyo

SBU

This email is UNCLASSIFIED-----Original Message-----

From: saigai03@mext.go.jp [mailto:saigai03@mext.go.jp]

Sent: Saturday, March 26, 2011 2:24 PM

To: Cherry, Ronald C

Cc: [redacted] (b)(6)

[redacted] (b)(6)

Subject: Radiation data by MEXT

Dear Mr. Cherry,

Please see attached the document.

This is the result of air monitoring by aircraft.

I'm sorry, we cannot prepare English version of our air monitoring plan yet.

Sincerely yours,
Eiko SENAMI

防衛省航空機による大気中の放出放射性物質の放射能濃度のモニタリングの測定結果

【太字、下線付きデータが今回追加箇所】

平成23年3月26日 13:00現在
文部科学省

採取場所	高度	採取期間	検出核種 (Bq/m ³)	
			Cs-137	I-131
百里～新潟	約3000m (10000フィート)	2011/3/24 11:12～ 11:40	0.0019	0.039
百里～新潟	約3000m (10000フィート)	2011/3/25 9:28～ 9:59	<u>0.0015</u>	<u>0.019</u>
福島沖	約1500～3000m (5000～10000フィート)	2011/3/24 15:25～16:00	0.017	0.46
福島沖	約1500m (5000フィート)	2011/3/25 9:30～10:07	<u>0.011</u>	<u>0.20</u>

※財団法人 日本分析センターにおいて分析