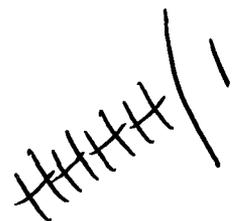


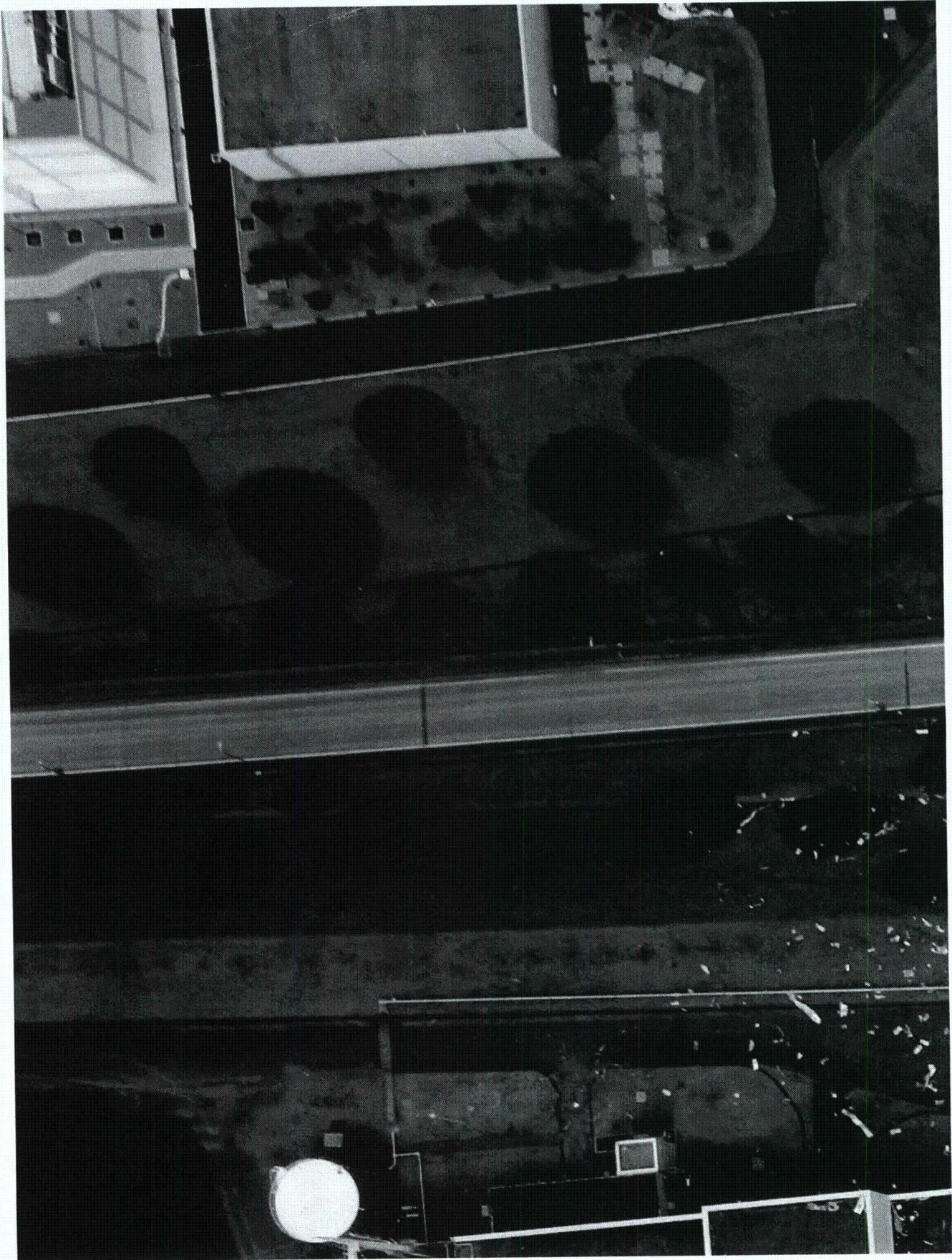
To:

eric.thomas@nrc.gov

Attachments:

IMG\_3223.JPG





---

**To:** rdc@nrc.gov  
**Subject:** Contingency Plan Template.docx  
**Attachments:** Contingency Plan Template.docx

11/11/11/2

## Contingency Plan A

### Phase I: Planning & Coordination

- 1) Personnel
  - Identify types and numbers of people\technical skill sets required (e.g., HPs, BWR, mechanical, electrical, etc.); interagency organizations; international organizations; POCs, etc.
- 2) Equipment
  - Identify types, quantities, dimensions of equipment required (see attached list)
- 3) Training
  - Identify training requirements to operate and maintain equipment (e.g., manuals, operating guides, translation capabilities, etc.)
- 4) Supplies
  - Identify types and quantities of supplies to operate equipment (e.g., fuel, oil, lubricants, spare parts, special materials, decontamination supplies\equip, etc.)
- 5) Support
  - Identify support requirements to operate equipment and run sustained operations (e.g., special transport capabilities, resupply operations, shift workers, backups, logistics planning, etc.)

### Phase II: Movement

- 1) Point of Origin
  - Movement of personnel, equipment, and supplies (PE&S) to port of debarkation (e.g., industry/vendor, gov, host nation, etc; identify mode and source of transport)
- 2) Port of Debarkation
  - Receipt and movement of personnel, equipment, and supplies (PE&S) to port of embarkation (e.g., industry/vendor, gov,, host nation, etc; identify mode and source of transport)
- 3) Port of Embarkation
  - Receipt and movement of personnel, equipment, and supplies (PE&S) to staging area (e.g., industry/vendor, gov,, host nation, etc; identify mode and source of transport)
- 4) Staging Area
  - Receipt and movement of personnel, equipment, and supplies (PE&S) to the site (e.g., industry/vendor, gov, host nation, etc; identify mode and source of transport)

### Phase III: Staging Area Operations

- 1) Personnel, Equipment, and Supplies (PE&S) Receipt
  - Establish on-site command & control/chain-of-command
  - PE&S accountability
- 2) Equipment Assembly and Testing
  - Assemble equipment
  - Test equipment
  - Conduct QA/QC
- 3) Host Nation Personnel Training
  - Conduct training activities for host nation personnel
  - Modify training as necessary
- 4) Equipment Disassembly
  - Breakdown equipment for transport
- 5) Transport PE&S to Site
  - Movement to site

### Phase IV: Site Operations

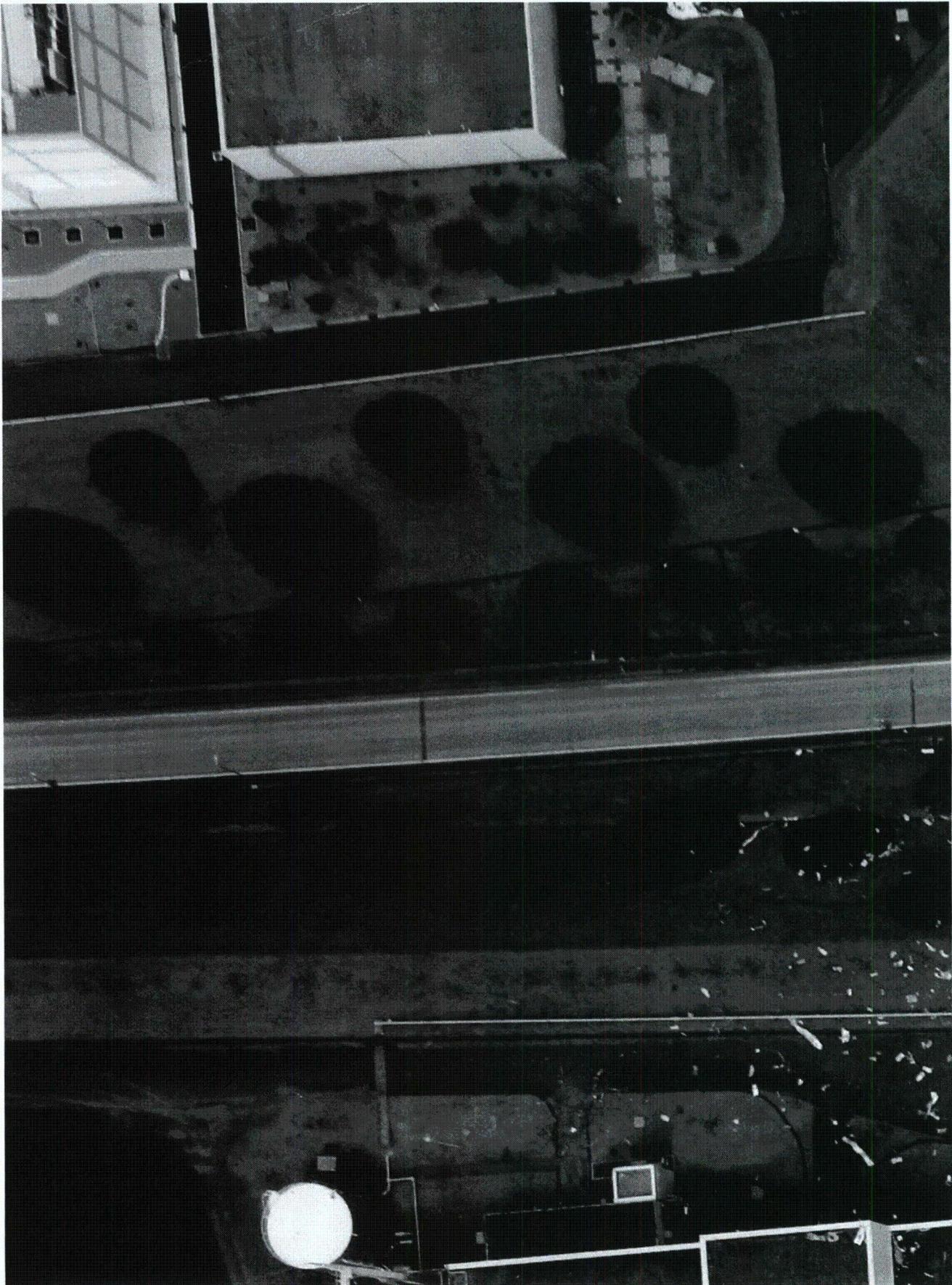
- 1) Gain Site Access
  - Identify access route(s) to site (i.e., use of maps, aerial assets)
- 2) Identify Positioning of On-Site Equipment/Operations (i.e., use of on-site plans, aerial assets)
- 3) Equipment Assembly
- 4) Execute Operations (i.e., specific to the plan)
- 5) Run Continuous Operations (i.e., specific to the plan)

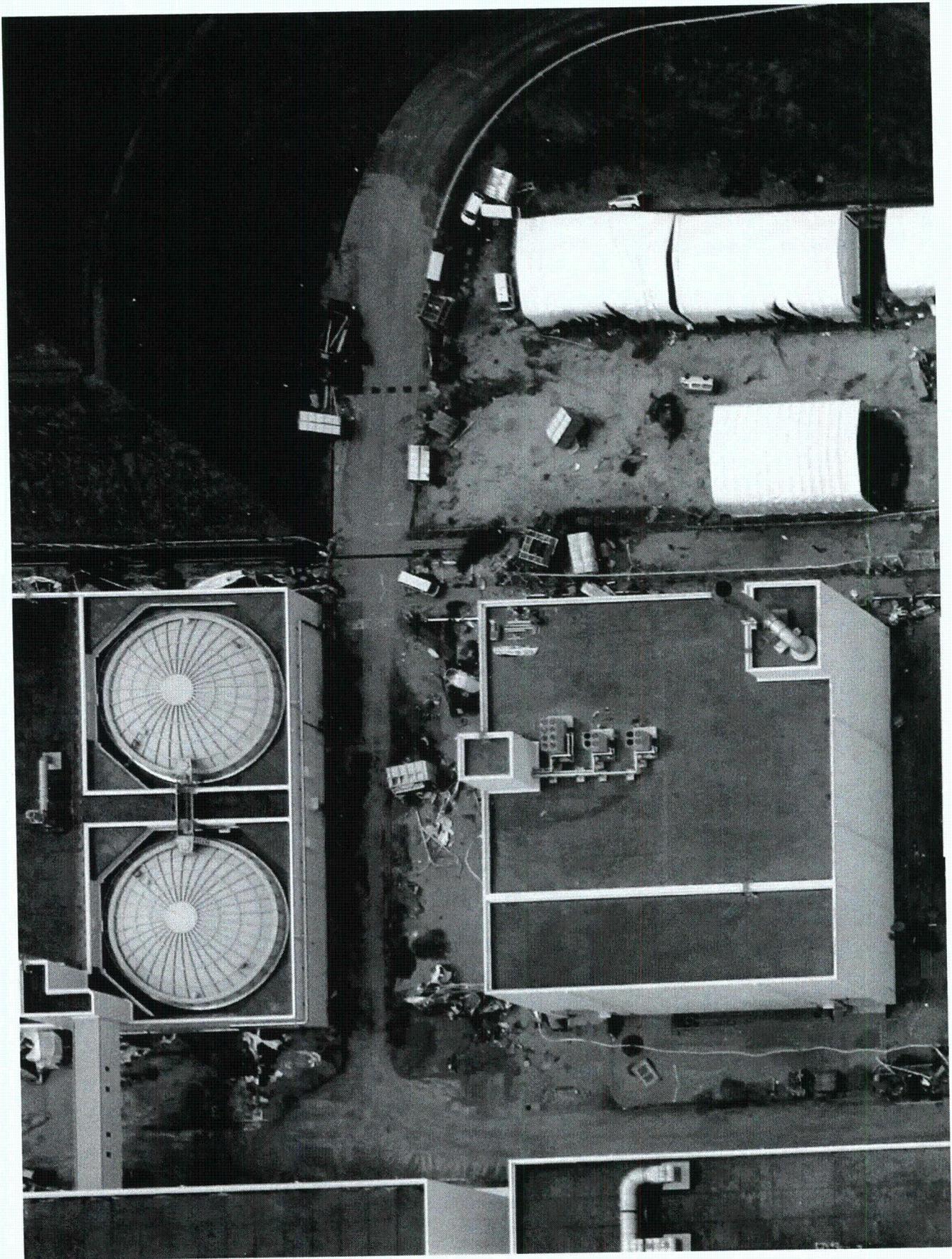
---

**To:**  
**Attachments:**

eric.thomas@nrc.gov  
IMG\_3223.JPG; IMG\_3192.JPG

11/11/13





---

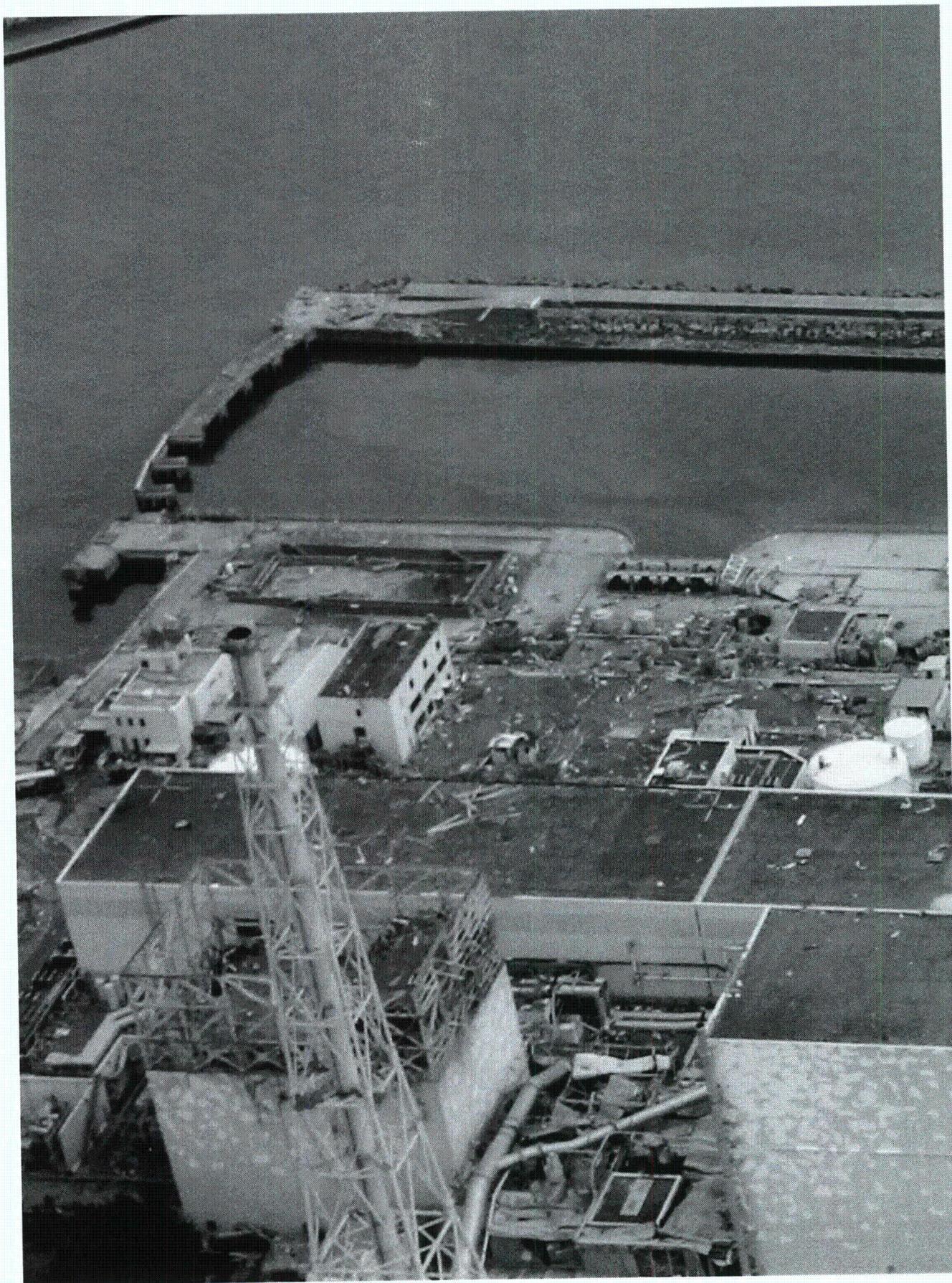
**To:**

eric.thomas@nrc.gov

**Attachments:**

IMG\_1434.JPG

111111/4



# **Act on Special Measures Concerning Nuclear Emergency Preparedness**

(Act No. 156 of December 17, 1999)

Chapter I General Provisions (Articles 1 to 6)

Chapter II Obligations, etc. of Nuclear Operators Concerning Nuclear Disaster  
Prevention (Articles 7 to 14)

Chapter III Issuance of a Declaration of a Nuclear Emergency Situation and  
Establishment, etc. of Nuclear Emergency Response Headquarters (Articles 15  
to 24)

Chapter IV Implementation, etc. of Emergency Response Measures (Articles 25  
and 26)

Chapter V Measures for Restoration from Nuclear Emergency (Article 27)

Chapter VI Miscellaneous Provisions (Articles 28 to 39)

Chapter VII Penal Provisions (Articles 40 to 42)

Supplementary Provisions

## **Chapter I General Provisions**

(Purpose)

Article 1 The purpose of this Act is to strengthen nuclear disaster control measures, in cooperation with the Act on Regulation of Nuclear Source Materials, Nuclear Fuel Materials and Reactors (Act No. 166 of 1957; hereinafter referred to as the "Reactor Regulation Act"), the Basic Act on Disaster Control Measures (Act No. 223 of 1961) and other Acts concerning nuclear disaster prevention, by providing special measures for the obligations, etc. of nuclear operators concerning nuclear disaster prevention, the issuance of a declaration of a nuclear emergency situation and the establishment, etc. of nuclear emergency response headquarters, and the implementation of emergency response measures and other matters relating to a nuclear disaster, taking into consideration the particularity of a nuclear disaster, thereby protecting the lives, bodies and properties of citizens from a nuclear disaster.

(Definitions)

Article 2 In this Act, the meanings of the terms listed in the following items shall be as prescribed respectively in those items:

HHH/5

- (i) "nuclear disaster" means damage caused to the lives, bodies or properties of citizens due to a nuclear emergency situation;
- (ii) "nuclear emergency situation" means a situation in which radioactive materials or radiation at an abnormal level has been released outside the nuclear site of a nuclear operator (in the case of the transport of radioactive materials outside the nuclear site (hereinafter referred to as "transport outside the nuclear site"), outside a vessel which is used for said transport) due to the operation of the reactor, etc. by said nuclear operator (which means the operation of the reactor, etc. prescribed in Article 2, paragraph 1 of the Act on Compensation for Nuclear Damage (Act No. 147 of 1961); the same shall apply hereinafter);
- (iii) "nuclear operator" means a person or an organization that falls under any of the following (excluding a person or an organization that has been designated, pursuant to the provisions of a Cabinet Order, by the competent minister as a person or an organization that does not plan to use a facility for the operation of the reactor, etc. over a long period of time):
  - (a) a person or an organization that has obtained permission for a fuel processing business pursuant to Article 13, paragraph 1 of the Reactor Regulation Act (including recognition given to the State under the provisions of said paragraph applied by replacing the terms pursuant to the provisions of Article 76 of the Reactor Regulation Act);
  - (b) a person or an organization that has obtained permission for the establishment of a reactor pursuant to Article 23, paragraph 1 of the Reactor Regulation Act (including recognition given to the State under the provisions of said paragraph applied by replacing the terms pursuant to the provisions of Article 76 of the Reactor Regulation Act, but excluding permission for a reactor established on a ship);
  - (c) a person or an organization that has obtained permission for a storage business pursuant to Article 43-4, paragraph 1 of the Reactor Regulation Act (including recognition given to the State under the provisions of said paragraph applied by replacing the terms pursuant to the provisions of Article 76 of the Reactor Regulation Act);
  - (d) a person or an organization that has been designated in terms of a reprocessing business pursuant to Article 44, paragraph 1 of the Reactor Regulation Act (including recognition given to the State under the provisions of said paragraph applied by replacing the terms pursuant to the provisions of Article 76 of the Reactor Regulation Act);
  - (e) a person or an organization that has obtained permission for a disposal business pursuant to Article 51-2, paragraph 1 of the Reactor Regulation Act (including recognition given to the State under the provisions of said

- paragraph applied by replacing the terms pursuant to the provisions of Article 76 of the Reactor Regulation Act);
- (f) a person or an organization that has obtained permission for using nuclear fuel materials pursuant to Article 52, paragraph 1 of the Reactor Regulation Act (including recognition given to the State under the provisions of said paragraph applied by replacing the terms pursuant to the provisions of Article 76 of the Reactor Regulation Act) (limited to a person or an organization that is deemed to have to put into place an operational safety program pursuant to the provisions of Article 56-3, paragraph 1 of the Reactor Regulation Act);
  - (iv) "nuclear site" means a factory or an operating site where a nuclear operator conducts the operation of the reactor, etc.;
  - (v) "emergency response measures" means temporary measures that should be implemented in order to prevent the progression (expansion) of a nuclear disaster (including the probability of the occurrence of a nuclear disaster) during the period from the issuance of a declaration of a nuclear emergency situation under the provisions of Article 15, paragraph 2 to the issuance of a declaration of the cancellation of a nuclear emergency situation under the provisions of paragraph 4 of said Article;
  - (vi) "measures to prevent nuclear emergency" means measures that should be implemented to prevent the occurrence of a nuclear disaster;
  - (vii) "measures for restoration from nuclear emergency" means measures that should be implemented to prevent the progression (expansion) of a nuclear disaster (including the probability of the occurrence of a nuclear disaster) or to promote nuclear disaster recovery efforts (excluding compensation by a nuclear operator for nuclear damage prescribed in Article 2, paragraph 2 of the Act on Compensation for Nuclear Damage pursuant to the provisions of said Act) after the issuance of a declaration of the cancellation of a nuclear emergency situation under the provisions of Article 15, paragraph 4;
  - (viii) "designated administrative organ" means a designated administrative organ prescribed in Article 2, item (iii) of the Basic Act on Disaster Control Measures;
  - (ix) "designated local administrative organ" means a designated local administrative organ prescribed in Article 2, item (iv) of the Basic Act on Disaster Control Measures;
  - (x) "designated public institution" means a designated public institution prescribed in Article 2, item (v) of the Basic Act on Disaster Control Measures;
  - (xi) "designated local public institution" means a designated local public institution prescribed in Article 2, item (vi) of the Basic Act on Disaster Control Measures; and
  - (xii) "disaster prevention plan" means a disaster prevention plan prescribed in

Article 2, item (vii) of the Basic Act on Disaster Control Measures and a disaster prevention plan for petroleum industrial complexes and other petroleum facilities prescribed in Article 31, paragraph 1 of the Act on the Prevention of Disasters in Petroleum Industrial Complexes and Other Petroleum Facilities (Act No. 84 of 1975).

(Responsibilities of a Nuclear Operator)

Article 3 A nuclear operator shall be responsible for taking full-scale measures for the prevention of the occurrence of a nuclear disaster pursuant to the provisions of this Act or any other relevant Act and for taking, in good faith, necessary measures with regard to the prevention of the progression (expansion) of a nuclear disaster (including the probability of the occurrence of a nuclear disaster) and nuclear disaster recovery efforts.

(Responsibilities of the State)

Article 4 (1) The State shall, pursuant to the provisions of this Act or any other relevant Act, fulfill its responsibilities under Article 3, paragraph 1 of the Basic Act on Disaster Control Measures concerning a nuclear disaster by establishing nuclear emergency response headquarters, giving necessary instructions to local governments and taking other measures necessary for the implementation of emergency response measures and those necessary for the implementation of measures to prevent nuclear emergency and measures for restoration from nuclear emergency.

(2) The head of a designated administrative organ (in the case where said designated administrative organ is a committee or any other agency based on the council system, said designated administrative organ; the same shall apply hereinafter except in Article 17, paragraph 6, item (iii) and Article 20, paragraph 3) and the head of a designated local administrative organ shall, for the purpose of ensuring the smooth implementation of measures to prevent nuclear emergency, emergency response measures and measures for restoration from nuclear emergency by a local government under the provisions of this Act, make recommendations and give advice to said local government and take other appropriate measures with regard to the affairs under the jurisdiction of said local government.

(3) In addition to exercising his/her authority under the provisions of this Act appropriately, the competent minister shall, for the purpose of ensuring the smooth implementation of measures to prevent nuclear emergency, emergency response measures and measures for restoration from nuclear emergency by a nuclear operator under the provisions of this Act, give guidance and advice to said nuclear operator and take other appropriate measures.

(Responsibilities of a Local Government)

Article 5 A local government shall, pursuant to the provisions of this Act or any other relevant Act, fulfill its responsibilities under Article 4, paragraph 1 and Article 5, paragraph 1 of the Basic Act on Disaster Control Measures concerning a nuclear disaster by taking measures necessary for the implementation of measures to prevent nuclear emergency, emergency response measures and measures for restoration from nuclear emergency.

(Coordination and Cooperation among Relevant Organs)

Article 6 The State, local governments, nuclear operators, and designated public institutions and designated local public institutions shall, for the purpose of ensuring the smooth implementation of measures to prevent nuclear emergency, emergency response measures and measures for restoration from nuclear emergency, cooperate with each other through the promotion of mutual coordination.

## **Chapter II Obligations, etc. of Nuclear Operators Concerning**

### **Nuclear Disaster Prevention**

(Nuclear Operator Emergency Action Plan)

Article 7 (1) A nuclear operator shall, pursuant to the provisions of an ordinance of the competent ministry, prepare a nuclear operator emergency action plan with regard to its measures to prevent nuclear emergency, emergency response measures, and measures for restoration from nuclear emergency and other duties that are necessary for preventing the occurrence and progression (expansion) of a nuclear disaster and for promoting nuclear disaster recovery efforts, with respect to each of its nuclear sites, and review its nuclear operator emergency action plan every year and revise it if revision is found to be necessary.

In this case, said nuclear operator emergency action plan shall not conflict with either any regional disaster prevention plan prescribed in Article 2, item (x) of the Basic Act on Disaster Control Measures or any disaster prevention plan for petroleum industrial complexes and other petroleum facilities prescribed in Article 31, paragraph 1 of the Act on the Prevention of Disasters in Petroleum Industrial Complexes and Other Petroleum Facilities (referred to as a "regional disaster prevention plan, etc." in the next paragraph).

(2) When a nuclear operator intends to prepare or revise a nuclear operator emergency action plan pursuant to the provisions of the preceding paragraph, it

shall, pursuant to the provisions of a Cabinet Order, confer in advance with a prefectural governor who has jurisdiction over the area where the relevant nuclear site is located (hereinafter referred to as the "competent prefectural governor"), the mayor of a municipality who has jurisdiction over said area (hereinafter referred to as the "competent mayor of a municipality") and the prefectural governors of the prefectures which include a municipality that neighbors a municipality including said area (excluding the competent prefectural governor; hereinafter referred to as the "related neighboring prefectural governors"). In this case, the competent prefectural governor and related neighboring prefectural governors shall hear the opinions of the mayors of related surrounding municipalities (which means the mayors of municipalities which have prepared a regional disaster prevention plan, etc. (excluding those listed in Article 2, item (x) (a) or (c) of the Basic Act on Disaster Control Measures) concerning nuclear disasters pertaining to said nuclear site with regard to the municipal area and fulfill other requirements specified by a Cabinet Order (excluding the competent mayor of a municipality); the same shall apply hereinafter ).

- (3) A nuclear operator shall, when it has prepared or revised a nuclear operator emergency action plan pursuant to the provisions of paragraph 1, promptly notify the competent minister to that effect and make public the gist of the plan.
- (4) The competent minister may, when he/she finds a nuclear operator to be in violation of the provisions of paragraph 1 or when he/she finds the nuclear operator emergency action plan of a nuclear operator not to be sufficient to prevent the occurrence or progression (expansion) of a nuclear disaster pertaining to the relevant nuclear site, order the nuclear operator to prepare a nuclear operator emergency action plan or to revise its nuclear operator emergency action plan.

(On-Site Organization for Nuclear Emergency Preparedness)

- Article 8 (1) A nuclear operator shall establish an on-site organization for nuclear emergency preparedness with respect to each of its nuclear sites.
- (2) An on-site organization for nuclear emergency preparedness shall, in accordance with a nuclear operator emergency action plan under paragraph 1 of the preceding Article, perform the necessary duties for preventing the occurrence or progression (expansion) of a nuclear disaster prescribed in said paragraph.
  - (3) A nuclear operator shall, pursuant to the provisions of an ordinance of the competent ministry, post nuclear disaster prevention staff who are engaged in the duties prescribed in the preceding paragraph, at its on-site organization for nuclear emergency preparedness.
  - (4) When a nuclear operator has posted nuclear disaster prevention staff at its on-

site organization for nuclear emergency preparedness, it shall, pursuant to the provisions of an ordinance of the competent ministry, notify the competent minister, the competent prefectural governor, the competent mayor of a municipality and the related neighboring prefectural governors of the current status thereof. In this case, the competent prefectural governor and the related neighboring prefectural governors shall send a copy of the document pertaining to said notification to the mayors of related surrounding municipalities.

- (5) The competent minister may, when he/she finds a nuclear operator to be in violation of the provisions of paragraph 1 or 3, order said nuclear operator to establish an on-site organization for nuclear emergency preparedness or post nuclear disaster prevention staff.

(Nuclear Emergency Preparedness Manager)

Article 9 (1) A nuclear operator shall appoint a nuclear emergency preparedness manager with respect to each of its nuclear sites and have him/her manage the relevant on-site organization for nuclear emergency preparedness.

- (2) A person who manages and administrates the implementation of the business of a nuclear site at said nuclear site shall serve as a nuclear emergency preparedness manager.
- (3) A nuclear operator shall appoint a vice-nuclear emergency preparedness manager from those in a managerial or supervisory position who are able to perform, appropriately, duties concerning the prevention of the occurrence or progression (expansion) of a nuclear disaster at the relevant nuclear site, and have him/her assist a nuclear emergency preparedness manager in managing the relevant on-site organization for nuclear emergency preparedness.
- (4) When a nuclear emergency preparedness manager is not located within the relevant nuclear site, a nuclear operator shall have a vice-nuclear emergency preparedness manager manage the relevant on-site organization for nuclear emergency preparedness.
- (5) When a nuclear operator has appointed a nuclear emergency preparedness manager or a vice-nuclear emergency preparedness manager pursuant to the provisions of paragraph 1 or 3, it shall, pursuant to the provisions of an ordinance of the competent ministry, notify the competent minister, the competent prefectural governor, the competent mayor of a municipality and the related neighboring prefectural governors to that effect without delay.  
The same shall apply to the dismissal of such a person.
- (6) The provisions of the second sentence of paragraph 4 of the preceding Article shall apply mutatis mutandis to the notification set forth in the preceding paragraph.
- (7) The competent minister may, when he/she finds a nuclear operator to be in

violation of the provisions of paragraph 1 or 3 or when a nuclear emergency preparedness manager or a vice-nuclear emergency preparedness manager has violated the provisions of this Act or any order based on this Act, order the nuclear operator to appoint a nuclear emergency preparedness manager or a vice-nuclear emergency preparedness manager or to dismiss the relevant nuclear emergency preparedness manager or vice-nuclear emergency preparedness manager.

(Obligation to Notify, etc. of a Nuclear Emergency Preparedness Manager)

Article 10 (1) When a nuclear emergency preparedness manager has been notified that a radiation dose above the limit specified by a Cabinet Order has been detected, pursuant to the provisions of a Cabinet Order, near the border of an area where the nuclear site is located or has discovered such fact for him/herself, he/she shall, pursuant to the provisions of an ordinance of the competent ministry and the nuclear operator emergency action plan, immediately notify the competent minister, the competent prefectural governor, the competent mayor of a municipality and the related neighboring prefectural governors (in the case of the occurrence of an event pertaining to transport outside the nuclear site, the competent minister, and a prefectural governor and the mayor of a municipality who have jurisdiction over the place where said event has occurred) to that effect. In this case, the competent prefectural governor and the related neighboring prefectural governors shall notify the mayors of related surrounding municipalities to that effect.

(2) A prefectural governor or the mayor of a municipality who has received a notification pursuant to the provisions of the first sentence of the preceding paragraph may, pursuant to the provisions of a Cabinet Order, request the competent minister to dispatch expert officials for the purpose of understanding the situation. In this case, the competent minister shall dispatch officials who are found to be qualified.

(Preparation, etc. of Radiation Measurement Facility and Other Necessary Materials and Equipment)

Article 11 (1) A nuclear operator shall, in accordance with the requirements specified by an ordinance of the competent ministry, establish in its nuclear site a radiation measurement facility necessary for giving a notification under the provisions of the first sentence of paragraph 1 of the preceding Article, and maintain such facility.

(2) A nuclear operator shall, in its on-site organization for nuclear emergency preparedness, install protection apparatus for radiation hazards, emergency communication devices and any other materials and equipment necessary for said

on-site organization for nuclear emergency preparedness to perform its duties, which are specified by an ordinance of the competent ministry (hereinafter referred to as "materials and equipment for nuclear disaster prevention"), and maintain and check them as needed.

- (3) When a nuclear operator has established a radiation measurement facility pursuant to the provisions of paragraph 1 or installed materials and equipment for nuclear disaster prevention pursuant to the provisions of the preceding paragraph, it shall, pursuant to the provisions of an ordinance of the competent ministry, notify the competent minister, the competent municipal governor, the competent mayor of a municipality and the related neighboring prefectural governors of the status of such facility or materials and equipment.
- (4) The provisions of the second sentence of Article 8, paragraph 4 shall apply *mutatis mutandis* to the notification set forth in the preceding paragraph.
- (5) When a nuclear operator has established a radiation measurement facility pursuant to the provisions of paragraph 1, it shall, pursuant to the provisions of an ordinance of the competent ministry, undergo an inspection conducted by the competent minister with regard to the performance of the facility.
- (6) The competent minister may, when he/she finds a nuclear operator to be in violation of the provisions of paragraph 1 or 2, order said nuclear operator to take necessary measures for the establishment, maintenance or improvement of its radiation measurement facility or the installation or maintenance and check of its materials and equipment for nuclear disaster prevention.
- (7) A nuclear operator shall, pursuant to the provisions of an ordinance of the competent ministry, record the numerical values of a radiation dose detected by a radiation measurement facility under paragraph 1, and publicize such values.

(Designation of an Off-Site Center)

- Article 12 (1) The competent minister shall, with respect to each nuclear site, designate a facility that serves as the center for emergency response measures taken by a person or an organization prescribed in Article 26, paragraph 2, which is located within the area of the prefecture that includes the area where the relevant nuclear site is located and fulfills other requirements specified by an ordinance of the competent ministry (hereinafter referred to as an "off-site center").
- (2) The competent minister shall, when he/she intends to designate an off-site center or make any change to a designation, hear in advance the opinions of the competent prefectural governor, the competent mayor of a municipality, and the mayor of a municipality who has jurisdiction over the location of said off-site center (excluding the competent mayor of a municipality) and a nuclear operator pertaining to said off-site center.

- (3) The designation or change of designation under paragraph 1 shall be carried out with a public notice to that effect given in an official gazette.
- (4) A nuclear operator shall, when being designated under paragraph 1, submit to the competent minister the materials specified by an ordinance of the competent ministry as those necessary to enable a person or an organization prescribed in Article 26, paragraph 2 to take emergency response measures pertaining to the relevant nuclear site at the relevant off-site center. The same shall apply to a case where there has been any change to the content of any documents submitted.
- (5) The competent minister shall keep the documents submitted pursuant to the provisions of the preceding paragraph at the relevant off-site center.

(National Plan Concerning Disaster Prevention Drills)

Article 13 (1) Disaster prevention drills under Article 48, paragraph 1 of the Basic Act on Disaster Control Measures applied by replacing the terms and phrases pursuant to the provisions of Article 28, paragraph 1 (excluding those carried out by each person in charge of disaster prevention prescribed in said paragraph pursuant to the provisions of a disaster prevention plan or a nuclear operator emergency action plan) shall be carried out based on a plan prepared by the competent minister pursuant to the provisions of an ordinance of the competent ministry.

- (2) A plan prepared pursuant to the provisions of the preceding paragraph shall include the following matters which are necessary for the implementation of disaster prevention drills:
  - (i) matters concerning the anticipation of a nuclear emergency;
  - (ii) matters concerning the operation of the provisions of Articles 10, 15 and 23;
  - and
  - (iii) in addition to what is listed in the preceding two items, matters necessary for promoting the implementation of measures to prevent nuclear emergency.

(Cooperation for Other Nuclear Site)

Article 14 A nuclear operator shall, where there is a need to take emergency response measures pertaining to the nuclear site of another nuclear operator, make efforts to dispatch nuclear disaster prevention staff, lend materials and equipment for nuclear disaster prevention and provide any other cooperation necessary for implementing said emergency response measures.

**Chapter III Issuance of a Declaration of a Nuclear Emergency**

**Situation and Establishment, etc. of Nuclear Emergency Response**

## **Headquarters**

(Declaration of a Nuclear Emergency Situation, etc.)

- Article 15 (1) In the case of falling under any of the following items, the competent minister shall, when he/she finds that a nuclear emergency situation has occurred, immediately report necessary information concerning the situation to the Prime Minister, and submit a draft of a public notice under the provisions of the next paragraph and a draft of an instruction under the provisions of paragraph 3 to the Prime Minister:
- (i) where the detected radiation dose pertaining to a notification which the competent minister has received pursuant to the provisions of the first sentence of Article 10, paragraph 1 or the radiation dose detected at a radiation measurement facility and by a measuring method, both of which are specified by a Cabinet Order, exceeds the radiation dose specified by a Cabinet Order as the condition of an abnormal level of a radiation dose;
  - (ii) in addition to what is listed in the preceding item, where an event specified by a Cabinet Order as an event that indicates the occurrence of a nuclear emergency situation has occurred.
- (2) When there has been a report or submission under the provisions of the preceding paragraph, the Prime Minister shall immediately give public notice of the occurrence of a nuclear emergency situation and the following matters (hereinafter referred to as the "declaration of a nuclear emergency situation"):
- (i) the area where emergency response measures should be implemented;
  - (ii) the outline of the nuclear emergency situation;
  - (iii) in addition to what is listed in the preceding two items, the matters which need to be known by residents, visitors and other persons, and public and private organizations (hereinafter referred to as "residents, etc.") in the area listed in item (i).
- (3) When there has been a report or submission under the provisions of paragraph 1, the Prime Minister shall immediately instruct mayors of municipalities and prefectural governors who have jurisdiction over the area listed in item (i) of the preceding paragraph to make a recommendation or give instructions for eviction in order to evacuate the area or to take shelter under the provisions of Article 60, paragraphs 1 and 5 of the Basic Act on Disaster Control Measures applied by replacing the terms and phrases pursuant to the provisions of Article 28, paragraph 2, or give such mayors of municipalities and prefectural governors other instructions concerning emergency response measures.
- (4) The Prime Minister shall, when he/she finds, after he/she has issued a declaration of a nuclear emergency situation, that it is no longer necessary to

implement emergency measures in order to prevent the progression (expansion) of a nuclear disaster, promptly hear the opinions of the Nuclear Safety Commission and give a public notice to the effect that said declaration of a nuclear emergency situation is cancelled (hereinafter referred to as a "declaration of the cancellation of a nuclear emergency situation").

(Establishment of Nuclear Emergency Response Headquarters)

Article 16 (1) The Prime Minister shall, when he/she has issued a declaration of a nuclear emergency situation, temporarily establish nuclear emergency response headquarters within the Cabinet Office after deliberation in a cabinet meeting in order to promote emergency response measures pertaining to said nuclear emergency situation, notwithstanding the provisions of Article 40, paragraph 2 of the Act for Establishment of the Cabinet Office (Act No. 89 of 1999).

(2) The Prime Minister shall, when he/she has established the nuclear emergency response headquarters, immediately publicly notify the name of said nuclear emergency response headquarters and the place and period of their establishment, and, when said nuclear emergency response headquarters have been abolished, immediately publicly notify to that effect.

(Organization of Nuclear Emergency Response Headquarters)

Article 17 (1) The nuclear emergency response headquarters shall be headed by the director-general of the nuclear emergency response headquarters, and the Prime Minister (or in the case of an accident to the Prime Minister, a Minister of State designated by the Prime Minister in advance) shall serve in this capacity.

(2) The director-general of the nuclear emergency response headquarters shall manage the affairs of the nuclear emergency response headquarters and direct and supervise the officials thereof.

(3) The nuclear emergency response headquarters shall have a vice director-general(s), members and other officials.

(4) The competent minister shall serve as the vice director-general of the nuclear emergency response headquarters.

(5) The vice director-general of the nuclear emergency response headquarters shall assist the director-general of the nuclear emergency response headquarters, and, in the case of an accident to the director-general of the nuclear emergency response headquarters, he/she shall be delegated the duties of said director-general. Where there are two or more vice director-generals of the nuclear emergency response headquarters, they shall be delegated said duties in the order set in advance by the director-general of the nuclear emergency response headquarters.

(6) The following persons shall serve as the members of the nuclear emergency

response headquarters:

- (i) persons appointed by the Prime Minister from among the Ministers of State other than the director-general and the vice director-general(s) of the nuclear emergency response headquarters;
- (ii) the Deputy Chief Cabinet Secretary for Crisis Management; and
- (iii) persons appointed by the Prime Minister from among the Senior Vice-Ministers or the heads of designated administrative organs other than the Ministers of State.

- (7) The officials of the nuclear emergency response headquarters other than the vice director-general(s) and the members of the nuclear emergency response headquarters shall be appointed by the Prime Minister from among the officials of the Cabinet Secretariat or designated administrative organs, or the heads or officials of designated local administrative organs.
- (8) Local nuclear emergency response headquarters shall be established within the nuclear emergency response headquarters as an organization which conducts part of the affairs of said nuclear emergency response headquarters in the emergency response measures implementation area (which means the area listed in Article 15, paragraph 2, item (i) (in the case where said area has been changed pursuant to the provisions of Article 20, paragraph 5, the area after said change); the same shall apply hereinafter) as specified by the director-general of said nuclear emergency response headquarters. In this case, the provisions of Article 156, paragraph 4 of the Local Autonomy Act (Act No. 67 of 1947) shall not apply.
- (9) The provisions of paragraph 2 of the preceding Article shall apply mutatis mutandis to the local nuclear emergency response headquarters.
- (10) The local nuclear emergency response headquarters prescribed in paragraph 2 of the preceding Article, as applied mutatis mutandis pursuant to the preceding paragraph, shall be established at an off-site center designated pursuant to the provisions of Article 12, paragraph 1 with regard to a nuclear site pertaining to the relevant nuclear emergency situation (in the case where a nuclear emergency situation pertaining to transport outside the nuclear site has occurred or where there are any other special circumstances, a facility specified by the director-general of the relevant nuclear emergency response headquarters by taking into consideration the place where said nuclear emergency situation has occurred; the same shall apply in Article 23, paragraph 4).
- (11) The local nuclear emergency response headquarters shall have a director-general, members and other officials.
- (12) The director-general of the local nuclear emergency response headquarters shall take charge of the affairs of the local nuclear emergency response

headquarters under the orders of the director-general of the relevant nuclear emergency response headquarters.

- (13) The director-general, members and other officials of the local nuclear emergency response headquarters shall be appointed from among the vice director-general(s), members and other officials of the relevant nuclear emergency response headquarters based on a designation by the director-general of the relevant nuclear emergency response headquarters.

(Affairs under Jurisdiction of Nuclear Emergency Response Headquarters)

Article 18 The nuclear emergency response headquarters shall take charge of the following affairs:

- (i) affairs relating to the comprehensive coordination of emergency response measures that are implemented by the head of a designated administrative organ, the head of a designated local administrative organ, the head of a local government or any other executive organ, designated public institution, designated local public institution or an on-site organization for nuclear emergency preparedness of a nuclear operator in the emergency response measures implementation area based on a disaster prevention plan or a nuclear operator emergency action plan;
- (ii) affairs that fall under the authority of the director-general of the nuclear emergency response headquarters pursuant to the provisions of this Act; and
- (iii) in addition to what is listed in the preceding two items, affairs that fall under the authority thereof pursuant to the provisions of laws and regulations.

(Delegation of the Authority of the Head of a Designated Administrative Organ)

Article 19 (1) The head of a designated administrative organ may, when the nuclear emergency response headquarters have been established, delegate the whole or a part of his/her authority for emergency response measures to the officials of said designated administrative organ or the head or officials of the relevant designated local administrative organ, who are the officials of said nuclear emergency response headquarters.

- (2) The head of a designated administrative organ shall, when he/she has delegated his/her authority pursuant to the provisions of the preceding paragraph, immediately give a public notice to that effect.

(Authority of the Director-General of Nuclear Emergency Response Headquarters)

Article 20 (1) The director-general of the nuclear emergency response headquarters may coordinate the exercise of his/her authority by officials to whom such authority has been delegated pursuant to the provisions of the preceding Article

- in the emergency response measures implementation area covered by said nuclear emergency response headquarters.
- (2) When the director-general of the nuclear emergency response headquarters finds it especially necessary for implementing emergency response measures accurately and promptly in the emergency response measures implementation area covered by said nuclear emergency response headquarters, he/she may, pursuant to the provisions of Article 64, paragraph 3 of the Reactor Regulation Act, instruct the competent minister to give the necessary orders.
  - (3) In addition to the instructions under the provisions of the preceding paragraph, when the director-general of the nuclear emergency response headquarters finds it especially necessary for implementing emergency response measures accurately and promptly in the emergency response measures implementation area covered by said nuclear emergency response headquarters, he/she may, within the limit necessary, give necessary instructions to the heads of the relevant designated administrative organs and the heads of the relevant designated local administrative organs, and the officials of said designated administrative organs and the officials of said designated local administrative organs to whom his/her authority has been delegated pursuant to the provisions of the preceding Article, the heads of local governments and other executive organs, designated public institutions and designated local public institutions, and nuclear operators.
  - (4) The director-general of the nuclear emergency response headquarters may, when he/she finds that it is necessary to request support from the Self-Defense Forces in order to implement emergency response measures accurately and promptly in the emergency response measures implementation area covered by said nuclear emergency response headquarters, request the Minister of Defense to dispatch units, etc. prescribed in Article 8 of the Self-Defense Forces Act (Act No. 165 of 1954).
  - (5) The director-general of the nuclear emergency response headquarters may, in accordance with the transition of a nuclear emergency situation, change the matters listed in Article 15, paragraph 2, items (i) and (iii), which have been publicly notified in the declaration of a nuclear emergency situation pertaining to said nuclear emergency response headquarters, by giving a public notice, after hearing the opinions of the Nuclear Safety Commission.
  - (6) The director-general of the nuclear emergency response headquarters may, when he/she finds it necessary for implementing emergency response measures accurately and promptly in the emergency response measures implementation area covered by said nuclear emergency response headquarters, ask the Nuclear Safety Commission for necessary advice with regard to technical matters concerning the implementation of emergency response measures.
  - (7) The director-general of the nuclear emergency response headquarters may

delegate the whole or a part of his/her authority under the provisions of the preceding six paragraphs to the vice director-general of the nuclear emergency response headquarters.

- (8) The director-general of the nuclear emergency response headquarters may delegate a part of his/her authority under the provisions of paragraphs 1, 3 and 6 (excluding giving instructions to the heads of the relevant designated administrative organs under the provisions of paragraph 3) to the director-general of the local nuclear emergency response headquarters.
- (9) The director-general of the nuclear emergency response headquarters shall, when he/she has delegated his/her authority pursuant to the provisions of the preceding two paragraphs, immediately give a public notice to that effect.

(Abolition of Nuclear Emergency Response Headquarters)

Article 21 Nuclear emergency response headquarters shall be abolished when a declaration of the cancellation of a nuclear emergency situation is issued with regard to a nuclear emergency situation pertaining to the relevant declaration of a nuclear emergency situation.

(Mandatory Establishment of Prefectural and Municipal Headquarters for Disaster Control)

Article 22 When a declaration of a nuclear emergency situation has been issued, prefectural governors and mayors of municipalities who have jurisdiction over the emergency response measures implementation area pertaining to said declaration of a nuclear emergency situation shall establish headquarters for disaster control as prescribed in Article 23, paragraph 1 of the Basic Act on Disaster Control Measures with regard to said nuclear emergency situation.

(Joint Council for Nuclear Emergency Response)

Article 23 (1) When a declaration of a nuclear emergency situation has been issued, the local nuclear emergency response headquarters and the prefectural and municipal headquarters for disaster control which have jurisdiction over the emergency response measures implementation area pertaining to said declaration of a nuclear emergency situation shall organize a Joint Council for Nuclear Emergency Response, in order to exchange information on said nuclear emergency situation and cooperate with one another for the emergency response measures that they implement respectively.

- (2) A Joint Council for Nuclear Emergency Response shall consist of the following persons:
- (i) the director-general, members and other officials of the local nuclear emergency response headquarters;

- (ii) the director-generals of the prefectural headquarters for disaster control, or the vice director-generals, members or other officials of said prefectural headquarters for disaster control who have been delegated by the director-generals of said prefectural headquarters for disaster control; and
  - (iii) the director-generals of the municipal headquarters for disaster control, or the vice director-generals, members or other officials of said municipal headquarters for disaster control, who have been delegated by the director-generals of said municipal headquarters for disaster control.
- (3) A Joint Council for Nuclear Emergency Response may, when it finds it necessary, by conference, include designated public institutions, nuclear operators or any other parties responsible for the implementation of nuclear emergency response measures within the council, in addition to the persons listed in the preceding paragraph.
- (4) A Joint Council for Nuclear Emergency Response shall be established at an off-site center.

(Exclusion from Application of the Basic Act on Disaster Control Measures)  
Article 24 During the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation, the provisions of Chapter II, Section 3 and Article 107 of the Basic Act on Disaster Control Measures shall not apply to the nuclear emergency situation pertaining to said declaration of a nuclear emergency situation.

#### **Chapter IV Implementation, etc. of Emergency Response Measures**

- (Emergency Responses to be Implemented by a Nuclear Operator)  
Article 25 (1) When an event specified by a Cabinet Order under Article 10, paragraph 1 has occurred at the nuclear site managed by a nuclear emergency preparedness manager, the nuclear emergency preparedness manager shall, pursuant to the provisions of a nuclear operator emergency action plan, immediately have the on-site organization for nuclear emergency preparedness of said nuclear site implement the emergency responses necessary for preventing the occurrence or progression (expansion) of a nuclear disaster.
- (2) In the case prescribed in the preceding paragraph, a nuclear operator shall, pursuant to the provisions of its nuclear operator emergency action plan, report the outline of the measures implemented under the provisions of said paragraph to the competent minister, the competent prefectural governor, the competent mayor of a municipality and the related neighboring prefectural governors (in the

case of the occurrence of an event pertaining to transport outside the nuclear site, the competent minister, and a prefectural governor and the mayor of a municipality who have jurisdiction over the place where said event has occurred). In this case, the competent prefectural governor and the related neighboring prefectural governors shall notify the mayors of related surrounding municipalities of the content of said report.

(Emergency Response Measures and Responsibilities for Their Implementation)

Article 26 (1) Emergency response measures shall be implemented with regard to the following matters:

- (i) declaration of a nuclear emergency situation and other matters relating to the transmission of information regarding a nuclear disaster and a recommendation for or instruction of evacuation;
  - (ii) measurement of a radiation dose and other matters relating to the collection of information regarding a nuclear disaster;
  - (iii) salvage, rescue of disaster victims and other matters relating to their protection;
  - (iv) matters relating to the development, check and emergency recovery of facilities and equipment;
  - (v) crime prevention, traffic control and other matters relating to maintenance of the social order in the area affected by the relevant nuclear disaster;
  - (vi) matters relating to securing emergency transportation;
  - (vii) securing food, medicine and other materials, measurement of radiation exposure of residents, etc., removal of contamination by radioactive materials and other matters relating to the implementation of emergency responses; and
  - (viii) in addition to what is listed in the preceding seven items, matters relating to measures to prevent the progression (expansion) of a nuclear disaster (including the probability of the occurrence of a nuclear disaster).
- (2) During the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation, the heads of designated administrative organs and the heads of designated local administrative organs, the heads of local governments and other executive organs, designated public institutions and designated local public institutions, nuclear operators and other parties responsible for the implementation of emergency response measures pursuant to the provisions of laws and regulations shall implement emergency response measures pursuant to the provisions of laws and regulations, a disaster prevention plan or a nuclear operator emergency action plan.
- (3) A nuclear operator shall, pursuant to the provisions of laws and regulations, a disaster prevention plan or a nuclear operator emergency action plan, dispatch

nuclear disaster prevention staff, lend materials and equipment for nuclear disaster prevention and take other necessary measures for the accurate and smooth implementation of emergency response measures which are implemented by the heads of designated administrative organs and the heads of designated local administrative organs, and the heads of local governments and other executive organs.

## **Chapter V Measures for Restoration from Nuclear Emergency**

(Measures for Restoration from Nuclear Emergency and Responsibilities for Their Implementation)

Article 27 (1) Measures for restoration from nuclear emergency shall be implemented with regard to the following matters:

- (i) investigation of the concentration or density of radioactive materials, or of the radiation dose, in the emergency response measures implementation area or other areas where such investigation is required (referred to as the "emergency response measures implementation area, etc." in item (iii));
  - (ii) medical examination of and mental and physical health consultation for residents, etc. and other measures relating to medical care;
  - (iii) public information activities concerning the status of the emanation of radioactive materials in the emergency response measures implementation area, etc. for the purpose of preventing the stagnation of sales, etc. of goods resulting from a situation where the status of contamination by radioactive materials remains unclear;
  - (iv) in addition to what is listed in the preceding three items, matters relating to measures for preventing the progression (expansion) of a nuclear disaster (including the probability of the occurrence of a nuclear disaster) or promoting nuclear disaster recovery efforts.
- (2) The heads of designated administrative organs and the heads of designated local administrative organs, the heads of local governments and other executive organs, designated public institutions and designated local public institutions, nuclear operators and other parties responsible for measures for restoration from nuclear emergency pursuant to the provisions of laws and regulations shall implement measures for restoration from nuclear emergency pursuant to the provisions of laws and regulations, a disaster prevention plan or a nuclear operator emergency action plan.
- (3) A nuclear operator shall, pursuant to the provisions of laws and regulations, a disaster prevention plan or a nuclear operator emergency action plan, dispatch nuclear disaster prevention staff, lend materials and equipment for nuclear

disaster prevention and take other necessary measures for the accurate and smooth implementation of measures for restoration from nuclear emergency which are implemented by the heads of designated administrative organs and the heads of designated local administrative organs, and the heads of local governments and other executive organs.

### Chapter VI Miscellaneous Provisions

(Application of the Basic Act on Disaster Control Measures by Replacing the Terms and Phrases, etc.)

Article 28 (1) With regard to the application of the provisions of the Basic Act on Disaster Control Measures, which are listed in the left-hand column of the following table (including the cases where these provisions are applied by replacing the terms and phrases pursuant to the provisions of Article 32, paragraph 2 of the Act on the Prevention of Disasters in Petroleum Industrial Complexes and Other Petroleum Facilities), to a nuclear disaster, the terms and phrases listed in the middle column of the same table in these provisions shall be deemed to be replaced with the terms and phrases listed in the right-hand column of the same table.

| Provision for which a term or phrase is deemed to be replaced | Term or phrase deemed to be replaced | Term or phrase to be used as replacement   |
|---|--------------------------------------|--|
| Article 2, item (ii)  | disaster                             | nuclear disaster (which means the nuclear disaster prescribed in Article 2, item (i) of the Act on Special Measures Concerning Nuclear Emergency Preparedness; the same shall apply hereinafter) |
|   | disaster                             | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
|   | damage                               | damage (including the probability of the occurrence of damage)   |
|   | disaster                             | nuclear disaster   |

|   |  |  |
|---|--|--|
| Article 21  | and other persons concerned  | nuclear operators (which means the nuclear operators prescribed in Article 2, item (iii) of the Act on Special Measures Concerning Nuclear Emergency Preparedness) and other persons concerned |
|   | to provide materials   | , or the Nuclear Safety Commission through the competent ministry, to provide materials  |
| Article 34, paragraph 1   | disaster and disaster prevention   | nuclear disaster and nuclear disaster prevention   |
|   | status of disasters  | status of nuclear disasters (including the probability of the occurrence of a nuclear disaster)  |
|   | emergency disaster control measures                                      | emergency response measures  |
| Article 40, paragraph 2, item (ii) and Article 42, paragraph 2, item (ii) | disaster prevention  | measures to prevent nuclear emergency  |
|   | issuance and transmission of a forecast or a warning concerning disaster | transmission of a declaration of a nuclear emergency situation and other information regarding a nuclear disaster (including the probability of the occurrence of a nuclear disaster)          |
|   | fire control, flood prevention, salvage                                  | salvage  |
|   | emergency disaster control measures and disaster recovery efforts        | emergency response measures and measures for restoration from nuclear emergency  |
| Article 46, paragraph 1   | disaster prevention  | measures to prevent nuclear emergency  |
|   | disaster   | nuclear disaster   |

|                         |   |  |
|-------------------------|---|--|
|                         | emergency disaster control measures in the case of the occurrence of a disaster                     | emergency response measures  |
| Article 46, paragraph 2 | disaster prevention   | measures to prevent nuclear emergency  |
| Article 47, paragraph 1 | for predicting or forecasting a disaster, or promptly transmitting information regarding a disaster | for promptly transmitting information regarding a nuclear disaster   |
| Article 48, paragraph 1 | A person in charge of disaster prevention   | A person in charge of disaster prevention (including a nuclear operator)   |
|                         | a disaster prevention plan  | a disaster prevention plan or a nuclear operator emergency action plan (which means the nuclear operator emergency action plan under the provisions of Article 7, paragraph 1 of the Act on Special Measures Concerning Nuclear Emergency Preparedness; the same shall apply in paragraph 3) |
| Article 48, paragraph 3 | a person in charge of disaster prevention   | a person in charge of disaster prevention (including a nuclear operator)   |
|                         | a disaster prevention plan and  | a disaster prevention plan and a nuclear operator emergency action plan, and   |
| Article 48, paragraph 4 | A person in charge of disaster prevention   | A person in charge of disaster prevention (including a nuclear operator)   |
| Article 49              | emergency disaster control measures or disaster recovery efforts                                    | emergency response measures or measures for restoration from nuclear emergency   |
| Article 51              | disasters   | nuclear disasters  |
| Article 52, paragraph 1 | for issuing and transmitting an alarm with regard to a disaster, giving a warning                   | for transmitting a declaration of a nuclear emergency situation  |

|   |  |  |
|---|--|--|
| Article 53,<br>paragraphs 1 to 4<br>inclusive | disaster   | nuclear disaster   |
| Article 53,<br>paragraph 5                    | disaster   | nuclear disaster   |
| Article 55                                    | When a prefectural governor has, pursuant to the provisions of laws and regulations, received notice of a forecast or an alarm with regard to a disaster from the Japan Meteorological Agency or any other State organization, or has issued an alarm with regard to a disaster him/herself, ... pursuant to the provisions of laws and regulations or a regional disaster prevention plan | When a prefectural governor has received an instruction under the provisions of Article 15, paragraph 3 or Article 20, paragraph 3 of the Act on Special Measures Concerning Nuclear Emergency Preparedness, ... pursuant to the provisions of a regional disaster prevention plan |
|   | anticipated disaster situation and measures to be taken against that   | measures pertaining to said instruction  |
| Article 56                                    | When a prefectural governor has, pursuant to the provisions of laws and regulations, received notice of a forecast or an alarm with regard to a disaster, has become aware of a forecast or an alarm with regard to a disaster him/herself, or has, pursuant to the provisions of laws and regulations, issued an alarm with regard to a disaster him/herself,                             | When a prefectural governor has received an instruction under the provisions of Article 15, paragraph 3 or Article 20, paragraph 3 of the Act on Special Measures Concerning Nuclear Emergency Preparedness,   |
|   | forecast or alarm  | instruction  |
|   | anticipated disaster   | nuclear disaster (including the probability of the occurrence of   |

|   |   |  |
|---|---|--|
|   |   | a nuclear disaster)  |
| Article 67,<br>paragraph 1,<br>Article 68,<br>paragraphs 1 and<br>2, and Article 69 | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
| Article 71,<br>paragraph 1  | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
|   | Article 50, paragraph 1, items (iv) to (ix) inclusive                                   | Article 26, paragraph 1, items (ii) to (viii) inclusive of the Act on Special Measures Concerning Nuclear Emergency Preparedness   |
| Article 73,<br>paragraph 1  | In the case of the occurrence of a disaster, ... said disaster                          | In the case of the occurrence of a nuclear disaster (including the probability of the occurrence of a nuclear disaster; the same shall apply in this paragraph), ... said nuclear disaster |
| Article 74,<br>paragraph 1 and<br>Article 75  | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
| Article 78,<br>paragraph 1  | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
|   | Article 50, paragraph 1, items (iv) to (ix) inclusive                                   | Article 26, paragraph 1, items (iv) to (viii) inclusive of the Act on Special Measures Concerning Nuclear Emergency Preparedness   |
| Article 79  | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
| Article 84,<br>paragraph 1  | a Self-Defense official of a unit, etc. ordered to serve in a disaster relief operation | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster relief  |

|                                   |  |  |
|-----------------------------------|--|--|
|                                   |  | operation, etc.  |
| Article 86,<br>paragraphs 1 and 2 | disaster   | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
| Article 88,<br>paragraph 1        | a disaster recovery project  | measures for restoration from nuclear emergency  |
|                                   | expenses for a disaster recovery project   | expenses required for measures for restoration from nuclear emergency  |
| Article 89                        | expenses for a disaster recovery project   | expenses required for measures for restoration from nuclear emergency  |
|                                   | a disaster recovery project  | measures for restoration from nuclear emergency  |
| Article 90                        | a disaster recovery project  | measures for restoration from nuclear emergency  |
| Article 91                        | disaster prevention and emergency disaster control measures  | measures to prevent nuclear emergency and emergency response measures  |
| Article 94                        | emergency disaster control measures  | emergency response measures  |
| Article 95                        | an instruction given by the director-general of the headquarters for extraordinary disaster control under the provisions of Article 28, paragraph 2 or an instruction given by the director general of the headquarters for emergency disaster control under the provisions of Article 28-6, paragraph 2 | an instruction given by the Prime Minister pursuant to Article 15, paragraph 3 of the Act on Special Measures Concerning Nuclear Emergency Preparedness or an instruction given by the director-general of the nuclear emergency response headquarters pursuant to Article 20, paragraph 3 of said Act |
| Article 96                        | disaster recovery projects and other projects implemented in connection with a disaster  | measures for restoration from nuclear emergency  |
| Article 100,<br>paragraph 1       | Disaster   | nuclear disaster   |

|                                     |   |   |
|-------------------------------------|---|---|
| Article 102, paragraph 1            | Disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)  |
| Article 102, paragraph 1, item (ii) | disaster prevention, emergency disaster control measures or disaster recovery efforts | measures to prevent nuclear emergency, emergency response measures or measures for restoration from nuclear emergency   |
| Article 104                         | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)  |
| Article 113                         | Article 71, paragraph 1   | Article 71, paragraph 1 (including the cases where it is applied by replacing the term and phrase pursuant to the provisions of Article 28, paragraph 1 of the Act on Special Measures Concerning Nuclear Emergency Preparedness) |
|                                     | paragraph 2 of said Article   | Article 71, paragraph 2   |
|                                     | Article 78, paragraph 1   | Article 78, paragraph 1 (including the cases where it is applied by replacing the term and phrase pursuant to the provisions of Article 28, paragraph 1 of the Act on Special Measures Concerning Nuclear Emergency Preparedness) |
| Article 115                         | including the cases ...;  | and including the cases where it is applied by replacing the term and phrase pursuant to the provisions of Article 28, paragraph 1 of the Act on Special Measures Concerning Nuclear Emergency Preparedness ...;                  |

|             |                         |   |
|-------------|-------------------------|---|
| Article 116 | Article 52, paragraph 1 | Article 52, paragraph 1<br>(including the cases where it is applied by replacing the phrase pursuant to the provisions of Article 28, paragraph 1 of the Act on Special Measures Concerning Nuclear Emergency Preparedness) |
|             | Article 73, paragraph 1 | Article 73, paragraph 1<br>(including the cases where it is applied by replacing the phrase pursuant to the provisions of Article 28, paragraph 1 of the Act on Special Measures Concerning Nuclear Emergency Preparedness) |

(2) With regard to the application of the provisions of the Basic Act on Disaster Control Measures, which are listed in the left-hand column of the following table (including the cases where these provisions are applied by replacing the terms and phrases pursuant to the provisions of Article 32, paragraph 2 of the Act on the Prevention of Disasters in Petroleum Industrial Complexes and Other Petroleum Facilities), during the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation, the terms and phrases listed in the middle column of the same table in these provisions shall be deemed to be replaced with the terms and phrases listed in the right-hand column of the same table.

| Provision for which a term or phrase is deemed to be replaced | Term or phrase deemed to be replaced                        | Term or phrase to be used as replacement  |
|---|---|---|
| Article 23, paragraph 4                                       | disaster prevention and emergency disaster control measures | measures to prevent nuclear emergency (which means the measures to prevent nuclear emergency prescribed in Article 2, item (vi) of the Act on Special Measures Concerning Nuclear |

|                         |   |  |
|-------------------------|---|--|
|                         |   | Emergency Preparedness) and emergency response measures  |
| Article 23, paragraph 6 | disaster prevention or emergency disaster control measures          | measures to prevent nuclear emergency or emergency response measures   |
| Article 58              | when a disaster is likely to occur                                  | when a declaration of a nuclear emergency situation has been issued  |
|                         | fire services or flood prevention teams                             | fire services  |
| Article 60, paragraph 1 | Where a disaster has occurred or is likely to occur,                | During the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation, |
|                         | disaster  | nuclear disaster   |
|                         | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)   |
|                         | eviction in order to evacuate the area                              | eviction in order to evacuate the area or to take shelter  |
| Article 60, paragraph 2 | eviction in order to evacuate                                       | eviction in order to evacuate the area or to take shelter  |
|                         | place to which residents, visitors and other persons shall be moved | place to which residents, visitors and other persons shall be moved or evacuated   |
| Article 60, paragraph 3 | eviction in order to evacuate                                       | eviction in order to evacuate the area or to take shelter  |
|                         | place to which residents, visitors and other persons shall be moved | place to which residents, visitors and other persons shall be moved or evacuated   |
|                         | prefectural governor  | director-general of the nuclear emergency response headquarters and the relevant prefectural governor  |

|                                   |   |   |
|-----------------------------------|---|---|
| Article 60,<br>paragraph 5        | Where a disaster pertaining to the area of a prefecture has occurred, when a municipality no longer has the ability to conduct the whole or most of its affairs due to the occurrence of said disaster, | Where a declaration of a nuclear emergency situation pertaining to the area of a prefecture has been issued, when a municipality no longer has the ability to conduct the whole or most of its affairs due to the occurrence of a nuclear disaster (including the probability of the occurrence of a nuclear disaster) pertaining to said declaration of a nuclear emergency situation, |
| Article 60,<br>paragraph 6        | publicly notify to that effect  | publicly notify and promptly report to the director-general of the nuclear emergency response headquarters to that effect   |
| Article 61,<br>paragraphs 1 and 2 | eviction in order to evacuate   | eviction in order to evacuate the area or to take shelter   |
| Article 62,<br>paragraph 1        | When a disaster pertaining to the area of a municipality has occurred or is just about to occur,  | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a municipality to the issuance of a declaration of the cancellation of a nuclear emergency situation,   |
|                                   | fire fighting, flood prevention, rescue and other emergency responses necessary for preventing the occurrence or progression (expansion) of a disaster  | fire fighting, rescue and other emergency responses necessary for preventing the progression (expansion) of a nuclear disaster (including the probability of the occurrence of a nuclear disaster)  |
| Article 62,<br>paragraph 2        | When a disaster pertaining to the area of a municipality has occurred or is just about to occur,  | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a municipality to the issuance of a declaration of the cancellation of a nuclear emergency situation,   |

|                                   |   |   |
|-----------------------------------|---|---|
| Article 63,<br>paragraph 1        | Where a disaster has occurred or is just about to occur,  | During the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation,  |
|                                   | emergency disaster control measures   | emergency response measures   |
| Article 63,<br>paragraph 3        | Article 83, paragraph 2   | Article 83, paragraph 2 or Article 83-3   |
|                                   | a Self-Defense official of a unit, etc. ordered to serve in a disaster relief operation           | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster relief operation, etc.   |
| Article 64,<br>paragraph 1        | When a disaster pertaining to the area of a municipality has occurred or is just about to occur,  | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a municipality to the issuance of a declaration of the cancellation of a nuclear emergency situation, |
| Article 64,<br>paragraph 2        | When a disaster pertaining to the area of a municipality has occurred or is just about to occur,  | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a municipality to the issuance of a declaration of the cancellation of a nuclear emergency situation, |
|                                   | disaster  | nuclear disaster (including the probability of the occurrence of a nuclear disaster)  |
| Article 64,<br>paragraphs 8 and 9 | a Self-Defense official of a unit, etc. ordered to serve in a disaster relief operation           | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster relief operation, etc.   |
| Article 65,<br>paragraph 1        | Where a disaster pertaining to the area of a municipality has occurred or is just about to occur, | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a municipality to the issuance of a declaration of the cancellation of a nuclear emergency            |

|                                |   |   |
|--------------------------------|---|---|
|                                |   | situation,  |
|                                | when he/she finds ...,  | when he/she finds ..., unless a nuclear disaster is likely to be progressed (expanded) thereby,   |
| Article 65, paragraph 3        | a Self-Defense official of a unit, etc. ordered to serve in a disaster relief operation   | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster relief operation, etc.   |
| Article 70, paragraphs 1 and 2 | When a disaster pertaining to the area of a prefecture has occurred or is just about to occur,  | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a prefecture to the issuance of a declaration of the cancellation of a nuclear emergency situation,   |
| Article 76, paragraph 1        | Where a disaster pertaining to the area of a prefecture or a neighboring or adjacent prefecture thereof has occurred or is just about to occur, | During the period from the issuance of a declaration of a nuclear emergency situation pertaining to the area of a prefecture or a neighboring or adjacent prefecture thereof to the issuance of a declaration of the cancellation of a nuclear emergency situation, |
|                                | emergency disaster control measures   | emergency response measures   |
| Article 76-3, paragraph 1      | emergency disaster control measures   | emergency response measures   |
| Article 76-3, paragraph 3      | a Self-Defense official of a unit, etc. ordered to serve in a disaster relief operation   | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster relief operation, etc.   |
|                                | emergency disaster control measures   | emergency response measures   |
| Article 76-3, paragraph 4      | emergency disaster control measures   | emergency response measures   |
| Article 76-3, paragraph 6      | a Self-Defense official of a unit, etc. ordered to  | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster  |

|   |   |  |
|---|---|--|
|   | serve in a disaster relief operation  | relief operation, etc.   |
| Article 76-4  | emergency disaster control measures   | emergency response measures  |
| Article 77, paragraph 1 and Article 80, paragraph 1 | When a disaster has occurred or is just about to occur,                                 | During the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation,   |
| Article 114   | Article 76, paragraph 1   | Article 76, paragraph 1 (including the cases where it is applied by replacing the term and phrase pursuant to the provisions of Article 28, paragraph 2 of the Act on Special Measures Concerning Nuclear Emergency Preparedness )   |
| Article 116   | Article 63, paragraph 1   | Article 63, paragraph 1 (including the cases where it is applied by replacing the term and phrase pursuant to the provisions of Article 28, paragraph 2 of the Act on Special Measures Concerning Nuclear Emergency Preparedness; hereinafter the same shall apply in this item) |
|   | paragraph 3 of said Article,  | paragraph 3 of said Article (including the cases where it is applied by replacing the phrases pursuant to the provisions of Article 28, paragraph 2 of the Act on Special Measures Concerning Nuclear Emergency Preparedness)  |
|   | paragraph 1 of said Article   | Article 63, paragraph 1  |
|   | a Self-Defense official of a unit, etc. ordered to serve in a disaster relief operation | a Self-Defense official of a unit, etc. ordered to serve in a nuclear disaster relief operation, etc.  |

(3) With regard to the application of the provisions of the Basic Act on Disaster Control Measures, which are listed in the left-hand column of the following table, after the issuance of a declaration of a nuclear emergency situation, the terms and phrases listed in the middle column of the same table in these provisions shall be deemed to be replaced with the terms and phrases listed in the right-hand column of the same table.

| Provision for which a term or phrase is deemed to be replaced | Term or phrase deemed to be replaced  | Term or phrase to be used as replacement   |
|---|---|--|
| Article 14, paragraph 2, item (ii)                            | in the case where a disaster pertaining to the area of the relevant prefecture has occurred, collecting information regarding said disaster   | in the case where a declaration of a nuclear emergency situation (which means the declaration of a nuclear emergency situation under the provisions of Article 15, paragraph 2 of the Act on Special Measures Concerning Nuclear Emergency Preparedness; the same shall apply hereinafter) pertaining to the area of the relevant prefecture has been issued, collecting information regarding the relevant nuclear disaster (including the probability of the occurrence of a nuclear disaster) |
| Article 14, paragraph 2, item (iii)                           | in the case where a disaster pertaining to the area of the relevant prefecture has occurred, ... with regard to emergency disaster control measures and disaster recovery efforts pertaining to said disaster | in the case where a declaration of a nuclear emergency situation pertaining to the area of the relevant prefecture has been issued, ... with regard to emergency response measures (which means the emergency response measures prescribed in Article 2, item (v) of the Act on Special Measures Concerning Nuclear Emergency Preparedness; the same shall apply hereinafter) and measures for restoration from nuclear emergency (which means the measures for                                  |

|  |  |  |
|--|--|--|
|  |  | restoration from nuclear emergency prescribed in item (vii) of said Article) pertaining to said declaration of a nuclear emergency situation |
| Article 29, paragraph 1  | emergency disaster control measures or disaster recovery efforts | emergency response measures or measures for restoration from nuclear emergency   |
| Article 29, paragraph 2  | emergency disaster control measures or disaster recovery efforts | emergency response measures or measures for restoration from nuclear emergency   |
|  | the head of a designated local administrative organ              | the head of a designated administrative organ or the head of a designated local administrative organ   |
|  | officials of said designated local administrative organ          | officials of said designated administrative organ or designated local administrative organ   |
| Article 30, paragraphs 1 and 2, Article 32, paragraph 1 and Article 33 | emergency disaster control measures or disaster recovery efforts | emergency response measures or measures for restoration from nuclear emergency   |
| Article 109, paragraph 1, item (ii)                                    | emergency disaster control measures or disaster recovery efforts | emergency response measures or measures for restoration from nuclear emergency   |

- (4) The provisions of Article 87 and Article 88, paragraph 2 of the Basic Act on Disaster Control Measures shall not apply to a nuclear disaster.
- (5) During the period from the issuance of a declaration of a nuclear emergency situation to the issuance of a declaration of the cancellation of a nuclear emergency situation, the provisions of Articles 50, 54, 59 and 66 of the Basic Act on Disaster Control Measures shall not apply to a nuclear emergency situation pertaining to said declaration of a nuclear emergency situation.
- (6) The head of a local government who implements emergency response measures or measures for restoration from nuclear emergency may request the head of a

designated administrative organ or the head of a designated local administrative organ for the necessary assistance for preventing a radiation hazard to human bodies, giving advice concerning a diagnosis and medical treatment and implementing other emergency response measures or measures for restoration from nuclear emergency, in addition to assistance under the provisions of Article 29, paragraph 1 or 2 or Article 30, paragraph 1 of the Basic Act on Disaster Control Measures applied by replacing the terms and phrases pursuant to the provisions of paragraph 2.

(Promotion of Research on Nuclear Disasters)

Article 29 The State shall promote scientific research and development concerning the securing of nuclear safety, prevention of the occurrence of a nuclear disaster, and prevention of a nuclear hazard, and endeavor to disseminate the results thereof.

(Senior Specialist for Nuclear Emergency Preparedness)

Article 30 (1) Senior specialists for nuclear emergency shall be allocated to the Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Economy, Trade and Industry.

(2) A senior specialist for nuclear emergency preparedness shall, in addition to giving guidance and advice concerning the preparation of a nuclear operator emergency action plan under Article 7, paragraph 1, establishment of an on-site organization for nuclear emergency preparedness under Article 8, paragraph 1 or other measures to prevent nuclear emergency implemented by a nuclear operator with regard to a nuclear site that has been designated by the Minister of Education, Culture, Sports, Science and Technology or the Minister of Economy, Trade and Industry as a nuclear site of which said senior specialist for nuclear emergency preparedness should take charge, collect information necessary for understanding the situation, give advice concerning the collection of information and emergency responses implemented by a local government and perform any other duties necessary to smoothly implement the prevention of the occurrence or progression (expansion) of a nuclear disaster in the case where there has been a notification under the provisions of the first sentence of Article 10, paragraph 1.

(Collection of Report)

Article 31 The competent minister, the competent prefectural governor, the competent mayor of a municipality or the related neighboring prefectural governors may, within the limit necessary for the enforcement of this Act, have a nuclear operator report on its duties pursuant to the provisions of a Cabinet Order.

**(Inspection)**

- Article 32 (1)** The competent minister, the competent prefectural governor, the competent mayor of a municipality or the related neighboring prefectural governors may, within the limit necessary for the enforcement of this Act, have his/her officials enter a nuclear site, and have them inspect the facilities, books and documents and other necessary items of a nuclear operator pertaining to said nuclear site or question the persons concerned.
- (2)** When an official enters a nuclear site pursuant to the provisions of preceding paragraph, he/she shall carry a certificate for identification and produce it to the persons concerned if requested by them.
- (3)** The authority under the provisions of paragraph 1 shall not be construed as that recognized for criminal investigation.

**(Fee)**

**Article 33** A person or an organization that intends to undergo an inspection under the provisions of Article 11, paragraph 5 shall pay a fee pursuant to the provisions of a Cabinet Order.

**(Competent Minister, etc.)**

**Article 34 (1)** The competent minister as mentioned in this Act (excluding Article 10, Article 15, paragraph 1, Article 17, paragraph 4, Article 20, paragraph 2, Article 25, paragraph 2, Article 31, Article 32 and Article 37) shall be a minister specified in each of the following items according to the classification of matters listed in each of said items:

- (i)** matters relating to a person or an organization listed in any of (a), (c), (d) and (e) of Article 2, item (iii) and a person or an organization listed in (b) of said item who has obtained permission for the establishment of a reactor listed in Article 23, paragraph 1, items (i) and (iv) of the Reactor Regulation Act, and a nuclear site of such a person or an organization: Minister of Economy, Trade and Industry;
- (ii)** matters relating to a person or an organization listed in Article 2, item (iii) (b) that has obtained permission for the establishment of a reactor listed in Article 23, paragraph 1, items (iii) and (v) of the Reactor Regulation Act and a person or an organization listed in Article 2, item (iii) (f), and a nuclear site of such a person or an organization: Minister of Education, Culture, Sports, Science and Technology.
- (2)** The competent minister as mentioned in the provisions of Article 10, Article 15, paragraph 1, Article 17, paragraph 4, Article 20, paragraph 2 and Article 25,

paragraph 2 shall be a minister specified in each of the following items according to the classification of matters listed in each of said items:

- (i) a nuclear emergency situation or other event resulting from the operation of the reactor, etc. by a nuclear operator prescribed in item (i) of the preceding paragraph: Minister of Economy, Trade and Industry (for an event resulting from transport outside the nuclear site, the Minister of Economy, Trade and Industry and the Minister of Land, Infrastructure and Transport);
  - (ii) a nuclear emergency situation or other event resulting from the operation of the reactor, etc. by a nuclear operator prescribed in item (ii) of the preceding paragraph: Minister of Education, Culture, Sports, Science and Technology (for an event resulting from transport outside the nuclear site, the Minister of Education, Culture, Sports, Science and Technology and the Minister of Land, Infrastructure and Transport).
- (3) The competent minister as mentioned in the provisions of Article 31, Article 32 and Article 37 shall be the Minister of Education, Culture, Sports, Science and Technology, the Minister of Economy, Trade and Industry and the Minister of Land, Infrastructure and Transport.
- (4) The ordinance of the competent ministry as referred to in this Act shall be an order issued by the competent minister specified in each item of paragraph 1 (for the ordinance of the competent ministry pursuant to Article 10, paragraph 1, each item of paragraph 2) according to the classification listed in each item of said paragraph.

#### Article 35 Deleted

(Application of This Act to a Special Ward)

Article 36 With regard to the application of this Act, a special ward shall be deemed to be a city.

(Opinions of the Nuclear Safety Commission)

Article 37 The competent minister shall, when he/she intends to establish or revise or abolish a Cabinet Order under Article 10, paragraph 1 or Article 15, paragraph 1, hear in advance the opinions of the Nuclear Safety Commission.

(Delegation to a Cabinet Order)

Article 38 In addition to what is provided for in this Act, procedures for the implementation of this Act and other matters necessary for the enforcement of this Act shall be specified by a Cabinet Order.

(Exclusion from Application to the State)

Article 39 The provisions of Article 33 and the next Chapter shall not apply to the State.

### **Chapter VII Penal Provisions**

Article 40 A person or an organization that has violated any order under the provisions of Article 7, paragraph 4, Article 8, paragraph 5, Article 9, paragraph 7 or Article 11, paragraph 6 shall be punished by imprisonment with work for not more than one year or a fine of not more than one million yen, or both.

Article 41 A person or an organization that falls under any of the following items shall be punished by a fine of not more than three hundred thousand yen:

- (i) a person or an organization that has failed to give a notification under the provisions of Article 7, paragraph 3, the first sentence of Article 8, paragraph 4, Article 9, paragraph 5 or Article 11, paragraph 3, or has given a false notification;
- (ii) a person or an organization that, in violation of the provisions of the first sentence of Article 10, paragraph 1, has failed to give a notification;
- (iii) a person or an organization that, in violation of the provisions of Article 11, paragraph 7, has failed to record the result of the measurement of a radiation dose, or has recorded a false result;
- (iv) a person or an organization that, in violation of the provisions of Article 12, paragraph 4, has failed to submit documents;
- (v) a person or an organization that has failed to make a report under the provisions of Article 31, or has made a false report;
- (vi) a person or an organization that has refused, obstructed, or avoided an entry or an inspection under the provisions of Article 32, paragraph 1, or has failed to make a statement or has made a false statement in response to the questioning under the provisions of said paragraph.

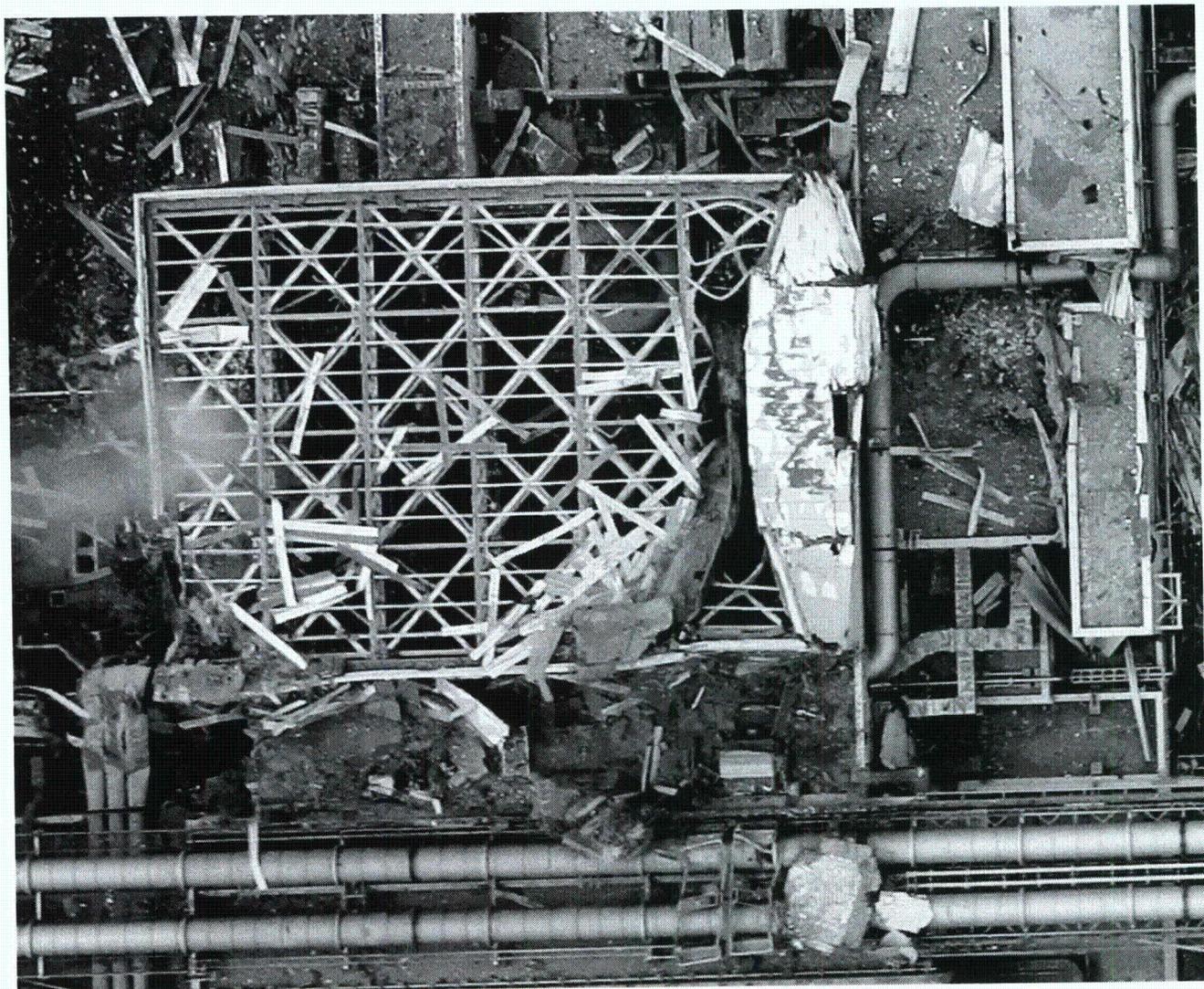
Article 42 When a representative person of a corporate organization or an agent, employee or other worker of a corporate organization or an individual has committed the act of violating either of the preceding two Articles with regard to the business of said corporate organization or individual, not only the offender shall be punished but also said corporate organization or individual shall be punished by the fine prescribed in the respective Articles.

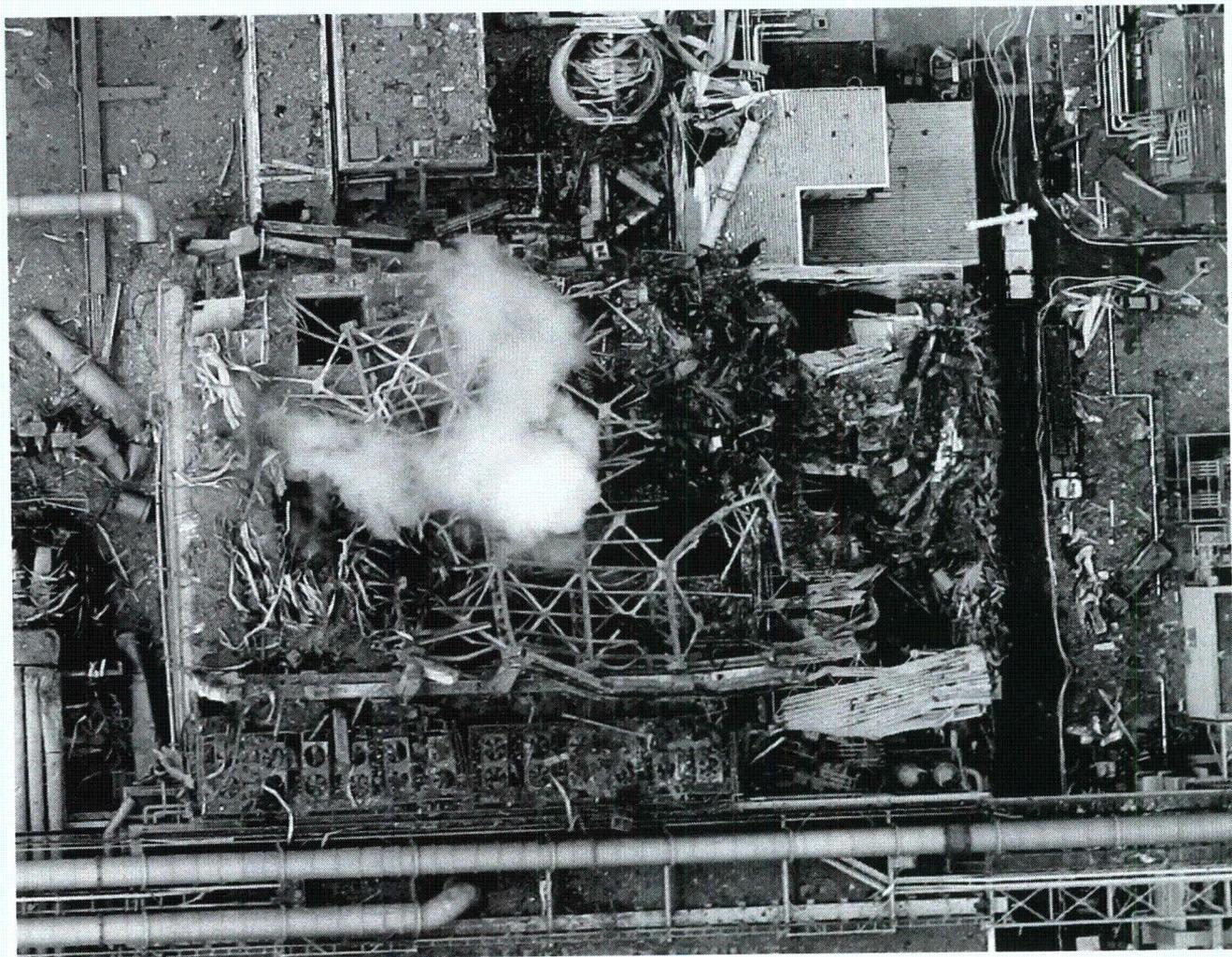
---

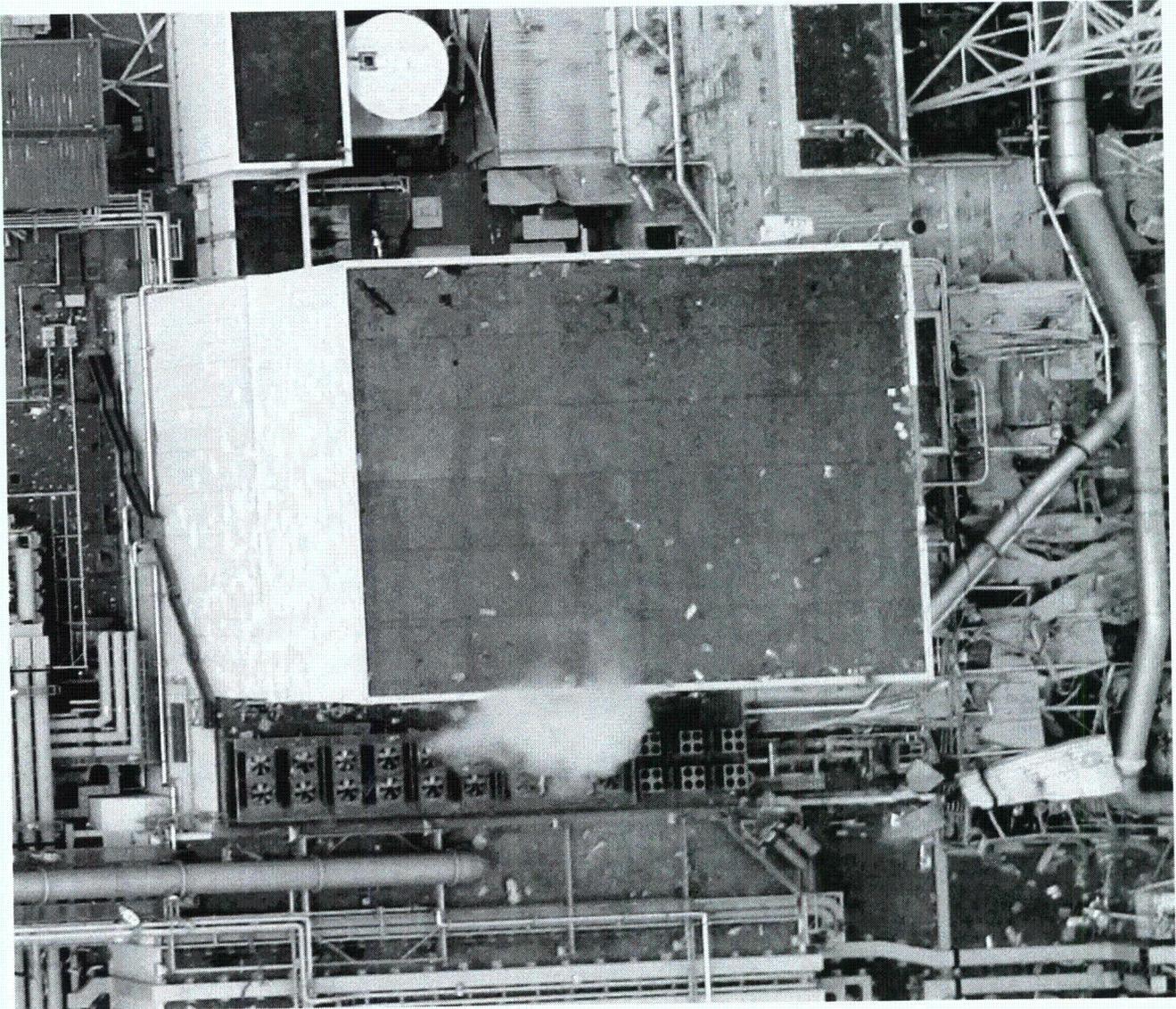
**To:**  
**Attachments:**

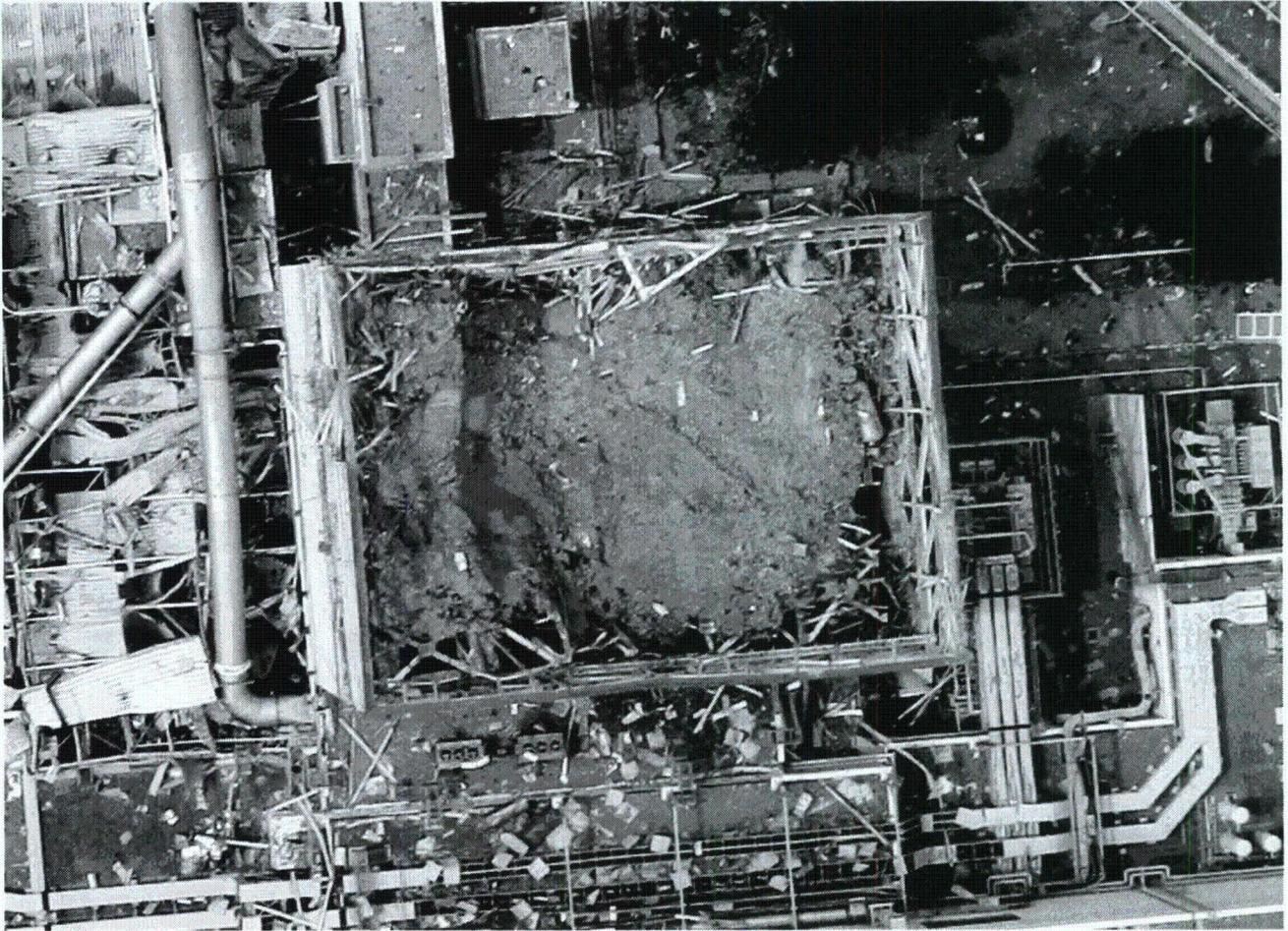
eric.thomas@nrc.gov  
Unit 1 Overhead .JPG; Unit 2 Overhead.JPG; Unit 3 Overhead.JPG; Unit 4 Overhead.JPG

HHHHH/6







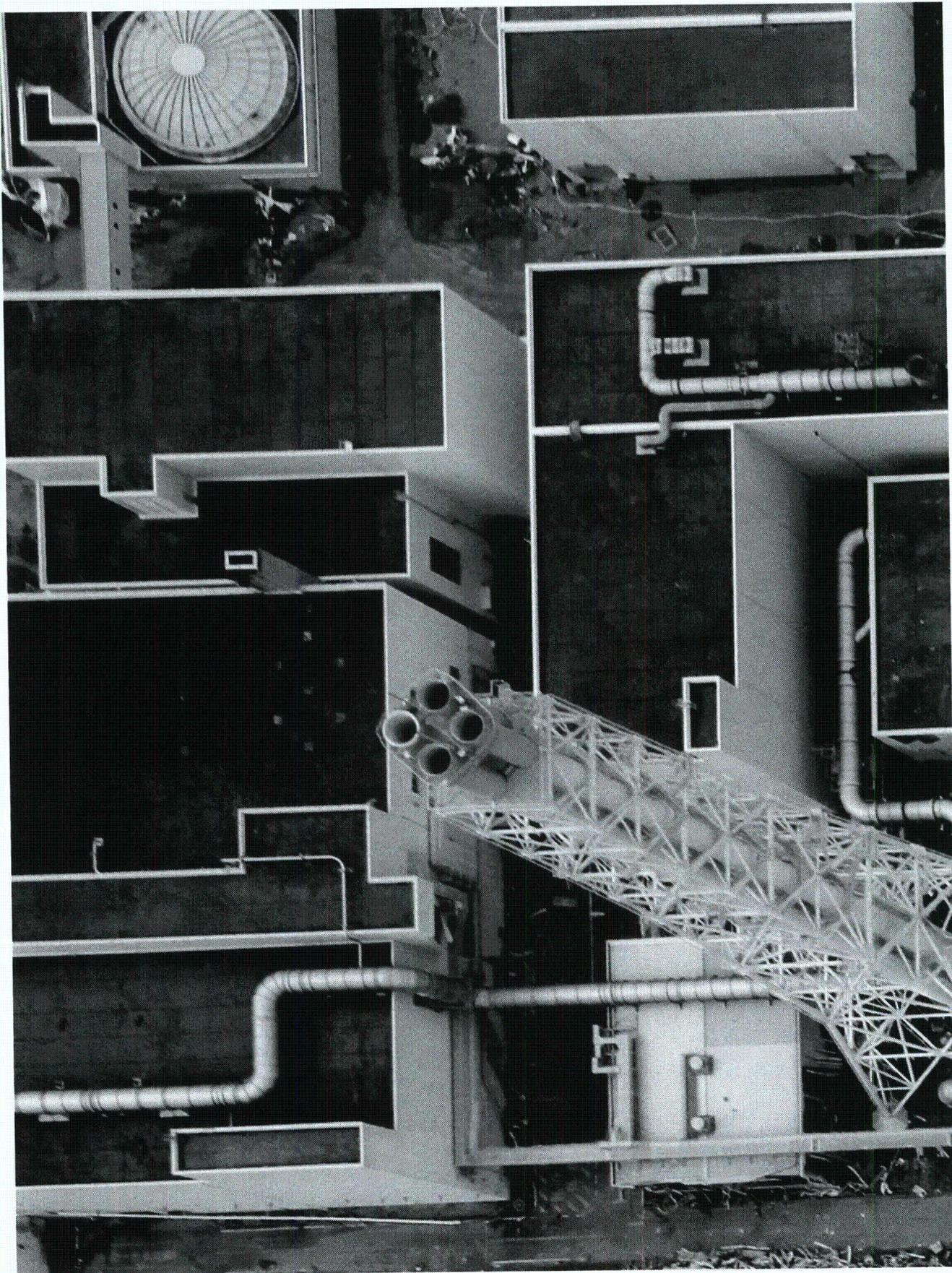


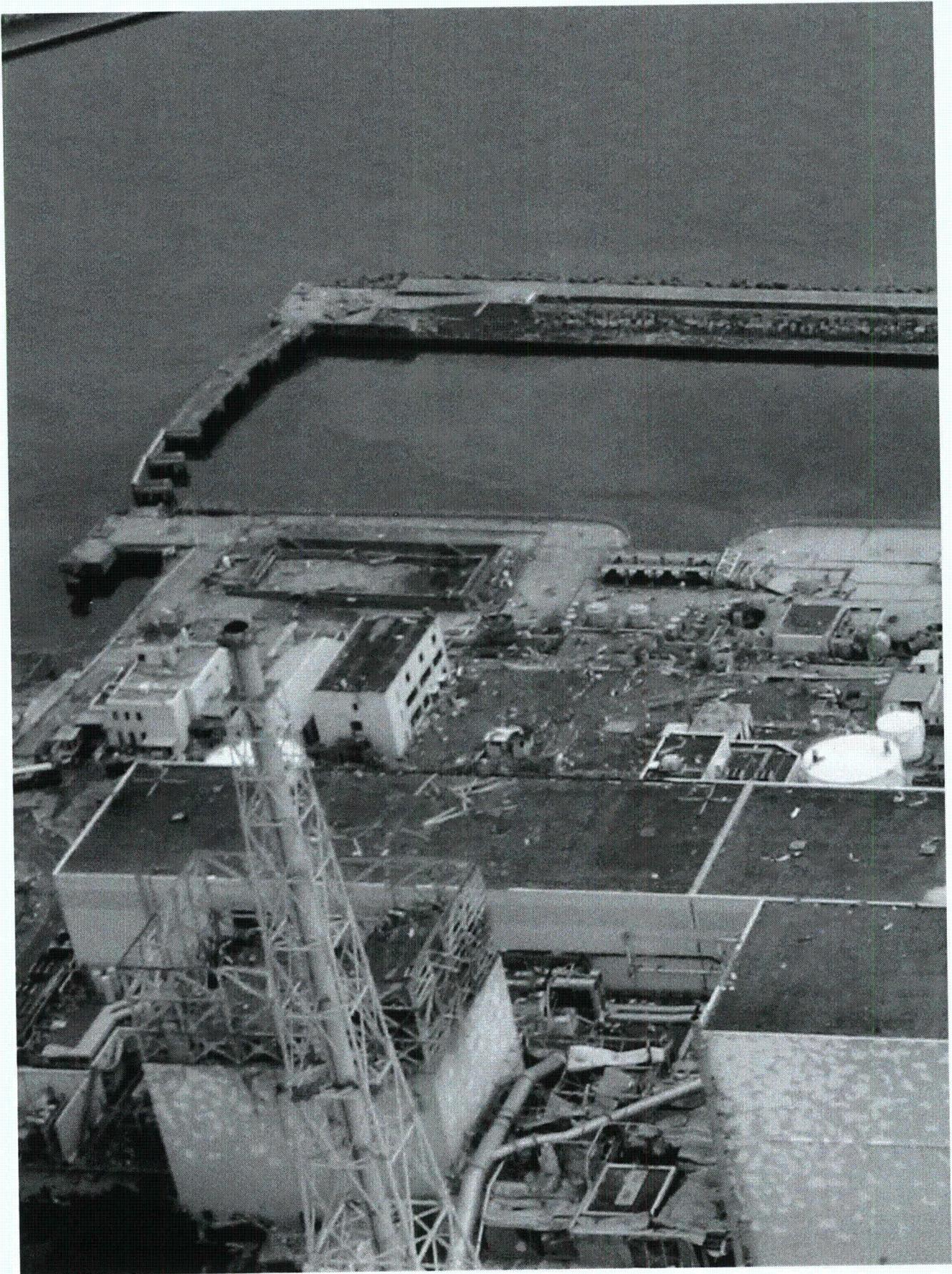
---

**To:**  
**Attachments:**

eric.thomas@nrc.gov  
IMG\_1434.JPG; IMG\_3189.JPG

+++++/7









## McKelvey, Harold

---

**From:** Collins, Elmo  
**Sent:** Wednesday, March 16, 2011 9:23 AM  
**To:** Caniano, Roy  
**Cc:** Hays, Myra; Kennedy, Kriss; Vegel, Anton; Howell, Art  
**Subject:** RE: Did You Know?

Thanks Roy. This is an excellent communication method.  
Elmo

---

**From:** Caniano, Roy  
**Sent:** Wednesday, March 16, 2011 7:55 AM  
**To:** R4DNMS-DIV  
**Subject:** Did You Know?

Hi, as I indicated last week at our division meeting I am going to begin generating a weekly e-mail to the division highlighting some of the activities going on in the division. I also will use this to provide key notes which were discussed at the division meeting for those of you that weren't present for it. So...having said that here is some information for you about the happenings in the division and region! p.s. please let me know if this is helpful.

We are still following the tragic events occurring in Japan and have dispatched a group of NRC staff to assist the Japanese Government. If you go the NRC web, you can see the latest info coming from the EDO and Chairman.

We continue to be appreciative of the support we are getting from DRS in providing us Michael to assist us in enforcement. There is light at the end of the tunnel and we are making good progress. Thanks to all!! As discussed at the division meeting I am going to hold off for now on soliciting the senior enforcement position that was discussed. I will re-evaluate in about 30 days.

Welcome to Don Stearns who joined us a materials inspector! Still evaluating if we can bring anyone else on board later this year. FTE is really being watched closely.

Regarding CR: it looks like the CR will be extended for another 3 weeks.

Congratulations to Michelle and Marti for passing their boards! Way to go!

Remember the annual computer security training is due later this year. Not too early to get it done. If you find that opportunity with some time go online and complete it. Takes about 30 minutes.

I will be briefing LMPC on some of the org changes in DNMS next month. (Blair picking up uranium recovery and a few staff moving around).

Staff recognition and current events tomorrow! Good eats!!!

The Deputy solicitation has closed and I will be conducting interviews in the next few weeks.

Chuck Cain kicked off the KM sessions this week discussing Part 19. Great job by Chuck! Future ones will all be recorded and placed on KM web.

Rick Munoz returned safely from his trip to Hawaii and Guam. Glad you made it back before the earthquake.

For those who supported the IRC activation last Friday, Thank You for a job well done. (we responded to the UE declared at Diablo for the Tsunami warnings).

Mid years are approaching. Please make sure you discuss with your supervisor any training desires and career goals.

Looks like Commissioner Magwood is planning on visiting uranium recovery site in June. Stay tuned.

I will be leaving for HQ today for a few meetings and a video opportunity. I have been asked to discuss OCWE. Chuck will be covering for me.

On the reactor side of the house end of cycle public meetings are being planned. Needless to say communications are going to be critical because I am sure a lot of questions will come up on the Japanese event.

Several IMPEPs coming up that Chuck and I will be attending the exits for. (Arkansas and North Dakota).

**Vegel, Anton**

---

**From:** R4 IRC  
**Sent:** Friday, March 11, 2011 9:05 AM  
**To:** R4  
**Subject:** Agency in Monitoring in Response to Tsunami Warnings and 8.9 Magnitude Earthquake in Japan

The NRC entered Monitoring at 09:46AM Eastern in response to the 8.9 magnitude earthquake in Japan and subsequent tsunami warnings. [NRC Region IV is monitoring the impact on materials licensees in Alaska, Hawaii, and materials licensees and reactors on the Pacific Coast.] NRC Headquarters is monitoring Japan's response to the current situation.

If you are not responding to the event, please stay clear of the incident response center. Thank you for your support.

Emergency Response Coordinator  
NRC – Region IV

HHHH/9

**From:** Doane, Margaret  
**To:** Hayden, Elizabeth  
**Subject:** Fw: Update of the news issued by NISA/METI on the massive earthquake in the Northern Japan  
**Date:** Saturday, March 12, 2011 7:41:56 PM  
**Attachments:** News Releases No16[2].pdf

---

I received this from NISA tonight. May be what you have.  
Margie

Sent from an NRC Blackberry  
Margaret Doane

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

From: okubo-masaki@jnes.go.jp <okubo-masaki@jnes.go.jp>  
To: okubo-masaki@jnes.go.jp <okubo-masaki@jnes.go.jp>  
Sent: Sat Mar 12 17:32:36 2011  
Subject: Fw:Update of the news issued by NISA/METI on the massive earthquake in the Northern Japan

Dear all,

Please find here attached the updated version of the news release issued by NISA/METI on the earthquake in the Northern Japan on 11 March in Japan time.

Sincerely,

Masaki Okubo, Counseling Expert,  
Japan Nuclear Energy Safety Organization(JNES)  
TOKYU REIT Toranomon Bldg, 3-17-1, Toranomon,  
Minato-ku, Tokyo, 105-0001, Japan  
Tel:+81-3-4511-1902, FAX:+81-3-4511-1998  
E-mail:okubo-masaki@jnes.go.jp URL. <http://www.jnes.go.jp>

HHHHH/10

---

**From:** Jaczko, Gregory  
**Sent:** Saturday, March 12, 2011 12:18 AM  
**To:** RST14 Hoc  
**Cc:** Dorman, Dan  
**Subject:** Re: From Dan Dorman

Dan - is it accurate to say this is comparable to a tmi event at this time

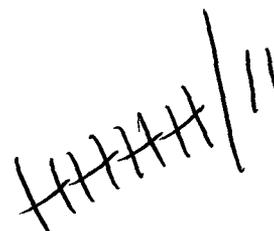
---

**From:** RST14 Hoc  
**To:** Jaczko, Gregory  
**Cc:** Dorman, Dan  
**Sent:** Sat Mar 12 00:16:25 2011  
**Subject:** From Dan Dorman

00:08 Eastern Update

Unit 1 Fukushima Daiichi

- Information recently obtained is not inconsistent with NRC previous hypothesis which was based on wire reports and public information.
- High radiation associated with containment venting suggests core damage, the extent of which is not known
- TEPCO appears to be taking extraordinary measures to supply water to the reactor, including using power supply trucks and batteries to supply power. The reactor vessel level is stabilized, possibly indicating a measure of control
- TEPCO is venting containment under high radiation conditions; wind direction is to see



---

**From:** RST01 Hoc  
**Sent:** Tuesday, March 29, 2011 10:39 AM  
**To:** RST01A Hoc  
**Subject:** FW: New OpE COMM: International - Tohoku-Taiheiyou-Oki Earthquake and Tsunami (Honshu, Japan)

---

**From:** Alter, Peter  
**Sent:** Tuesday, March 29, 2011 10:13 AM  
**To:** FOIA Response.hoc Resource; RST01 Hoc  
**Subject:** FW: New OpE COMM: International - Tohoku-Taiheiyou-Oki Earthquake and Tsunami (Honshu, Japan)

See INES Level 5 Document link on the posting (linked) below.

---

**From:** Garmon, David  
**Sent:** Monday, March 28, 2011 3:34 PM  
**Subject:** New OpE COMM: International - Tohoku-Taiheiyou-Oki Earthquake and Tsunami (Honshu, Japan)

This email is being sent to notify recipients of a new posting on the [@Operating Experience Community Forum](#).

Recipients are expected to review the posting for applicability to their areas of regulatory responsibility and consider appropriate actions. However, information contained in the posting is not tasking; therefore, no specific action or written response is required.

**Information Security Reminder: OpE COMMs contain preliminary information in the interest of timely internal communication of operating experience. OpE COMMs may be pre-decisional and may contain sensitive/proprietary information. They are not intended for distribution outside the agency**

The posting may be reviewed at: [Tohoku-Taiheiyou-Oki Earthquake and Tsunami \(Honshu, Japan\)](#)

This COMM is being posted to the following groups: ***All Communications, Chemistry/Chemical Engineering, Containment (leakage, degradation, cooling system performance), Control Room Habitability, Dose Assessment, ECCS, Electrical Power Systems, Emergency Diesel Generators, Emergency Preparedness, Fire Protection, Flood Protection & Missiles, Fuels, Health Physics, Human Performance, HVAC, Inspection Programs, Instrumentation and Controls, Main Steam & Condensate/Feed Systems, Materials/Aging, Natural Phenomena, New Reactors, Piping, Pump and Valve Performance, RCPB Leakage, Reactor Vessel/Pressurizer, Safety Culture, Shutdown Risk, Spent Fuel Storage & Load Handling, Station Service Water Systems & Ultimate Heat Sink, Steam Generators, Structural, Welding/Non-Destructive Examination, Worker Fatigue***

To unsubscribe from this distribution list or to subscribe to a different list on the OpE Community, please visit: <http://nrr10.nrc.gov/rps/dyn/subscription1.cfm>

For more information on the Reactor OpE Program, please visit our [Reactor OpE Gateway](#).

Thank you for reviewing and using Operating Experience.

HHHH/12

Regards,  
David Garmon  
NRR/DIRS/IOEB  
(301) 415-3512  
Office: O-7C20  
Mail Stop OWFN-7C02A

## Bozin, Sunny

---

**From:** Zorn, Jason  
**Sent:** Saturday, March 12, 2011 11:44 AM  
**To:** Nieh, Ho  
**Subject:** Fw: Press Release: NRC in Communication with Japanese Regulations  
**Attachments:** 11-044.docx

---

**From:** OPA Resource

**To:** Ash, Darren; Barkley, Richard; Batkin, Joshua; Bell, Hubert; Belmore, Nancy; Bergman, Thomas; Bollwerk, Paul; Bonaccorso, Amy; Borchardt, Bill; Bozin, Sunny; Brenner, Eliot; Brock, Terry; Brown, Boris; Bubar, Patrice; Burnell, Scott; Burns, Stephen; Carpenter, Cynthia; Chandrathil, Prema; Clark, Theresa; Collins, Elmo; Couret, Ivonne; Crawford, Carrie; Cutler, Iris; Dacus, Eugene; Dapas, Marc; Davis, Roger; Dean, Bill; Decker, David; Dricks, Victor; Droggitis, Spiros; Flory, Shirley; Franovich, Mike; Gibbs, Catina; Haney, Catherine; Hannah, Roger; Harbuck, Craig; Harrington, Holly; Hasan, Nasreen; Hayden, Elizabeth; Holahan, Gary; Holahan, Patricia; Holian, Brian; Jacobssen, Patricia; Jaczko, Gregory; Jasinski, Robert; Jenkins, Verlyn; Johnson, Michael; Jones, Andrea; Kock, Andrea; Kotzalas, Margie; Ledford, Joey; Lee, Samson; Leeds, Eric; Lepre, Janet; Lew, David; Lewis, Antoinette; Loyd, Susan; Magwood, William; McCrary, Cheryl; McGrady-Finneran, Patricia; McIntyre, David; Mensah, Tanya; Mitlyng, Viktoria; Monninger, John; Montes, David; Nieh, Ho; Ordaz, Vonna; Ostendorff, William; Owen, Lucy; Powell, Amy; Quesenberry, Jeannette; Reddick, Darani; Regan, Christopher; Reyes, Luis; Riddick, Nicole; RidsSecyMailCenter Resource; Riley (OCA), Timothy; Rohrer, Shirley; Samuel, Olive; Satorius, Mark; Schaaf, Robert; Schmidt, Rebecca; Scott, Catherine; Screnci, Diane; Shaffer, Vered; Shane, Raeann; Sharkey, Jeffrey; Sheehan, Neil; Sheron, Brian; Siurano-Perez, Osiris; Steger (Tucci), Christine; Svinicki, Kristine; Tabatabai, Omid; Tannenbaum, Anita; Taylor, Renee; Temp, WDM; Thomas, Ann; Uhle, Jennifer; Uselding, Lara; Vietti-Cook, Annette; Virgilio, Martin; Virgilio, Rosetta; Walker-Smith, Antoinette; Weaver, Doug; Weber, Michael; Weil, Jenny; Werner, Greg; Wiggins, Jim; Williams, Evelyn; Zimmerman, Roy; Zorn, Jason  
**Sent:** Sat Mar 12 11:29:26 2011  
**Subject:** Press Release: NRC in Communication with Japanese Regulations

Attached for immediate release and posting.

Office of Public Affairs  
US Nuclear Regulatory Commission  
301-415-8200  
[opa.resource@nrc.gov](mailto:opa.resource@nrc.gov)

#####/13



# 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](mailto:opa.resource@nrc.gov) Site: [www.nrc.gov](http://www.nrc.gov)

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

---

No. 11-044

March 12, 2011

## NRC IN COMMUNICATION WITH JAPANESE REGULATORS

Officials at Nuclear Regulatory Commission headquarters in Rockville, Md., have spoken with the agency's counterpart in Japan, offering the assistance of U.S. technical experts. Should the Japanese want to make use of this expertise, NRC staffers with extensive background in boiling-water reactors are available to assist ongoing efforts.

The NRC is coordinating its actions with other Federal agencies as part of the U.S. government response. The NRC is examining all available information as part of the effort to analyze the event and understand its implications both for Japan and the United States. The NRC's headquarters Operations Center is operating on a 24-hour basis.

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

For background information on generic operations at a boiling-water reactor, including an animated graphic, visit the NRC's website at [www.nrc.gov](http://www.nrc.gov).

###

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](http://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:** CommissionCalendar Resource  
**To:** Apostolakis, George; Ash, Darren; Blake, Kathleen; Borchardt, Bill; Bozin, Sunny; Bubar, Patrice; Burns, Stephen; Cianci, Sandra; Commission Hearing Room; Crawford, Carrie; Franovich, Mike; GBJGroupCalendar Resource; GEA Daily Cal Resource; GEA Staff Daily Resource; Harves, Carolyn; Hasan, Nasreen; Hayden, Elizabeth; Herr, Linda; Jaczko, Gregory; Joosten, Sandy; Kock, Andrea; Lepre, Janet; Muesle, Mary; Nieh, Ho; Pulley, Deborah; Sharkey, Jeffrey; Svinicki, Kristine; Taylor, Renee; Temp, WCO; Temp, WDM; Vietti-Cook, Annette; Virgilio, Martin; Weber, Michael  
**Subject:** Hearing: Japan - Senate Committee on Environment and Public Works (Time and Location TBD)

---

When: Wednesday, May 18, 2011 12:00 AM to Thursday, May 19, 2011 12:00 AM (GMT-05:00) Eastern Time (US & Canada).

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

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

11/11/14

**Weber, Michael**

---

**From:** Weber, Michael  
**Sent:** Monday, March 14, 2011 12:20 AM  
**To:** Borchardt, Bill  
**Subject:** Response - close out on acronyms

Done. Liaison team responded about 45 minutes ago.

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

**From:** Borchardt, Bill  
**To:** Weber, Michael  
**Sent:** Sun Mar 13 22:06:31 2011  
**Subject:** Fw:

Bill Borchardt  
Via blackberry

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

**From:** Jaczko, Gregory  
**To:** Borchardt, Bill  
**Sent:** Sun Mar 13 22:00:59 2011  
**Subject:**

bill -- anything we can do to assist lyons's request:

Greg  
A thought and request: could nrc fill in acronyms and email this back to nitops and to me and Dan (all copied above)??

I know most, not all, acronyms. I think this is significant progress!  
Thx  
Pete

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

**From:**  
**To:** Lyons, Peter  
**Sent:** Sun Mar 13 20:44:33 2011  
**Subject:**

Dear Pete;

I am sorry. I made some mistakes. The following data is quick and rough summary of the situation. Good news is that they are starting the cooling of S/C using final heat sink. They are continuing to do so in other unit.

Bad news is as in the past they are wondering what to do next, observing parameters.

Yours, Shunsuke

Current Status (5:00, 2011/03/14)

As for 2F, unit 1 started S/C cooling, recovering final heat sink.

1F Unit 1

HHHHH/15

1) Water injection status

Sea water is being injected through fire-fighting water line ( since 20:20 03/13)

2) Pressure in RPV

0.378MPa -> 0.304

3) Water level in RPV

Down scale (region A)

-1700 mm (region B)

Note: Sea water injection rate is about 20-60 ton/hr. We do not know the reason why the level is not recovered though the estimated volume of water injected has exceeded the volume of RPV ( 120 ton). Considering the radiation level change due to venting, it is difficult to say that melt through of RPV due to core melt has occurred. Most plausible explanation is the stuck open of S/R valve.

4) Pressure in D/W

D/W 0.605 MPa->0.490

S/C 0.600 MPa

Note; Explosion at Reactor Building caused wound and exposure of the public stayed in the neighborhood.

Note: the fraction of core damage was estimated to be 55% based on the measurement by CAMAS (unconfirmed, private company source)

1F Unit 2

1) Water injection status

RCIC in operation

2) Pressure in RPV

5.85MPa=>5.4

3) Water level in RPV

Region A: No information ( loss of battery?)

Region B: + 3750 mm

4) Pressure in RCV: Design pressure: D/W: 0.38 MPa, S/C: 0.43 MPa D/W 0.400 MPa => 0.467  
S/C no data

Note: as the RCIC will be lost in due course, the drywell venting operation is in preparation. Also in preparation is sea water injection

1F Unit 3

5) Water injection status

D/D fire fighting pump has inject pure water since 09:08 and sea water since 13:12.

6) Pressure in RPV

0.18MPa

7) Water level in RPV

Region A: -1500 mm

Region B: -2000 mm

8) Pressure in RCV: Design pressure: D/W: 0.38 MPa, S/C: 0.43 MPa

D/W 0.35 MPa=> 0.365

S/C: 0.30MPa

Note: CV vent started at 09:20

Note: Chief Cabinet Secretary Edano announced that though hydrogen explosion may occur at 1F3 as in the case of 1F1, there will be no major impact on the public health as the public has already been evacuated at 15:38(3/13)

Radiation level at Monitoring Points (micro SV/hr) at the site boundary

MP1 17 (11:40), 23( 10:00)  
MP4 78(03:38), 40.4 (21:33), 596(1355), 1557(13:52), 46 (12:42) 52.8(11:18)  
MP6 66.3(2:50 3/14), 650 (5:00) 951 ( 3:00 3/14) 5.5 ( 12:00) 5.6(07:30)  
MP7 0.04 (13:00) 0.04(11:55)  
MP8 5.6 ( 07:30) 5.6(07:30)

Iodine at MP6: Bq/ cm<sup>3</sup>

$2.6 \times 10^{-3}$  (11:10),  $6.7 \times 10^{-4}$ (10:10)

Measured levels are fluctuating in accordance with the change of wind direction: peak values have been about 1000 for 10 min or so.

It was reported from Onagawa NPP at 12:50 03/13 that the radiation level of several monitoring points was increased from below 100 nGy/hr to more than 10000 nGy/hr in the midnight peaking at 02:00 03/13 and the NPP reported the site emergency (preparation level) to the officials. The levels now decreased to several thousand nGy levels.

---

**From:** OST02 HOC  
**Sent:** Monday, March 14, 2011 1:11 PM  
**To:** RST01 Hoc; RST01A Hoc; RST01B Hoc  
**Attachments:** Rollie.pdf

HHHHH/16

## LIA02 Hoc

---

**From:** Michael W. Chinworth [michael-chinworth@jnes-usa.org]  
**Sent:** Monday, March 14, 2011 12:48 PM  
**To:** Emche, Danielle  
**Cc:** Yamachika, Hidehiko; Foggie, Kirk; Aono, Kenjiro; LIA02 Hoc  
**Subject:** Re: TEPCO Earthquake Information Update as of March 14, 2300(JST) - Fukushima Daini Unit 1 in Cold Shutdown

Correct.

-- Michael C.

On 3/14/2011 11:55 AM, Emche, Danielle wrote:

This is unit two correct?

Danielle

Sent from an NRC BlackBerry.

---

**From:** Emche, Danielle

**To:** 'yamachika-hidehiko@jnes-usa.org' <yamachika-hidehiko@jnes-usa.org>; Foggie, Kirk; 'michael-chinworth@jnes-usa.org' <michael-chinworth@jnes-usa.org>

**Cc:** 'aono-kenjiro@jnes-usa.org' <aono-kenjiro@jnes-usa.org>

**Sent:** Mon Mar 14 11:53:28 2011

**Subject:** Re: TEPCO Earthquake Information Update as of March 14, 2300(JST) - Fukushima Daini Unit 1 in Cold Shutdown

Is this Unit 2?

Danielle

Sent from an NRC BlackBerry.

---

**From:** Hidehiko Yamachika <yamachika-hidehiko@jnes-usa.org>

**To:** Emche, Danielle; Foggie, Kirk; Cullingford, Michael

**Cc:** Aono, Kenjiro <aono-kenjiro@jnes-usa.org>; Michael W. Chinworth <michael-chinworth@jnes-usa.org>

**Sent:** Mon Mar 14 11:49:29 2011

**Subject:** RE: TEPCO Earthquake Information Update as of March 14, 2300(JST) - Fukushima Daini Unit 1 in Cold Shutdown

TEPCO announced at 11:30 am in EDT that all of fuel became uncovered again at 10:20am in EDT because the closure of the valve prevented from flow of sea water.

TEPCO is trying to open another valve to release high pressure in the reactor vessel, which took place due to the lack of sea water supply, and keep condition in which sea water flow will be assured.

---

**From:** Carneal, Jason  
**Sent:** Monday, March 14, 2011 8:45 AM  
**To:** Hoc, PMT12; Hoc, RST16; Hoc, SGT08  
**Subject:** FW: Japan: Cooperation in Incident Response and Emergency Preparedness

Operations Center Staff:

I was asked to forward this email when I dialed the Operations Center line. I received the inquiry below from colleagues at GRS in Germany regarding the incidents in Japan and cooperation with the German Incident Response Center.

Please let me know if I have sent this email to the correct address, or if I need to send it to another recipient. These addresses were the only ones I could find in Outlook under HOC.

Thank you for your time,

Jason

Jason Carneal  
Project Manager  
U.S. Nuclear Regulatory Commission  
NRO/DNRL/NARP (T-6J4)  
301-415-3813

---

**From:** Jansen, Florian Dr. [mailto:Florian.Jansen@grs.de]  
**Sent:** Monday, March 14, 2011 7:57 AM  
**To:** Carneal, Jason  
**Cc:** Maqua, Michael Dr.  
**Subject:** Japan: Cooperation in Incident Response and Emergency Preparedness

Jason:

Our INES-Officer asked whether NSIR may be interested in cooperating with our German Incident Response Center. Cooperation may include the following:

- Making sure that information about the situation in Japan is consistent,
- Exchanging new information from Japan,
- Exchanging preliminary assessments of the situation,
- further as requested...

Our Incident Response Center at GRS has been working 24/7 since Friday and gives advice to our regulator who is in constant contact with us. We have also been in the news several times and continue to assess the situation carefully.

Would you know anyone that we could contact in that regard or who you could forward this message to?

Dr. Michael Maqua is our INES-Officer and would be in charge on our side. I have CC'd him on this email.

HHHHH/17

Thanks!

Florian

---

Dr. Florian Jansen  
Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) mbH  
- Referent der Geschäftsführung -  
Schwertnergasse 1  
50667 Köln

Tel.: +49 (0) 2 21 - 20 68 - 825

Fax: +49 (0) 2 21 - 20 68 - 702

E-Mail: [Florian.Jansen@grs.de](mailto:Florian.Jansen@grs.de)

<http://www.grs.de>

Vorsitzende des Aufsichtsrates: Parl. Staatssekretärin Ursula Heinen-Esser

Geschäftsführer: Prof. Dr. Frank-Peter Weiß, Hans J. Steinhauer

Registergericht: Amtsgericht Köln, HRB 7665

Sitz der Gesellschaft: Köln

---

[http://www.grs.de/misc/email\\_disclaimer.html](http://www.grs.de/misc/email_disclaimer.html)

**Hergenroder, Dan**

---

**From:** Dean, Bill  
**Sent:** Tuesday, March 15, 2011 9:16 PM  
**To:** Collins, Elmo; Satorius, Mark; McCree, Victor  
**Subject:** Re: Response to Japan Earthquake/Tsunami

Great minds think alike. I have called an all hands meeting to do the same thing tomorrow.  
Bill Dean  
Regional Administrator  
Region I, USNRC  
Sent from NRC BlackBerry

---

**From:** Collins, Elmo  
**To:** Satorius, Mark; McCree, Victor; Dean, Bill  
**Sent:** Tue Mar 15 11:30:21 2011  
**Subject:** Re: Response to Japan Earthquake/Tsunami

Mark  
I think your plans are good as long as it is kept internal - I did it yesterday  
Elmo

---

**From:** Satorius, Mark  
**To:** McCree, Victor; Collins, Elmo; Dean, Bill  
**Sent:** Tue Mar 15 11:00:00 2011  
**Subject:** RE: Response to Japan Earthquake/Tsunami

I'm headed into a 'routine' all-staff meeting in 5 minutes and have decided to hijack the agenda and pretty much turn the meeting into an informational update by myself and going into taking all questions from the staff (knowing that I will probably not be able to answer all comers). In addition, I decided this morning to send out the attached email w/ the OOU status as of 730. Not sure the last was kosher, but decided to move forward and beg for forgiveness later rather than ask permission...

---

**From:** McCree, Victor  
**Sent:** Tuesday, March 15, 2011 9:11 AM  
**To:** Collins, Elmo; Satorius, Mark; Dean, Bill  
**Subject:** FW: Response to Japan Earthquake/Tsunami

FYI

---

**From:** McCree, Victor  
**Sent:** Tuesday, March 15, 2011 10:08 AM  
**To:** R2MAIL; R2RESIDENTS; R2\_RESIDENT SITES  
**Subject:** Response to Japan Earthquake/Tsunami

Good Morning.

I'm sure that all of you are aware of the ongoing events in Japan following last Friday's massive earthquake and tsunami. The loss of life and property due to these catastrophic events is truly devastating, and the U.S., along with a host of other countries are extending support to the Japanese government.

HHHH/18

Shortly after the event, the NRC entered the Monitoring Mode and staffed the Headquarters Operations (Ops) Center. Our colleagues in the Ops Center have continued to gather information from media sources and the International Atomic Energy Agency which indicate that the condition of the Unit 1, 2 and 3 reactors at the Fukushima Daiichi nuclear station remains dynamic and represents a continuing safety concern. The Japanese government has implemented protective measures for persons within the emergency planning zone of the Fukushima station, including evacuation, sheltering, and issuance of potassium iodide. The NRC does not expect the U.S. to experience any harmful levels of radioactivity.

On yesterday, the NRC dispatched additional experts to Japan to better understand the status of efforts to safely shut down the damaged reactors at the Fukushima Daiichi site. They will provide technical advice to the U.S. Ambassador in Japan and contribute to the communications among stakeholders (see <http://www.nrc.gov/reading-rm/doc-collections/news/2011/11-048.pdf>). Chuck Casto has been designated to lead the NRC team and will serve as the single point of contact for the U.S. Ambassador on nuclear reactor issues. We wish Chuck and his team the best as they take on this challenging and important assignment. Please note that others in Region II also volunteered to support the response to the events in Japan and they may be asked in the coming weeks and months to supplement and/or replace the current U.S. team members.

The extraordinary events in Japan and their impact on that nation's nuclear infrastructure highlight some of the known risks involved in the technology we regulate. The events have also prompted widespread media and public interest in the safe use of nuclear power in this country. In addition, media commentary on the NRC's role in assuring safety of U.S. plants underscores the vital role that we play in ensuring that nuclear facilities are constructed, maintained, and operated in accordance with the requirements of their design and license. Despite these potential distractions, I echo the Chairman's message today in encouraging you to remain focused on carrying out the NRC mission, as well as Region II's vision.

Once again, I truly appreciate your professional, safety-focused, and high quality work.

Thank you, Vic

**McKelvey, Harold**

---

**From:** Collins, Elmo  
**Sent:** Tuesday, March 15, 2011 5:29 PM  
**To:** Maier, Bill  
**Subject:** RE: Proposed Outreach activities

Thanks  
Elmo

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

**From:** Maier, Bill  
**Sent:** Tuesday, March 15, 2011 4:19 PM  
**To:** Collins, Elmo; McCree, Victor; Dean, Bill; Satorius, Mark  
**Cc:** Howell, Art; Lew, David; Pederson, Cynthia; Wert, Leonard; Trojanowski, Robert; Woodruff, Gena; McNamara, Nancy; Tiff, Doug  
**Subject:** RE: Proposed Outreach activities

Thank you for conveying the States' viewpoints Elmo.

FYI, we conducted a regularly scheduled RSLO counterpart call today and Region I suggested, and I seconded, conduct as Bill Dean suggests below of periodic calls with the SLOs to provide information that can be shared and to field questions that can be answered. Given the intense sensitivity of control of information related to this event, we suggested that the call be conducted by NRC HQs and conducted nationally so that appropriate controls could be applied and all states were getting the same information. FSME agreed to raise the suggestion again with the Executive Team.

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

**From:** Collins, Elmo  
**Sent:** Tuesday, March 15, 2011 2:04 PM  
**To:** McCree, Victor; Dean, Bill; Satorius, Mark  
**Cc:** Howell, Art; Lew, David; Pederson, Cynthia; Wert, Leonard; Trojanowski, Robert; Woodruff, Gena; Maier, Bill  
**Subject:** RE: Proposed Outreach activities

Thanks Bill and Victor -

Region IV looks a lot like Region II on these fronts. While we are getting a large number of inquiries, press and public, there is not a ground swell from the states.

That said, it is apparent that States are looking to be treated as a governmental partner, not as press or members of the public and thus, expect more information from NRC than they are getting about the status of the reactors in Japan.

Elmo

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

**From:** McCree, Victor  
**Sent:** Tuesday, March 15, 2011 1:52 PM  
**To:** Dean, Bill; Collins, Elmo; Satorius, Mark  
**Cc:** Howell, Art; Lew, David; Pederson, Cynthia; Wert, Leonard; Trojanowski, Robert; Woodruff, Gena  
**Subject:** RE: Proposed Outreach activities

Bill,

HHHHH/19

I apologize for not responding to your email sooner.... Although our SLOs have received a couple of inquiries from state points-of-contact, we have not received the groundswell of inquiries that you have experienced. As a result, our SLO's will stay current on the events in Japan through the regular email updates and respond to any questions from their counterparts.

Also, although we routinely inform FEMA Region IV of our EOC meeting schedule and invite them to participate, they rarely do so. Based on the small number of inquiries we've received from states, EMDs, etc., thus far regarding the Japan event, I do not plan to extend them an additional invitation.

Vic

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

From: Dean, Bill

Sent: Monday, March 14, 2011 6:00 PM

To: Collins, Elmo; Satorius, Mark; McCree, Victor

Cc: Howell, Art; Lew, David; Pederson, Cynthia; Wert, Leonard

Subject: Proposed Outreach activities

I am not sure what you have experienced thus far relative to the events unfolding in Japan, but I have had dialog today with State Liaison officers and emergency management directors, congressional staffers, and FEMA administrators all looking for the same thing: information they can use to address the groundswell of inquiries they are receiving. What do you think about:

1. Periodic calls with SLOs (maybe even daily right now) to update them on current information and receive, and where possible, answer questions; and
2. Inviting FEMA to EOC meetings to discuss emergency preparedness questions emanating from the Japanese situation?

Bill Dean

Regional Administrator

Region I, USNRC

Sent from NRC BlackBerry

## Kuritzky, Alan

---

**From:** Uhle, Jennifer  
**Sent:** Tuesday, March 15, 2011 9:46 AM  
**To:** Kuritzky, Alan  
**Subject:** RE: B5b vis-a-vis Japan [OUO]

Thanks so much Alan. The Ops center has in fact been looking at these have been communicating them to Jim Trapp on the ground in Japan. It is not clear if Jim is providing any of these to the Japanese or not. We are not sure of the communication channel. I really appreciate your thinking of ways to help and volunteering these measures.

Thanks,

Jennifer

---

**From:** Kuritzky, Alan  
**Sent:** Tuesday, March 15, 2011 8:55 AM  
**To:** Uhle, Jennifer  
**Subject:** B5b vis-a-vis Japan [OUO]

\*\*\*This email and attachment contain OUO-SRI\*\*\*

Jennifer,

A former contractor for the B5b project reminded me that as part of that project, the NRC staff and licensee staff each developed plant-specific lists of mitigation strategies for very severe plant damage scenarios (i.e., loss of all AC and DC power). I found the attached file that lists a number of the mitigation strategies that were postulated for response to a loss of all plant power (AC and DC) at BWRs. I'm not sure how much use this file is (many of the proposed strategies are things that would have to have been considered long before the accident), but it does raise the point that a lot of strategies were postulated and documented as part of the B5b work. I know that a comprehensive list was developed for both BWRs and PWRs. There may also have even been some lists that were put together for specific plant types, but I'm not sure. Unfortunately, all of the staff involved in this project have scattered around the agency and I'm not sure who controls this information. The last I knew, it was under Stacey Rosenberg in NRR/DPR (I think her branch may have been called something like Special Projects Branch, but it no longer exists according to the current NRR/DPR organizational chart). It is something you may want to look into.

Alan

#####/20

Nuclear News Flashes

Wednesday, Apr 20, 2011

Copyright Platts 2011 A Division of The McGraw-Hill Companies, Inc.

All rights reserved. <http://www.platts.com>

---

---

[Inside This Issue:]

- \*\* UN secretary general pushes for international nuclear safety standards
- \*\* Italy halts nuclear power program, favors renewables
- \*\* Conditions in Fukushima I buildings interfering with use of robots: Tepco
- \*\* Spot price of uranium remains around \$57/lb
- \*\* Plutonium-contaminated water cleaned up in February at Sellafield
- \*\* Alaskan city drops plan for small reactor
- \*\* Westinghouse appoints vice president

---

---

\*\*\* UN secretary general pushes for international nuclear safety standards

The world needs to agree on international standards for nuclear power plant construction, operation and regulation to preserve nuclear power as an energy source, United Nations Secretary General Ban Ki-moon told an international conference in Kiev April 20.

"The world has witnessed an unnerving series of nuclear disasters," Ban told the conference organized by the Ukrainian government to mark the 25th anniversary of the Chernobyl disaster, which contaminated large areas in Ukraine, Russia and Belarus and uprooted some 330,000 people. He spoke as Japan continues to deal with the accident at the Fukushima I nuclear power plant.

Nuclear energy has been considered a "relatively clean" energy source that could help mitigate climate change, he said. But climate change also "means more incidence of freak and severe weather," and as the number of nuclear power plants in the world increases, "our vulnerability will only grow," Ban said.

He said nuclear safety is a matter of "global public interest, not merely a national" responsibility.

Ban said the record of nuclear power "requires us to ask the painful questions: have we correctly calculated the risks? have we done all we can to protect citizens?"

"We are likely to see more such disasters" as Chernobyl and Fukushima, he said, and the world must better protect against them by adopting universal, high nuclear safety standards.

Ban also said, however, that history has shown that the contaminated regions around Chernobyl are not condemned but that with the appropriate infrastructure and support, "life is fully possible" there. "What these areas need most is development," Ban said.

re/11/11/21

---

**\*\*\* Italy halts nuclear power program, favors renewables**

The Italian parliament voted April 20 in favor of a proposal to halt nuclear power, Democratic Party opposition Senator Francesco Ferrante said.

The Italian government intends to halt previous initiatives to build nuclear reactors in the country, and proposed late April 19 a national energy strategy based on renewable energy sources.

"The new proposal came ... amid rising public concern about a return to nuclear power," said Ferrante. The Fukushima I accident in Japan "has acted as an incentive to abandon nuclear energy production in Italy and also in the rest of Europe, with the exception of a few countries."

Minister of Economic Development Paolo Romani said in a statement late April 19 that "the Fukushima accident has changed everything ... Our objective is to spot new measures for guaranteeing security and diversification of energy supply, and improve the development of infrastructures needed to support investments for research in the energy sector so important for our country."

The government will present a new energy strategy plan by the end of the summer. The new plan will aim at boosting Italy's energy and production systems for the next 20 years.

Although Italy had abandoned nuclear power with a referendum in 1987 after the Chernobyl disaster, Prime Minister Silvio Berlusconi's government planned a return to nuclear power energy production to increase the country's energy independence.

But on March 23, Italy declared a one-year moratorium for safety reasons.

---

**\*\*\* Conditions in Fukushima I buildings interfering with use of robots: Tepco**

Efforts to assess damage at units of Japan's Fukushima I nuclear plant using remote-controlled robots are being hindered by conditions inside the reactor buildings, Tokyo Electric Power Co. said April 20.

Tepco said it failed in attempts to survey unit 2 on April 17 and 18 because "the robot's camera lens was instantly clouded by high humidity." Tepco said it believes the steam is emanating from a damaged section of the reactor's suppression pool. The Japan Atomic Industrial Forum said April 19 that Tepco has "not found a way to resolve the problem as the steam could be highly toxic."

Tepco said debris blocked access to robots sent into unit 3. JAIF said the company is considering the use of another robot with a mechanical extension capable of moving objects weighing up to 220 pounds.

Robots sent into unit 1 were able to move about 130 feet along one wall, but no further due to debris, Tepco said.

Meanwhile, Yukio Edano, the Japanese government's chief cabinet secretary, said April 20 an order is being prepared that would forbid people to enter the 20-kilometer (12.4 mile) evacuation zone around Fukushima I, NHK television reported. Edano said at a media briefing that the order also would mandate that any residents who chose to remain in the zone would be required to leave because the damaged reactors have not been stabilized, NHK said.

---

\*\*\* Spot price of uranium remains around \$57/lb

With light activity, the spot price of uranium remained around \$57 a pound U3O8 April 19, several analysts said, with both buyers and sellers appearing reluctant to commit to deals with any sizable volume.

But those analysts also noted that the price continues to be under some downward pressure because the market remains unsettled by the accident at Japan's Fukushima I nuclear plant. The next deal, these analysts said, is most likely to occur at a price slightly below \$57/lb. But one analyst cautioned that if a buyer became aggressive in wanting to buy 300,000 lb or more right now, the price would likely move well above \$57/lb.

TradeTech April 15 lowered its spot price to \$57/lb, down 75 cents from a week earlier. TradeTech said buyers "are extremely price sensitive and reticent to commit to purchases at higher prices."

Ux Consulting April 18 lowered its weekly spot price \$1.25/lb cents/lb to \$57.25/lb, which was the most competitive offer price UxC said it was aware of. UxC said that "in general it appears that many of the more active market players have pushed the pause button over the past several weeks, and it will be interesting to see what it takes to bring these players back to the table."

The Platts NuclearFuel range for the week was \$52-\$59/lb.

---

\*\*\* Plutonium-contaminated water cleaned up in February at Sellafield

Management at the nuclear and chemical waste facilities at the Sellafield site in England said April 20 that "half an eggcup" of plutonium-contaminated water spilled and was cleaned up in February in a 60-year-old building that was undergoing decommissioning.

Sellafield Ltd. said there was no leak to the environment and no workers received radioactive doses. In a statement, it said an investigation concluded that the spill was due to condensation that likely dripped through a seal in the ventilation system.

A spokesman for the UK Office for Nuclear Regulation said the incident was classified on the seven-level International Nuclear Event Scale as Level 1, the lowest level. Level 1 events are those "without any direct impact on people or the environment, but for which the range of measures put in place to prevent accidents did not function as intended." Workers at the site responded appropriately to the incident, he said.

The information was made public after the UK's Guardian newspaper reported on a leaked ministerial memo on the event. Sellafield Ltd. said the material detected was "five times the ministerial reportable level," which, a spokesman said, for plutonium is radioactivity of 1 megabecquerel or greater.

---

\*\*\* Alaskan city drops plan for small reactor

A plan to use a 10-MW Toshiba reactor to provide electricity to a small city in Alaska is being abandoned because the company will not be able to license the design soon enough, a city official said April 19.

The city of Galena "needs something in the next year or two" to meet its energy demand, said Marvin Yoder, the former city manager who is in charge of the reactor project. But it now appears Toshiba will not be able to obtain NRC design certification for its 4S reactor until 2020, he said. "I don't think we can wait that long," Yoder said at the Nuclear Energy Insider's Small Modular Reactor Conference in Columbia, South Carolina.

Yoder said he based his 2020 estimate on NRC's stated priority to focus on light water reactor designs and the Next Generation Nuclear Plant, a congressionally mandated project to build a high-temperature gas-cooled reactor. That means reactors such as the liquid metal-cooled 4S would have to wait longer for agency review.

Galena is reachable only by air or sea and, according to the 2000 Census count, has a population of 675. Galena has been searching for an alternative to electricity generated by diesel engines.

In a letter to NRC last month, Toshiba said it plans to submit an application for design certification in third-quarter fiscal 2012.

In an interview following his presentation, Yoder said Galena is now evaluating alternatives such as biomass energy to supply electricity to its residents.

---

\*\*\* Westinghouse appoints vice president

Westinghouse appointed Joe Zwetolitz to the new position of vice president, Americas effective May 2, the company said in a statement April 20.

Zwetolitz will handle business development, customer relations and project delivery for all product lines for customers in Canada, including Atomic Energy of Canada Ltd., Bruce Power, Hydro-Quebec and Ontario Power Generation, Westinghouse said.

Zwetolitz formerly worked at Areva NP, where he was senior vice president of the North American reactors and services group, Westinghouse said.

---

\*\*\*

---

Contact Us:

| To reach Platts |  
| E-mail: [support@platts.com](mailto:support@platts.com) |

| North America |  
| Tel: 800-PLATTS-8 (toll-free) |  
| +1-212-904-3070 (direct) |

| Latin America |  
| Tel: + 54-11-4804-1890 |

| Europe & Middle East |  
| Tel: +44-20-7176-6111 |

| Asia Pacific |  
| Tel: +65-6530-6430 |

---

**From:** RST01 Hoc  
**Sent:** Wednesday, March 16, 2011 5:10 PM  
**To:** RST15 Hoc  
**Subject:** FW: Sketch of Temp SF Pumping System  
**Attachments:** Temp Spent Fuel Pumping System.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

---

**From:** RST01 Hoc  
**Sent:** Wednesday, March 16, 2011 3:48 PM  
**To:** Kowalczyk, Jeffrey  
**Subject:** FW: Sketch of Temp SF Pumping System

FYI

---

**From:** RST01 Hoc  
**Sent:** Wednesday, March 16, 2011 2:51 PM  
**To:** LIA06 Hoc; Kozal, Jason; Dudek, Michael; Anderson, Joseph  
**Subject:** FW: Sketch of Temp SF Pumping System

Meant to send this earlier. Sorry!

---

**From:** RST01 Hoc  
**Sent:** Wednesday, March 16, 2011 12:20 PM  
**To:** Kolb, Timothy; Casto, Chuck; Cook, William; Nakanishi, Tony; Foster, Jack; Trapp, James; Monninger, John; Smith, Brooke; Foggie, Kirk; Ulses, Anthony  
**Cc:** RST01 Hoc  
**Subject:** Sketch of Temp SF Pumping System

FYI:

Japan Gov Request for Pumping Assets to cool fuel pool.

Requested 4 trains of mobile pumps including the following

- 4 each Diesel Sea Water Suction pump with Strainer.
- 4 each Diesel Booster Pumps.
- 4 each Diesel Spray Pumps. 100m Length 50m High
- Provide approximately 500 gpm water flow to Fukushima Daiichi Spent Fuel Pools.
- Diesel Fuel tanks and Fuel to support pump trains.
- 500 meters of Piping for 2 trains.
- 700 meters of Piping for 2 trains.
- People to assist in assembly of trains
- 20,000 # or more Boron

HHHHH/22

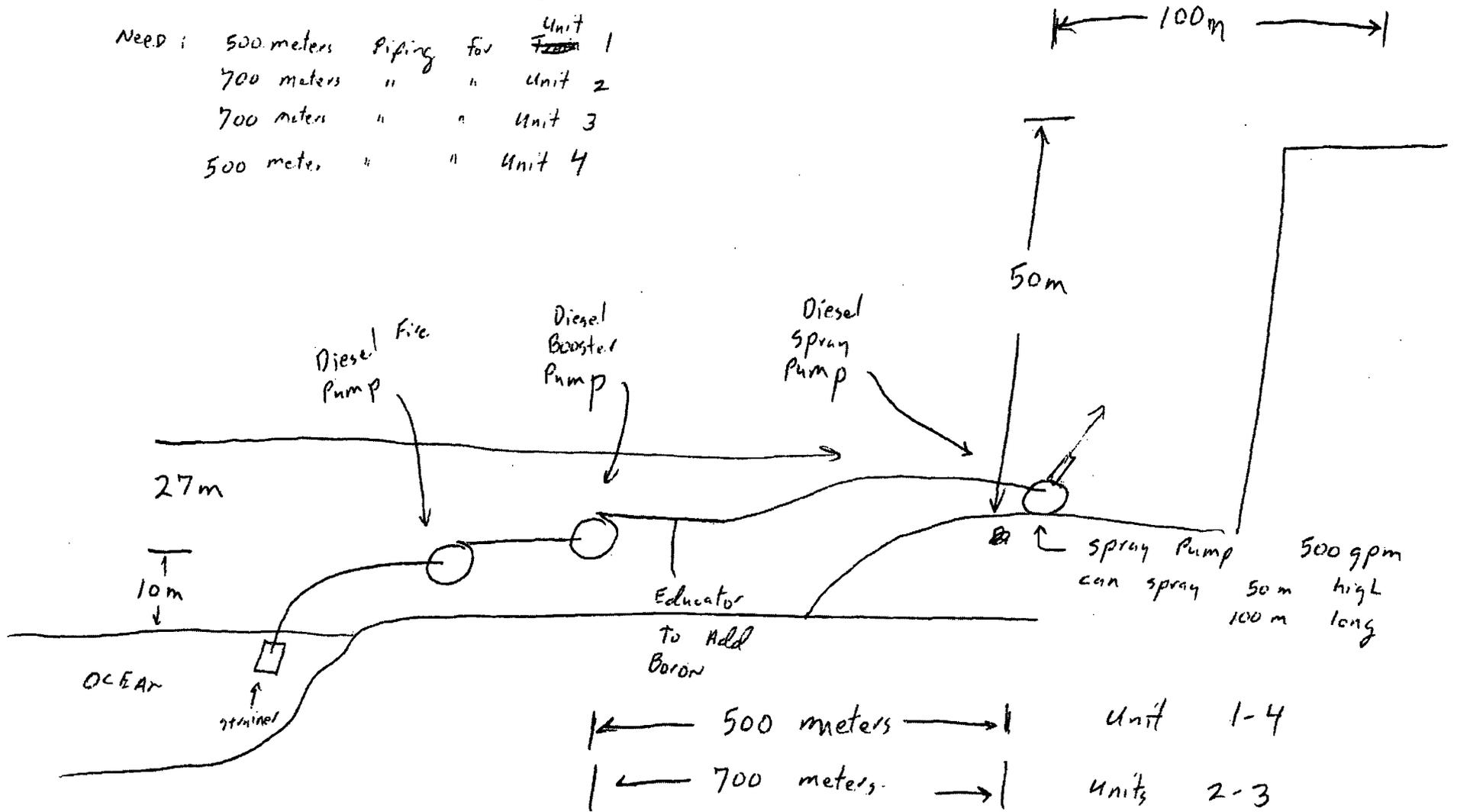
Back-up Systems including

- 4 Pumper Trucks

Would also like Robots for High Rad work with camera capability.

4 TRAINS NEEDED (Example shown is one TRAIN)

Need: 500 meters piping for ~~Unit~~ Unit 1  
 700 meters " " Unit 2  
 700 meters " " Unit 3  
 500 meters " " Unit 4



Also need Diesel Trucks

Robots which can enter a high Radiation Field

tamank.duong@  
 USFJ.mil

## Owen, Lucy

---

**From:** Dean, Bill  
**Sent:** Wednesday, March 16, 2011 8:58 AM  
**To:** Collins, Elmo; Satorius, Mark; McCree, Victor  
**Subject:** RE: Additional Staff requirements outside Ops Center Long Term Staffing

I agree. We have to be able to handle our frontline mission here in the us.

*Bill*

---

**From:** Collins, Elmo  
**Sent:** Wednesday, March 16, 2011 9:57 AM  
**To:** Satorius, Mark; Dean, Bill; McCree, Victor  
**Subject:** FW: Additional Staff requirements outside Ops Center Long Term Staffing  
**Importance:** High

I suggest that regions not be first in line to support this function  
Elmo

---

**From:** Muessle, Mary  
**Sent:** Wednesday, March 16, 2011 8:32 AM  
**To:** Evans, Michele; Hackett, Edwin; Brenner, Eliot; Schmidt, Rebecca; Powell, Amy; Droggitis, Spiros; Doane, Margaret; Mamish, Nader; Dyer, Jim; Brown, Milton; Greene, Kathryn; Stewart, Sharon; Howard, Patrick; Miller, Charles; Moore, Scott; Cohen, Miriam; Tracy, Glenn; Haney, Catherine; Dorman, Dan; Johnson, Michael; Holahan, Gary; Leeds, Eric; Boger, Bruce; Grobe, Jack; Zimmerman, Roy; Campbell, Andy; Sheron, Brian; Uhle, Jennifer; Dean, Bill; Lew, David; McCree, Victor; Wert, Leonard; Casto, Chuck; Satorius, Mark; Pederson, Cynthia; Collins, Elmo; Howell, Art; Andersen, James; Akstulewicz, Brenda; Belmore, Nancy; Quesenberry, Jeannette; Kreuter, Jane; Armstrong, Janine; Hudson, Sharon; Ellis, Marv; Hasan, Nasreen; Ronewicz, Lynn; Schumann, Stacy; Daniels, Stanley; Casby, Marcia; Thomas, Loretta; Walker, Dwight; Sprogeris, Patricia; Schwarz, Sherry; Ross, Robin; Cohen, Shari; Riddick, Nicole; Flory, Shirley; Veltri, Debra; Matakas, Gina; ODaniell, Cynthia; Miles, Patricia; Lee, Pamela; Dubose, Sheila; Buckley, Patricia; Tomczak, Tammy; Owen, Lucy; Tannenbaum, Anita; Gusack, Barbara; Harrington, Holly; Ricketts, Paul; Howell, Linda; Higginbotham, Tina; Ross, Brenda; Boyce, Thomas (OIS); Schaeffer, James; Jackson, Donald  
**Cc:** Williams, Shawn; Andersen, James; Ramsey, Jack  
**Subject:** Additional Staff requirements outside Ops Center Long Term Staffing  
**Importance:** High

OPA and OIP expect large call volumes today and in the next few weeks given expected news from Japan. OIP is looking for names of people who have desk officer or other OIP or international experience to assist them in the event that current staff cannot meet the work demands for call inquiries as well as ongoing international work. Please provide Shawn Williams and I a list of names that could serve to help OIP in this capacity and their general availability over the next week and month. It is difficult to determine the need level at this time, but as in the Op Center, it is anticipated OIP will have for an additional month. We would like the list of names by COB today.

Thanks  
Mary

Mary Muessle  
Assistant for Operations - Acting  
Office of the Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
301-415-1703 office  
301-415-2700 fax

HHHH/23

---

**From:** Evans, Michele

**Sent:** Tuesday, March 15, 2011 5:53 PM

**To:** Hackett, Edwin; Brenner, Eliot; Schmidt, Rebecca; Powell, Amy; Droggitis, Spiros; Doane, Margaret; Mamish, Nader; Dyer, Jim; Brown, Milton; Greene, Kathryn; Stewart, Sharon; Howard, Patrick; Miller, Charles; Moore, Scott; Cohen, Miriam; Tracy, Glenn; Haney, Catherine; Dorman, Dan; Johnson, Michael; Holahan, Gary; Leeds, Eric; Boger, Bruce; Grobe, Jack; Zimmerman, Roy; Campbell, Andy; Sheron, Brian; Uhle, Jennifer; Dean, Bill; Lew, David; McCree, Victor; Wert, Leonard; Casto, Chuck; Satorius, Mark; Pederson, Cynthia; Collins, Elmo; Howell, Art; Muessle, Mary; Andersen, James; Akstulewicz, Brenda; Belmore, Nancy; Quesenberry, Jeannette; Kreuter, Jane; Armstrong, Janine; Hudson, Sharon; Ellis, Marv; Hasan, Nasreen; Ronewicz, Lynn; Schumann, Stacy; Daniels, Stanley; Casby, Marcia; Thomas, Loretta; Walker, Dwight; Sprogeris, Patricia; Schwarz, Sherry; Ross, Robin; Cohen, Shari; Riddick, Nicole; Flory, Shirley; Veltri, Debra; Matakas, Gina; ODaniell, Cynthia; Miles, Patricia; Lee, Pamela; Dubose, Sheila; Buckley, Patricia; Tomczak, Tammy; Owen, Lucy; Tannenbaum, Anita; Gusack, Barbara; Harrington, Holly; Ricketts, Paul; Howell, Linda; Higginbotham, Tina; Ross, Brenda; Boyce, Thomas (OIS); Schaeffer, James; Jackson, Donald

**Subject:** Follow-up from 4 pm teleconference on Ops Center Long Term Staffing

Everyone,

Please find attached 1) a list of current positions being staffed in the Ops Center and 2) the staff identified as available to support in Japan.

Regarding additional staff available to support in the ops center, the primary needs are for the specialized positions on the PMT and anyone with previous international experience in OIP.

Regarding support in Japan, please provide any updates/changes to the list by COB March 17. The target time frame for sending these staff members is March 27-April 9, so please consider that when considering staff to put on the list.

Thanks for your support.

*Michele*

## Owen, Lucy

---

**From:** Dean, Bill  
**Sent:** Wednesday, March 16, 2011 9:00 AM  
**To:** McCree, Victor; Collins, Elmo; Satorius, Mark  
**Cc:** Wert, Leonard  
**Subject:** RE: Additional Staff requirements outside Ops Center Long Term Staffing

We are already supporting with PAO support. Since that is a HQ resource, I can live with that.

*Bill*

---

**From:** McCree, Victor  
**Sent:** Wednesday, March 16, 2011 9:59 AM  
**To:** Collins, Elmo; Satorius, Mark; Dean, Bill  
**Cc:** Wert, Leonard  
**Subject:** RE: Additional Staff requirements outside Ops Center Long Term Staffing

Thanks Mary...and I agree with Bill. However, we may have one nominee—one of our PAOs to provide temporary support to OPA.

Vic

---

**From:** Collins, Elmo  
**Sent:** Wednesday, March 16, 2011 9:57 AM  
**To:** Satorius, Mark; Dean, Bill; McCree, Victor  
**Subject:** FW: Additional Staff requirements outside Ops Center Long Term Staffing  
**Importance:** High

I suggest that regions not be first in line to support this function  
Elmo

---

**From:** Muesle, Mary  
**Sent:** Wednesday, March 16, 2011 8:32 AM  
**To:** Evans, Michele; Hackett, Edwin; Brenner, Eliot; Schmidt, Rebecca; Powell, Amy; Droggitis, Spiros; Doane, Margaret; Mamish, Nader; Dyer, Jim; Brown, Milton; Greene, Kathryn; Stewart, Sharon; Howard, Patrick; Miller, Charles; Moore, Scott; Cohen, Miriam; Tracy, Glenn; Haney, Catherine; Dorman, Dan; Johnson, Michael; Holahan, Gary; Leeds, Eric; Boger, Bruce; Grobe, Jack; Zimmerman, Roy; Campbell, Andy; Sheron, Brian; Uhle, Jennifer; Dean, Bill; Lew, David; McCree, Victor; Wert, Leonard; Casto, Chuck; Satorius, Mark; Pederson, Cynthia; Collins, Elmo; Howell, Art; Andersen, James; Akstulewicz, Brenda; Belmore, Nancy; Quesenberry, Jeannette; Kreuter, Jane; Armstrong, Janine; Hudson, Sharon; Ellis, Marv; Hasan, Nasreen; Ronewicz, Lynn; Schumann, Stacy; Daniels, Stanley; Casby, Marcia; Thomas, Loretta; Walker, Dwight; Sprogeris, Patricia; Schwarz, Sherry; Ross, Robin; Cohen, Shari; Riddick, Nicole; Flory, Shirley; Veltri, Debra; Matakas, Gina; ODaniell, Cynthia; Miles, Patricia; Lee, Pamela; Dubose, Sheila; Buckley, Patricia; Tomczak, Tammy; Owen, Lucy; Tannenbaum, Anita; Gusack, Barbara; Harrington, Holly; Ricketts, Paul; Howell, Linda; Higginbotham, Tina; Ross, Brenda; Boyce, Thomas (OIS); Schaeffer, James; Jackson, Donald  
**Cc:** Williams, Shawn; Andersen, James; Ramsey, Jack  
**Subject:** Additional Staff requirements outside Ops Center Long Term Staffing  
**Importance:** High

OPA and OIP expect large call volumes today and in the next few weeks given expected news from Japan. OIP is looking for names of people who have desk officer or other OIP or international experience to assist them in the event that current staff cannot meet the work demands for call inquiries as well as ongoing international work. Please provide Shawn Williams and I a list of names that could serve to help OIP in this capacity and their general availability over the next week and month. It is difficult to determine the need level at this time, but as in the Op Center, it is anticipated OIP will have for an additional month. We would like the list of names by COB today.

HHH/24

Thanks  
Mary

Mary Muesle  
Assistant for Operations - Acting  
Office of the Executive Director for Operations  
U.S. Nuclear Regulatory Commission  
301-415-1703 office  
301-415-2700 fax

---

**From:** Evans, Michele

**Sent:** Tuesday, March 15, 2011 5:53 PM

**To:** Hackett, Edwin; Brenner, Eliot; Schmidt, Rebecca; Powell, Amy; Droggitis, Spiros; Doane, Margaret; Mamish, Nader; Dyer, Jim; Brown, Milton; Greene, Kathryn; Stewart, Sharon; Howard, Patrick; Miller, Charles; Moore, Scott; Cohen, Miriam; Tracy, Glenn; Haney, Catherine; Dorman, Dan; Johnson, Michael; Holahan, Gary; Leeds, Eric; Boger, Bruce; Grobe, Jack; Zimmerman, Roy; Campbell, Andy; Sheron, Brian; Uhle, Jennifer; Dean, Bill; Lew, David; McCree, Victor; Wert, Leonard; Casto, Chuck; Satorius, Mark; Pederson, Cynthia; Collins, Elmo; Howell, Art; Muesle, Mary; Andersen, James; Akstulewicz, Brenda; Belmore, Nancy; Quesenberry, Jeannette; Kreuter, Jane; Armstrong, Janine; Hudson, Sharon; Ellis, Marv; Hasan, Nasreen; Ronewicz, Lynn; Schumann, Stacy; Daniels, Stanley; Casby, Marcia; Thomas, Loretta; Walker, Dwight; Sprogeris, Patricia; Schwarz, Sherry; Ross, Robin; Cohen, Shari; Riddick, Nicole; Flory, Shirley; Veltri, Debra; Matakas, Gina; ODaniell, Cynthia; Miles, Patricia; Lee, Pamela; Dubose, Sheila; Buckley, Patricia; Tomczak, Tammy; Owen, Lucy; Tannenbaum, Anita; Gusack, Barbara; Harrington, Holly; Ricketts, Paul; Howell, Linda; Higginbotham, Tina; Ross, Brenda; Boyce, Thomas (OIS); Schaeffer, James; Jackson, Donald

**Subject:** Follow-up from 4 pm teleconference on Ops Center Long Term Staffing

Everyone,

Please find attached 1) a list of current positions being staffed in the Ops Center and 2) the staff identified as available to support in Japan.

Regarding additional staff available to support in the ops center, the primary needs are for the specialized positions on the PMT and anyone with previous international experience in OIP.

Regarding support in Japan, please provide any updates/changes to the list by COB March 17. The target time frame for sending these staff members is March 27-April 9, so please consider that when considering staff to put on the list.

Thanks for your support.

*Michele*

## Weber, Michael

---

**From:** Weber, Michael  
**Sent:** Thursday, March 17, 2011 1:00 PM  
**To:** Jaczko, Gregory  
**Cc:** 'daniel.poneman@hq.doe.gov'; Coggins, Angela  
**Subject:** Response - Mitigation advice

Yes, sir. DOE and Naval Reactors are embedded in our Reactor Safety Team and are working closely with INPO, GE, and other private sector reps. We are frequently discussing strategies with Chuck and team and preparing them for the next meeting between our team in Japan and Japanese authorities (including MOD) in 7 hours in Tokyo.

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

**From:** Jaczko, Gregory  
**To:** Weber, Michael  
**Cc:** 'daniel.poneman@hq.doe.gov' <daniel.poneman@hq.doe.gov>  
**Sent:** Thu Mar 17 10:41:25 2011  
**Subject:** Mitigation advice

Mike - can you have someone make sure doe/inpo/naval reactors and us are talking about strategies for dealing with reactors and have the casto team prepare for possible additional support people

HHHHH/25

## Weber, Michael

---

**From:** Weber, Michael  
**Sent:** Thursday, March 17, 2011 6:06 PM  
**To:** RST01 Hoc  
**Cc:** OST02 HOC  
**Subject:** FYI - Mitigation advice

I responded to the Chairman and DOE Deputy Secretary Poneman that we are working closely with DOE, NR, INPO on strategies and pumping the information to our team in Japan.

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

**From:** Jaczko, Gregory  
**Sent:** Thursday, March 17, 2011 10:41 AM  
**To:** Weber, Michael  
**Cc:** 'daniel.poneman@hq.doe.gov'  
**Subject:** Mitigation advice

Mike - can you have someone make sure doe/inpo/naval reactors and us are talking about strategies for dealing with reactors and have the casto team prepare for possible additional support people

#####/26

**Andersen, James**

---

**From:** Andersen, James  
**Sent:** Thursday, March 17, 2011 9:00 PM  
**To:** Frazier, Alan  
**Subject:** RE: Requests from Commission Offices for Ops Center/Japan Nuclear Information

Got it, thanks for pulling the process together and letting the ETAs know. Have a great weekend.

Jim A.

---

**From:** Frazier, Alan  
**Sent:** Thursday, March 17, 2011 6:30 PM  
**To:** Andersen, James  
**Subject:** FW: Requests from Commission Offices for Ops Center/Japan Nuclear Information

Jim,

The Chairman's office said that if the Commission offices have a problem with not getting information fast enough (or not at all) that we should tell them to bring their concerns to Josh Batkin. However, Bill told me that we should only do that as a last resort.

Alan

**From:** Frazier, Alan  
**Sent:** Thursday, March 17, 2011 6:26 PM  
**To:** EDO\_TBPM Distribution  
**Cc:** Weber, Michael; Virgilio, Martin; Ash, Darren; Muessle, Mary; Andersen, James  
**Subject:** Requests from Commission Offices for Ops Center/Japan Nuclear Information

ETAs,

Today the Chairman asked his fellow Commissioners to please not distract the Ops Center staff with requests for information. After consulting this afternoon with Bill, the current Executive Team in the Ops Center, and the Chairman's staff, we have decided to institute the following temporary procedure, which pertains to requests for Ops Center/Japan Nuclear Information from Commission offices.

If requests come to you from Commission offices for information that can only be obtained from the Ops Center staff, send an email with that request to "OST02 HOC" (see example below). This will put the request into the Ops Center action tracking list where it will be assigned to a team and given a priority. If a response was requested within a certain timeframe, please provide that information as well.

**IMPORTANT NOTE:** If the Ops Center informs you that they cannot meet the timeframe specified (or won't be able to respond at all) and if the Commission office has a problem with that, please work with OEDO Management starting with Jim Anderson escalating up to Bill if necessary to resolve the situation.

Please let Jim or I know if you have any questions.

Alan L. Frazier  
Executive Technical Assistant  
Office of the Executive Director for Operations U.S. Nuclear Regulatory Commission  
301-415-1763

##### / 27

From: Frazier, Alan  
Sent: Thursday, March 17, 2011 5:58 PM  
To: OST02 HOC  
Cc: Andersen, James; Bowman, Gregory; Muessle, Mary  
Subject: ACTION ITEM: Commission Office Request for list Provided to USAID

Ops Center,

This is a Commission Office request. Please provide the requested list back to me ([alan.frazier@nrc.gov](mailto:alan.frazier@nrc.gov)) and I will make sure it gets to the Commission Offices. If a response will not be provide please let me know and I will inform the requesting office.

ACTION ITEM: Provide the "list of additional equipment that could be brought in to help with mitigation" as provided to USAID, to the OEDO for the Commission (more details in the email below).

REQUEST REPLY BY: No timeframe given. Please reply at your earliest convenience.

REQUESTED BY: A Commission Office.

Please let me know if you have any questions.

Alan L. Frazier  
Executive Technical Assistant  
Office of the Executive Director for Operations U.S. Nuclear Regulatory Commission  
301-415-1763

From: Castleman, Patrick  
Sent: Thursday, March 17, 2011 4:08 PM  
To: Frazier, Alan  
Cc: Wittick, Brian; Andersen, James; Brock, Kathryn; Merzke, Daniel; Bowman, Gregory  
Subject: Another Request

Alan, et al,

At the 1530 Monday conference call, it was reported that we had provided USAID with a list of additional equipment that could be brought in to help with mitigation. This list was largely developed from B5b. I have heard that the reactor safety team is maintaining this list. Could you please provide it to the Commission offices? Thanks! Pat

---

**From:** LIA08 Hoc  
**Sent:** Thursday, March 17, 2011 10:25 PM  
**To:** Blount, Tom; LIA06 Hoc  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Log entry has been made. The FEMA rep here at the IRC (Ken) has left for the evening but I believe he will be back tomorrow.

Rani

---

**From:** Blount, Tom  
**Sent:** Thursday, March 17, 2011 9:54 PM  
**To:** LIA08 Hoc; LIA06 Hoc  
**Subject:** Fw: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Add to log to ensure we remember to reach out to FEMA POC for offsite consequence Q n A's....

Tom

Sent from Tom Blount's NRC BB

---

**From:** Anderson, Joseph  
**To:** Quinn, Vanessa <Vanessa.Quinn@dhs.gov>; Purvis, James <james.purvis@dhs.gov>; Wierman, Kenneth <kenneth.wierman@dhs.gov>  
**Cc:** Sheffield, Bonnie <Bonnie.Sheffield@dhs.gov>; Wright, Lisa (Gibney); Mroz (Sahm), Sara; Blount, Tom; Thaggard, Mark; harry.sherwood@dhs.gov <harry.sherwood@dhs.gov>  
**Sent:** Thu Mar 17 12:43:05 2011  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Don't disagree. However, these responses are often being developed on short notice in support of Federal Agency and White House briefings, hence the need for 24/7 staffing. Your failsafe is FEMA Liaison in NRC Operations Center.

I will "cc" our Liaison Team on this e-mail, emphasize the need for FEMA to be provided the opportunity to review Q&As, talking points, etc. developed impacting generic EP issues and topics.

---

**From:** Quinn, Vanessa [Vanessa.Quinn@dhs.gov]  
**Sent:** Thursday, March 17, 2011 12:32 PM  
**To:** Purvis, James; Wierman, Kenneth  
**Cc:** Anderson, Joseph; Sheffield, Bonnie  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

If others have been working this issue, then this information should have been sent to us to review as well.

---

**From:** Purvis, James  
**Sent:** Thursday, March 17, 2011 12:23 PM  
**To:** 'kenneth.wierman@dhs.gov'  
**Cc:** 'Anderson, Joseph'; 'Sheffield, Bonnie'; Quinn, Vanessa  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS  
**Importance:** High

HHHHH/28

I am getting confused here . . . I don't at all mind responding to these questions (FEMA-REP-1 answers them quite easily itself), but if this has already been done – and/or a canned message already exists – I'd rather not duplicate the effort . . . to say nothing of putting out separate answers to multiple questioners that don't look the same.

- James

---

**From:** prvs=05089e57d=Joseph.Anderson@nrc.gov [mailto:prvs=05089e57d=Joseph.Anderson@nrc.gov] **On Behalf Of** Anderson, Joseph  
**Sent:** Thursday, March 17, 2011 12:16 PM  
**To:** james.purvis@dhs.gov  
**Cc:** kenneth.wierman@dhs.gov  
**Subject:** FW: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

James -- See e-mail below. Check with Ken Wierman, who has been liaison at our OPS Center. Apparently they have been working this issue.

---

**From:** Mroz (Sahm), Sara  
**Sent:** Wednesday, March 16, 2011 9:49 PM  
**To:** Thaggard, Mark; Kahler, Robert; Anderson, Joseph; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; McDermott, Brian; Williams, Kevin  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Also, yesterday, Ken Weirman (FEMA) and I both reviewed Q & As that OPA developed for use in responding to the public. I requested that they add a question about EPZs.  
-Sara

---

**From:** Thaggard, Mark  
**Sent:** Wednesday, March 16, 2011 8:42 PM  
**To:** Kahler, Robert; Anderson, Joseph; Mroz (Sahm), Sara; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; McDermott, Brian; Williams, Kevin  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

OPA has provided a response to R1.

---

**From:** Kahler, Robert  
**Sent:** Wednesday, March 16, 2011 5:34 PM  
**To:** Anderson, Joseph; Mroz (Sahm), Sara; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; Thaggard, Mark; McDermott, Brian; Williams, Kevin  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

I have received a call from Nancy McNamara that she has been receiving calls from States inquiring about adequacy of 10 mile EPZ.

Bob

---

**From:** Anderson, Joseph  
**Sent:** Wednesday, March 16, 2011 5:32 PM  
**To:** Mroz (Sahm), Sara; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; Thaggard, Mark; McDermott, Brian; Kahler, Robert; Williams, Kevin  
**Subject:** Fw: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Sara/Jim: I would assume that inquiries are being made, or will start, in regards to adequacy of 10 mile EPZ, especially in light of Chairman's recommendation today and 30 km (19 mile) protective action zone in place around Japanese sight. Has OPA or Liaison Team developed a canned response? Has this been coordinated with FEMA REP?

Any EP-related issues/concerns arise on your shifts today in OPS Center?

I will be in touch with Lisa when she gets back late Saturday to coordinate an Outreach staff conference call, at a minimum, to get a status on activities.

---

**From:** Operations Center Bulletin  
**To:** Operations Center Bulletin  
**Sent:** Wed Mar 16 12:51:17 2011  
**Subject:** UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

**THIS IS NOT A DRILL**

**The Office of Public Affairs is expecting a large volume of calls from media and the general public regarding the latest statements from the State Department and the NRC regarding the situation in Japan. ALL CALLS from media or the general public on this topic must be referred to Regional Public Affairs or the 301-415-8200 number for HQ employees.**

**THIS IS NOT A DRILL**

\*\*\*\*\*Event Information is Attached\*\*\*\*\*

The NRC is responding to an event.

Please contact the NRC Executive Support Team if necessary at 301-816-5100 or reply to this e-mail.

---

**From:** LIA08 Hoc  
**Sent:** Thursday, March 17, 2011 9:55 PM  
**To:** Blount, Tom; LIA06 Hoc  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Will do, Tom...  
Rani

---

**From:** Blount, Tom  
**Sent:** Thursday, March 17, 2011 9:54 PM  
**To:** LIA08 Hoc; LIA06 Hoc  
**Subject:** Fw: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Add to log to ensure we remember to reach out to FEMA POC for offsite consequence Q n A's....  
Tom  
Sent from Tom Blount's NRC BB

---

**From:** Anderson, Joseph  
**To:** Quinn, Vanessa <Vanessa.Quinn@dhs.gov>; Purvis, James <james.purvis@dhs.gov>; Wierman, Kenneth <kenneth.wierman@dhs.gov>  
**Cc:** Sheffield, Bonnie <Bonnie.Sheffield@dhs.gov>; Wright, Lisa (Gibney); Mroz (Sahm), Sara; Blount, Tom; Thaggard, Mark; harry.sherwood@dhs.gov <harry.sherwood@dhs.gov>  
**Sent:** Thu Mar 17 12:43:05 2011  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Don't disagree. However, these responses are often being developed on short notice in support of Federal Agency and White House briefings, hence the need for 24/7 staffing. Your failsafe is FEMA Liaison in NRC Operations Center.

I will "cc" our Liaison Team on this e-mail, emphasize the need for FEMA to be provided the opportunity to review Q&As, talking points, etc. developed impacting generic EP issues and topics.

---

**From:** Quinn, Vanessa [Vanessa.Quinn@dhs.gov]  
**Sent:** Thursday, March 17, 2011 12:32 PM  
**To:** Purvis, James; Wierman, Kenneth  
**Cc:** Anderson, Joseph; Sheffield, Bonnie  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

If others have been working this issue, then this information should have been sent to us to review as well.

---

**From:** Purvis, James  
**Sent:** Thursday, March 17, 2011 12:23 PM  
**To:** 'kenneth.wierman@dhs.gov'  
**Cc:** 'Anderson, Joseph'; 'Sheffield, Bonnie'; Quinn, Vanessa  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS  
**Importance:** High

I am getting confused here . . . I don't at all mind responding to these questions (FEMA-REP-1 answers them quite easily itself), but if this has already been done – and/or a canned message already exists – I'd rather not duplicate the effort . . . to say nothing of putting out separate answers to multiple questioners that don't look the same.

HHHH/29

- James

---

**From:** prvs=05089e57d=Joseph.Anderson@nrc.gov [mailto:prvs=05089e57d=Joseph.Anderson@nrc.gov] **On Behalf Of** Anderson, Joseph  
**Sent:** Thursday, March 17, 2011 12:16 PM  
**To:** james.purvis@dhs.gov  
**Cc:** kenneth.wierman@dhs.gov  
**Subject:** FW: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

James -- See e-mail below. Check with Ken Wierman, who has been liaison at oyr OPS Center. Apparently they have been working this issue.

---

**From:** Mroz (Sahm), Sara  
**Sent:** Wednesday, March 16, 2011 9:49 PM  
**To:** Thaggard, Mark; Kahler, Robert; Anderson, Joseph; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; McDermott, Brian; Williams, Kevin  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Also, yesterday, Ken Weirman (FEMA) and I both reviewed Q & As that OPA developed for use in responding to the public. I requested that they add a question about EPZs.  
-Sara

---

**From:** Thaggard, Mark  
**Sent:** Wednesday, March 16, 2011 8:42 PM  
**To:** Kahler, Robert; Anderson, Joseph; Mroz (Sahm), Sara; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; McDermott, Brian; Williams, Kevin  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

OPA has provided a response to R1.

---

**From:** Kahler, Robert  
**Sent:** Wednesday, March 16, 2011 5:34 PM  
**To:** Anderson, Joseph; Mroz (Sahm), Sara; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; Thaggard, Mark; McDermott, Brian; Williams, Kevin  
**Subject:** RE: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

I have received a call from Nancy McNamara that she has been receiving calls from States inquiring about adequacy of 10 mile EPZ.

Bob

---

**From:** Anderson, Joseph  
**Sent:** Wednesday, March 16, 2011 5:32 PM  
**To:** Mroz (Sahm), Sara; Anderson, James  
**Cc:** Wright, Lisa (Gibney); Kahler, Carolyn; Thaggard, Mark; McDermott, Brian; Kahler, Robert; Williams, Kevin  
**Subject:** Fw: UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

Sara/Jim: I would assume that inquiries are being made, or will start, in regards to adequacy of 10 mile EPZ, especially in light of Chairman's recommendation today and 30 km (19 mile) protective action zone in place around Japanese sight. Has OPA or Liaison Team developed a canned response? Has this been coordinated with FEMA REP?

Any EP-related issues/concerns arise on your shifts today in OPS Center?

I will be in touch with Lisa when she gets back late Saturday to coordinate an Outreach staff conference call, at a minimum, to get a status on activities.

---

**From:** Operations Center Bulletin  
**To:** Operations Center Bulletin  
**Sent:** Wed Mar 16 12:51:17 2011  
**Subject:** UPDATE: NRC IS RESPONDING TO JAPANESE EVENTS

**THIS IS NOT A DRILL**

**The Office of Public Affairs is expecting a large volume of calls from media and the general public regarding the latest statements from the State Department and the NRC regarding the situation in Japan. ALL CALLS from media or the general public on this topic must be referred to Regional Public Affairs or the 301-415-8200 number for HQ employees.**

**THIS IS NOT A DRILL**

\*\*\*\*\*Event Information is Attached\*\*\*\*\*

The NRC is responding to an event.

Please contact the NRC Executive Support Team if necessary at 301-816-5100 or reply to this e-mail.

---

**From:** ET02 Hoc  
**Sent:** Thursday, March 17, 2011 12:10 AM  
**To:** RST15 Hoc; Hoc, RST16  
**Subject:** FW: Japan Tsunami Earthquake Video Images News Updates

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

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

**From:** ET02 Hoc  
**Sent:** Thursday, March 17, 2011 12:04 AM  
**To:** RST01 Hoc; RST01A Hoc; RST01B Hoc; RST03 Hoc; RST02 Hoc; RST04 Hoc  
**Subject:** Japan Tsunami Earthquake Video Images News Updates

For NHK live stream

[http://www.myfoxphilly.com/subindex/video/tsunami\\_video](http://www.myfoxphilly.com/subindex/video/tsunami_video)

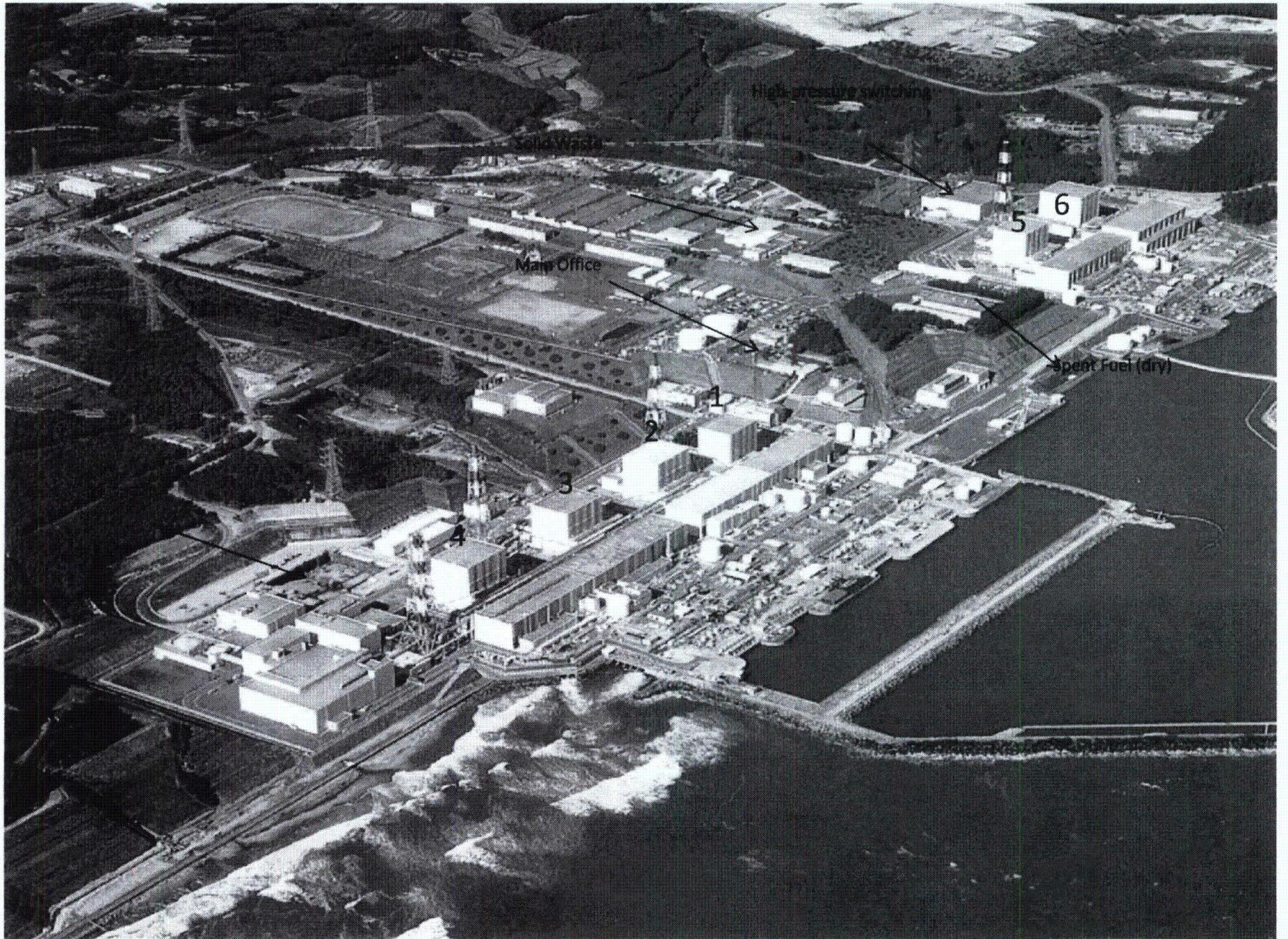
#####/30

---

**From:** PETER.ALTER@NRC.GOV  
**Sent:** Thursday, March 17, 2011 2:24 PM  
**To:** RST15 Hoc; Alter, Peter  
**Subject:** Daiichi View  
**Attachments:** Document.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

HHHH/31



**Maier, Bill**

---

**From:** LIA04 Hoc  
**Sent:** Thursday, March 17, 2011 5:47 PM  
**To:** Piccone, Josephine; Jackson, Deborah; OST05 Hoc; LIA06 Hoc; LIA05 Hoc; LIA01 Hoc; LIA11 Hoc; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Herral; Maier, Bill; McNamara, Nancy; Tiff, Doug; Trojanowski, Robert; Woodruff, Gena; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtill, Richard; Virgilio, Rosetta; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark  
**Subject:** Tonight's call with DOE

We have learned that tonight's 19:00 call with DOE with the States is in fact:

A meeting organized by the White House (NSS - National Security Staff) for Western Governors and Territories.

The following agenda was communicated by a DOE individual (A.J. Gibson):

1<sup>st</sup>. Coordinated Strategic Call – 19:00 EDT (Governors are being contacted by the White House)

- 1) Introductions
- 2) Briefing Update – Intergovernmental Agencies
- 3) Reactor Situation in Japan – DOE
- 4) Humanitarian/Effects on U.S. Citizens – State Department
- 5) Discussion of Monitoring – U.S. EPA
- 6) Potential Health Effects - HHS
- 7) Open Discussion – Intergovernmental Agencies
- 8) Summary - All

NRC will be a party to this call, but we are not expected to speak.

Richard Turtill  
State Liaison – Liaison Team  
Incident Response Center

HHHHH/32

**CANADIAN NUCLEAR SAFETY COMMISSION (CNSC):** March 17, 2011 19:08 EDT:  
"Given the evolving situation, Canadians located within 80 km of the Fukushima Nuclear Power Plant should consider, as a further precautionary measure, evacuating this area. The directions of the Japanese government and local emergency response personnel should also be followed by all Canadians in Japan."

**CANADA FOREIGN AFFAIRS AND INTERNATIONAL TRADE:** 23 March, 2011

"Following damage to the Fukushima nuclear power station in Okumacho, Canadians are strongly advised to follow the advice issued by the Japanese authorities. An evacuation order is in effect for the zone within 20 km of the Fukushima Nuclear Power Plant. Japanese authorities recommend that people between 20 km and 30 km from the plant remain indoors with windows and doors closed and refrain from using ventilation systems. Given the evolving situation, Canadians located within 80 km of the plant are advised that they should, as a further precautionary measure, evacuate this area. The directions of the Japanese government and local emergency response personnel should also be followed by all Canadians in Japan. "

**Kyodo News: March 18, Kyodo**

<http://english.kyodonews.jp/news/2011/03/79157.html>

"S. Korea to mobilize military planes to evacuate nationals from Japan"

On Thursday, South Korea upgraded a safety advisory telling its citizens in Japan to stay at least 80 kilometers away from the crippled nuclear reactors in Fukushima Prefecture, more than doubling the previous evacuation distance of 30 km amid rising fears of exposure to radiation.

**Australian Business Traveller:** 18 March 2011

<http://www.ausbt.com.au/australian-government-to-japan-travellers-leave-now-tokyo-unsafe>

ARPANSA [the Australian Radiation Protection and Nuclear Safety Agency] recommended that Australians within 80 kilometres of the Fukushima Nuclear Power Plant move out of the area as a precautionary measure.

**Travel Weekly: Mar 17, 2011 07:43**

"Nuclear fears in Japan prompt FCO warning"

<http://www.travelweekly.co.uk/Articles/2011/03/17/36516/nuclear-fears-in-japan-prompt-fco-warning.html>

The Government is chartering aircraft to evacuate Britons from Japan to Hong Kong as concerns heighten over fallout from the stricken Fukushima nuclear plant.

The Foreign and Commonwealth Office updated its travel advice today, saying: "Due to the evolving situation at the Fukushima nuclear facility and potential disruptions to the supply of goods, transport, communications, power and other infrastructure, British nationals currently in Tokyo and to the north of Tokyo should consider leaving the area.

"The UK government is chartering flights from Tokyo to Hong Kong to supplement commercially available options for those wishing to leave Japan."

Britons were urged to remain outside an 80km radius of the nuclear plant "as an additional precautionary measure," saying the call was in line with the US government's advice to its citizens in Japan.

"If you are currently between 30km and 80km from the facility, we advise you to leave the area or take shelter indoors if you are unable to travel," the FCO said. Britons seeking to leave Japan were advised to use commercial flights as their first option or register interest in the charter option to Hong Kong.

#### **BBC report: 18 march 2011**

<http://www.bbc.co.uk/news/world-asia-pacific-12775329>

#### **"Foreign evacuations"**

- US - providing flights for people who wish to leave, advising 50-mile exclusion zone around Fukushima
- France - urging people to leave northern Japan and Tokyo, sending government planes to fly French out
- UK - advising nationals to leave north-east and Tokyo, chartering flights out
- China - bringing thousands to Niigata for evacuation
- Australia - people with non-essential roles to leave Japan

China says it has evacuated more than 6,000 of its nationals from quake-hit areas, mostly to Niigata on Japan's west coast, and is laying on six to eight additional flights to bring them home.

South Korea has said it will mobilise military ships and aircraft to evacuate its citizens if the situation worsens. At the moment it has told its nationals to stay 50 miles away from the plant.

Most other countries have also advised their nationals to evacuate from the north-eastern region of Japan or to leave the country altogether if they can.

**Financial Times report Published: March 17 2011 17:14**

“Foreign governments step up evacuations”

<http://www.ft.com/cms/s/0/592cdc28-50b1-11e0-9227-00144feab49a.html#axzz1HRMbjqdg>

In the clearest sign yet that foreign governments are losing confidence in the Japanese government's ability to contain radioactivity from the crippled reactors, embassies including Australia, China, South Korea and Thailand upgraded their warnings to nationals in Japan.

The US and UK governments on Thursday said they were arranging charter flights for their nationals to leave Japan. The UK and Australia also expanded the evacuation zone to 80km in line with advice from the US to its nationals.

**World News Company report: March 17 2011**

<http://www.worldnewsco.com/4528/residents-radius-80-km-fukushima-nuclear-power-plant/>

The government of United States called on their citizens within a radius of 80 kilometers from the Fukushima nuclear power plant to leave the area. U.S. warning shows the evacuation radius which is wider than the evacuation order issued by Japanese government.

The Japanese government had previously urged people living within a radius of 20 kilometers from the Fukushima nuclear power plant to flee to other places.

The Japanese government also urged people residing within a radius of 32 kilometers from the Fukushima nuclear power plant to not leave the house if they can not leave the area.

While the British Foreign Office said, English people should now consider to go from Tokyo and the northeast region of Japan.

“Concerning the situation in the Fukushima nuclear facilities, the last suggestion of The UK Government Chief Scientific Adviser (GCSA) is for those who are outside the exclusion zone established by the Japanese authorities, no real problems to worry about the health of human society. This advice is kept under review constantly,” the statement of British Foreign Office.

“However, due to the situation that developed at the Fukushima nuclear facilities and potential disruptions to supply of goods, transportation, communications, electricity and other infrastructure, British citizens who currently resides in Tokyo and the north of Tokyo to consider leaving the area,” thus, the official statement of British Foreign Office as reported by the Daily Telegraph on Thursday (March 17, 2011).

The Swiss government also urged its citizens to leave Tokyo and northeastern Japan. Previously, the Australian government had also urged its citizens residing in Tokyo, near Fukushima nuclear power plant and other areas affected by earthquake and tsunami to go to

evacuate. The call of evacuation of residents also issued by the governments of South Korea and France.

## Maier, Bill

---

**From:** Maier, Bill  
**Sent:** Thursday, March 17, 2011 4:59 PM  
**To:** kvanburen@co.slo.ca.us  
**Subject:** FW: Helped needed regarding NRC statement

Kelly,

Your question has been echoed from various offsite agencies across the nation. We are trying to get an answer that you will find acceptable and useable. I got one from our public affairs folks that you would not appreciate. Still working.

Bill

---

**From:** kvanburen@co.slo.ca.us [mailto:kvanburen@co.slo.ca.us]  
**Sent:** Thursday, March 17, 2011 10:32 AM  
**To:** Maier, Bill  
**Subject:** Helped needed regarding NRC statement

Hi Bill,

I am sure you are absolutely swamped at the moment, but we are really going to need some help with this latest information recommended by the NRC. We are receiving many calls regarding why we plan just for the Emergency Planning Zone, if the NRC is saying 50 miles in Japan.

Any guidance or talking points you have would be most helpful!

**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.

Thanks Bill!

Kelly Van Buren  
Emergency Services Coordinator  
Office of Emergency Services  
County Government Center, Rm D430  
San Luis Obispo, CA 93408  
Ph (805) 781-1955 - Fax (805) 781-5005  
[www.slocounty.ca.gov/OES](http://www.slocounty.ca.gov/OES)

HHHH/33

**McKelvey, Harold**

---

**From:** Collins, Elmo  
**Sent:** Thursday, March 17, 2011 6:52 AM  
**To:** Virgilio, Martin  
**Subject:** RE: Update on Regional Assistance to the Ops Center

Do good!  
Elmo

---

**From:** Virgilio, Martin  
**Sent:** Wednesday, March 16, 2011 10:19 PM  
**To:** Collins, Elmo  
**Subject:** RE: Update on Regional Assistance to the Ops Center

Elmo

Thanks. Sorry that I have been somewhat unavailable. I am on the 7-7 night shift supporting the ET and the site team

---

**From:** Collins, Elmo  
**Sent:** Wednesday, March 16, 2011 2:28 PM  
**To:** Virgilio, Martin; Wiggins, Jim; Evans, Michele  
**Cc:** Leeds, Eric  
**Subject:** Fyi: Update on Regional Assistance to the Ops Center

Marty

We're glad that we're able to take on some of the Ops Center work

Elmo

---

**From:** Howell, Linda  
**Sent:** Wednesday, March 16, 2011 1:26 PM  
**To:** Collins, Elmo; Howell, Art; Kennedy, Kriss; Pruett, Troy; Caniano, Roy; Vogel, Anton  
**Subject:** Update on Regional Assistance to the Ops Center

I've had some discussions with Bill Gott about how we can balance work between the HOOs and ROOs. We've agreed that effective 3/17, the ROOs will be adjusting work schedules so that we can assist the HOOs in performing some routine tasks. We will be conducting the morning plant status calls and putting together the report. The ROOs will also begin preparing and delivering the EDO briefing. During routine daytime periods, the ROOs will be fielding some non-event calls that come through the Ops Center to relieve the HOOs. Bill and I will re-visit weekend needs for the plant status reports later this week. Our handling them would largely depend on how the situation in Japan unfolds.

Although this will require some shift in work schedules, our ROOs are quite willing to assist in this effort. (If you have a chance, some recognition or thanks would be welcomed.)

HHHH/34

---

**From:** OST01 HOC  
**Sent:** Thursday, March 17, 2011 6:46 AM  
**To:** PMT02 Hoc; PMT11 Hoc  
**Subject:** FW: 19時SPEEDI単位量放出図形イメージの送付  
**Attachments:** FUKUSHIMA1 air doseüi19-20hüj.gif; FUKUSHIMA1 air doseüi20-21hüj.gif;  
FUKUSHIMA1 air doseüi21-22hüj.gif; FUKUSHIMA1 wind(19hüj.gif; FUKUSHIMA1 air  
concentrationüi20-21hüj.gif; FUKUSHIMA1 air concentrationüi21-22hüj.gif;  
FUKUSHIMA1 air concentrationüi19-20hüj.gif

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

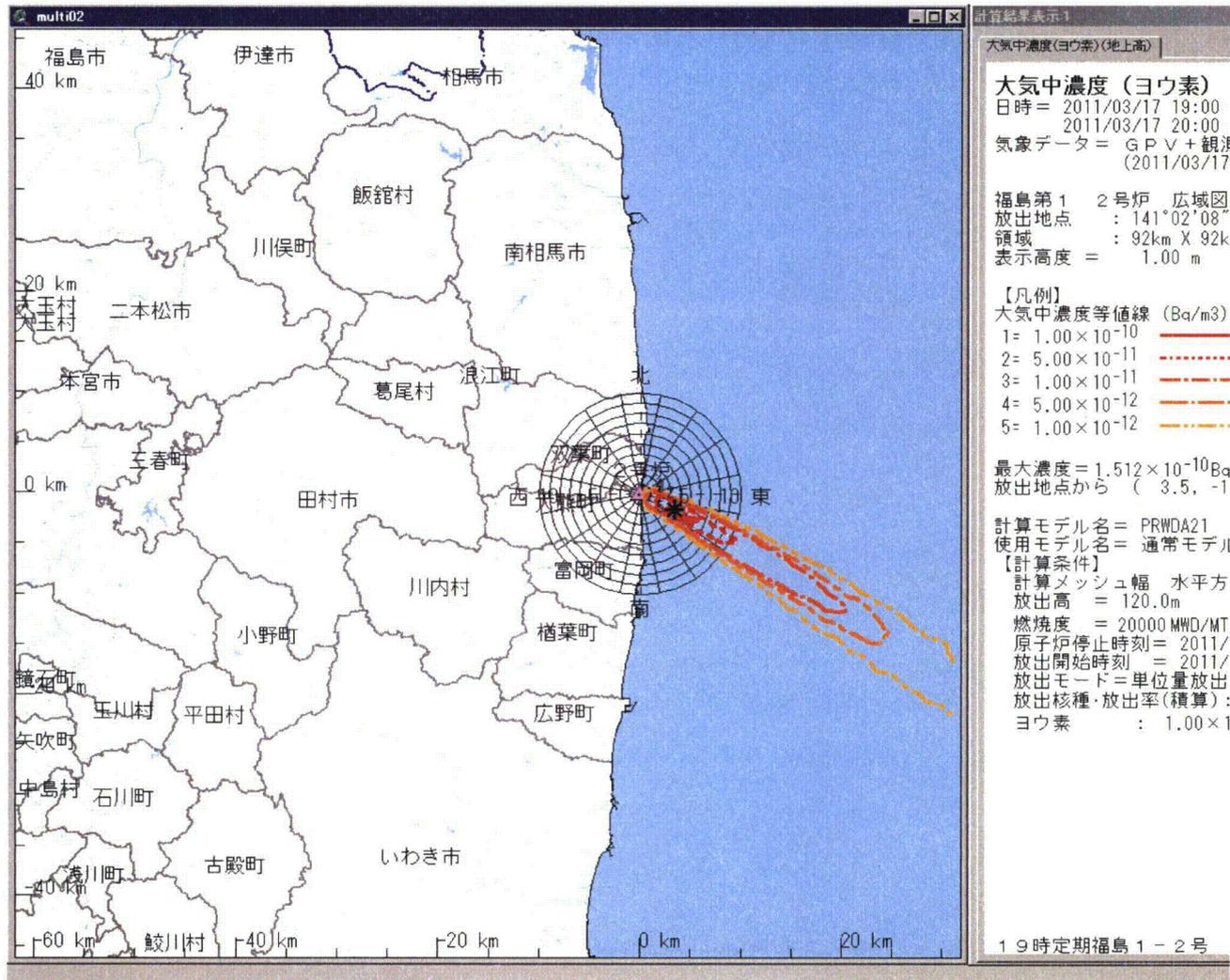
From: HOO Hoc  
Sent: Thursday, March 17, 2011 6:37 AM  
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC  
Subject: FW: 19時SPEEDI単位量放出図形イメージの送付

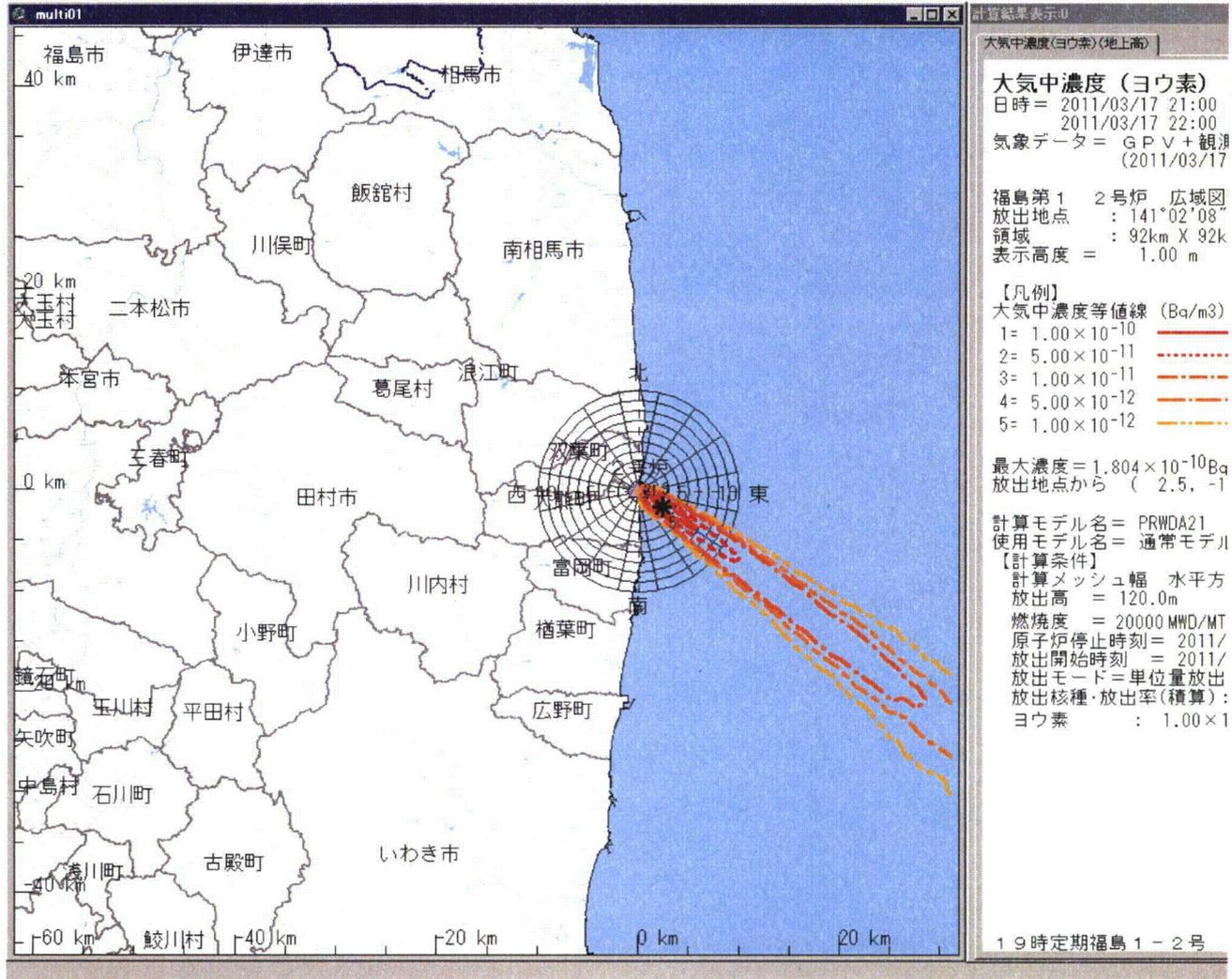
Headquarters Operations Officer  
U.S. Nuclear Regulatory Commission  
Phone: 301-816-5100  
Fax: 301-816-5151  
email: [hoo.hoc@nrc.gov](mailto:hoo.hoc@nrc.gov)  
secure e-mail: [hoo1@nrc.sgov.gov](mailto:hoo1@nrc.sgov.gov)

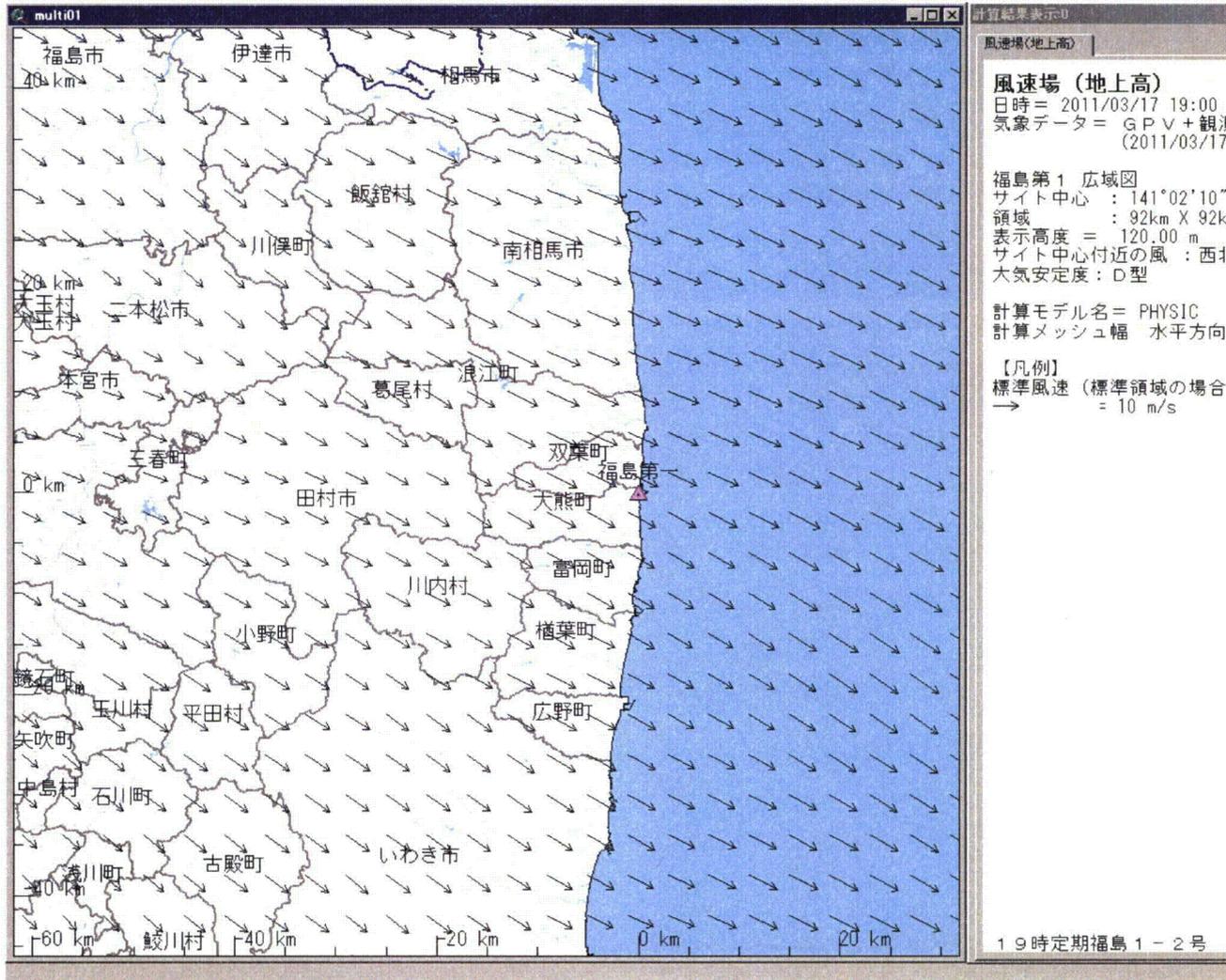
-----Original Message-----

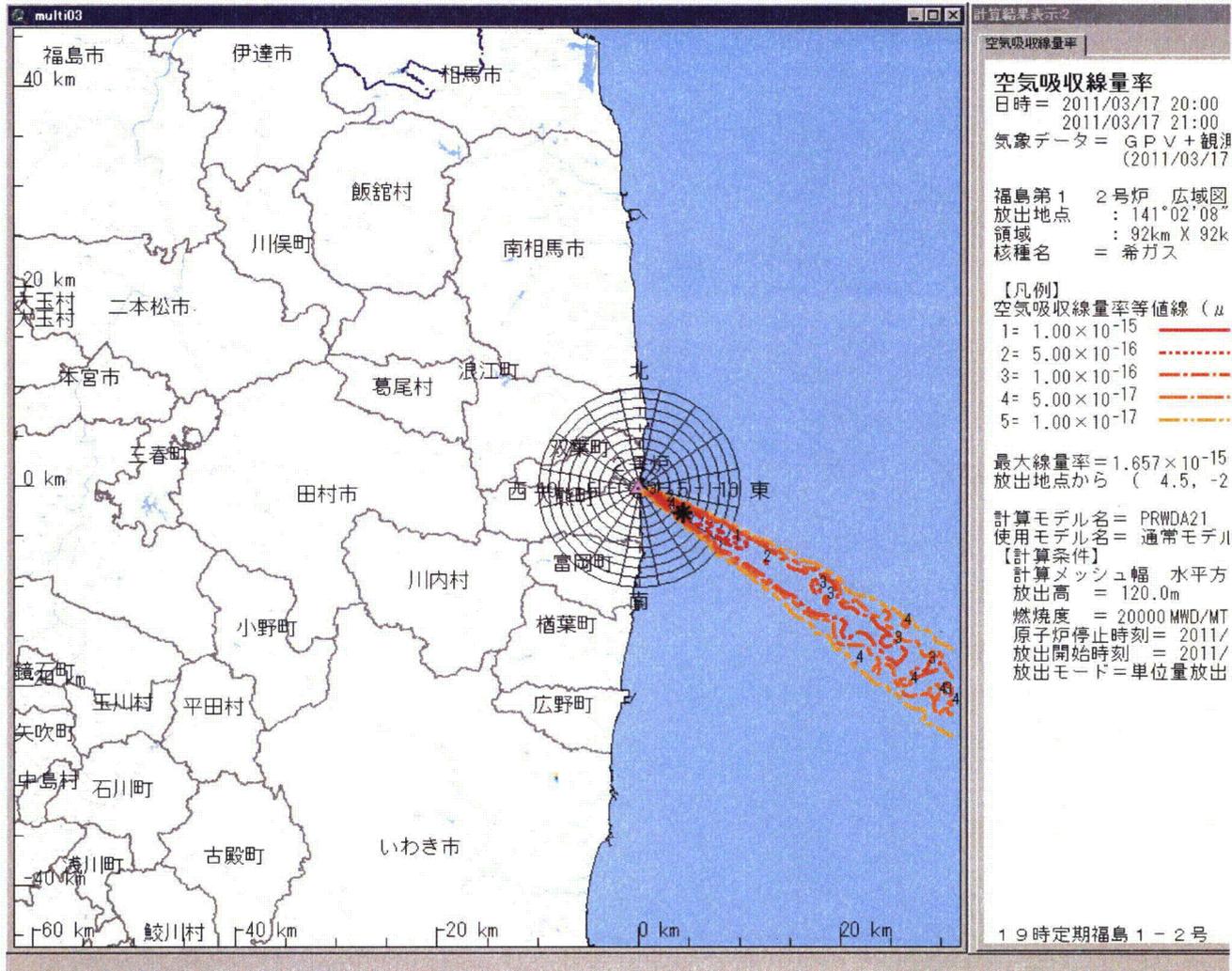
From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]  
Sent: Thursday, March 17, 2011 6:34 AM  
To: Alex Robinson; Ulses, Anthony; CAT 5; Cherry, Ronald C; cmht@nnsa.doe.gov; Craig Haas; Curry Wright; DART  
Liaison; HOO Hoc; Trapp, James; John Okon; Mears, Jeremy M; Morales, Russell A; Paul Guss; Hoc, PMT12; PMT01 Hoc;  
Theodore Shaw; Uchida, Koichi  
Subject: FW: 19時SPEEDI単位量放出図形イメージの送付

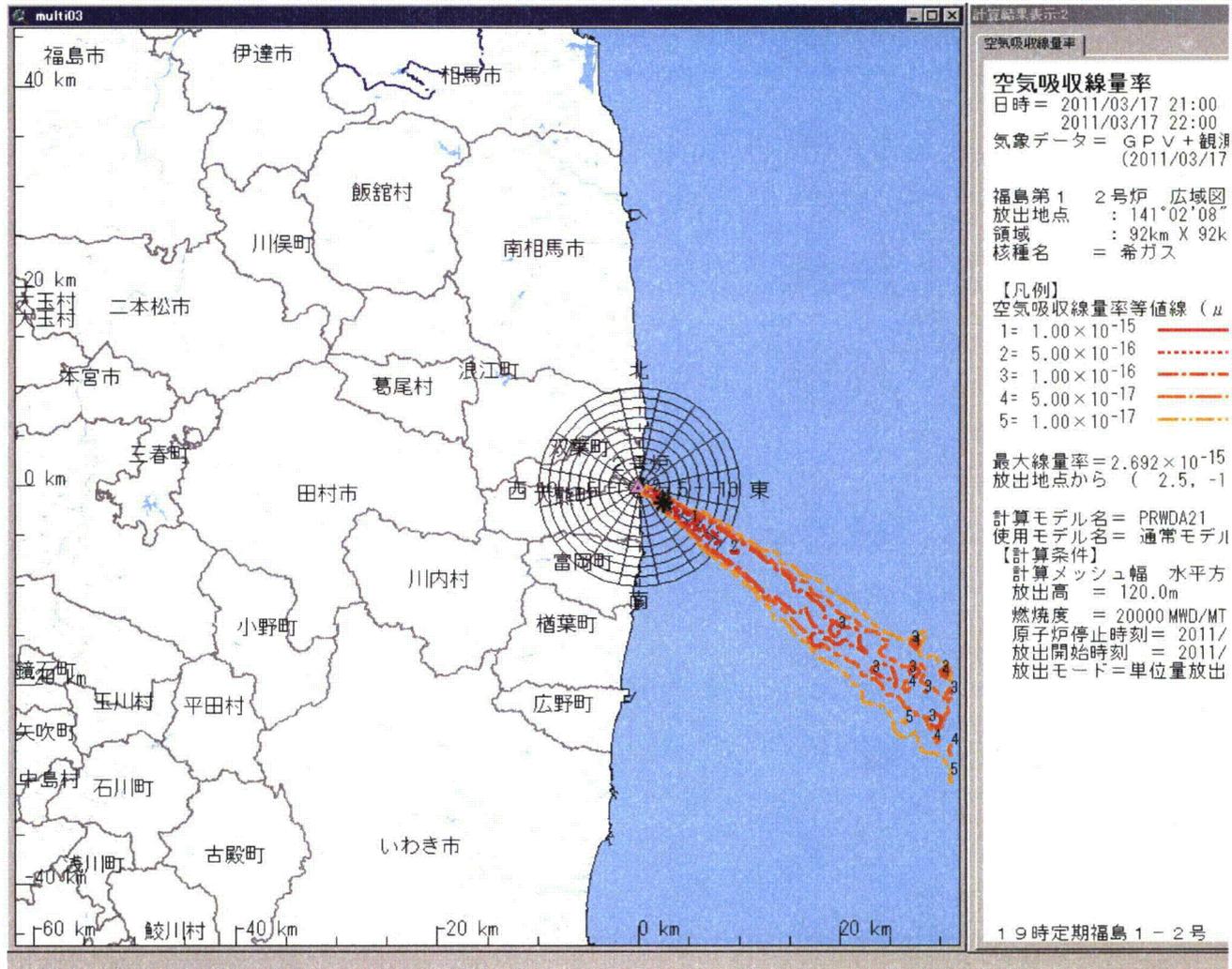
HHHH/35

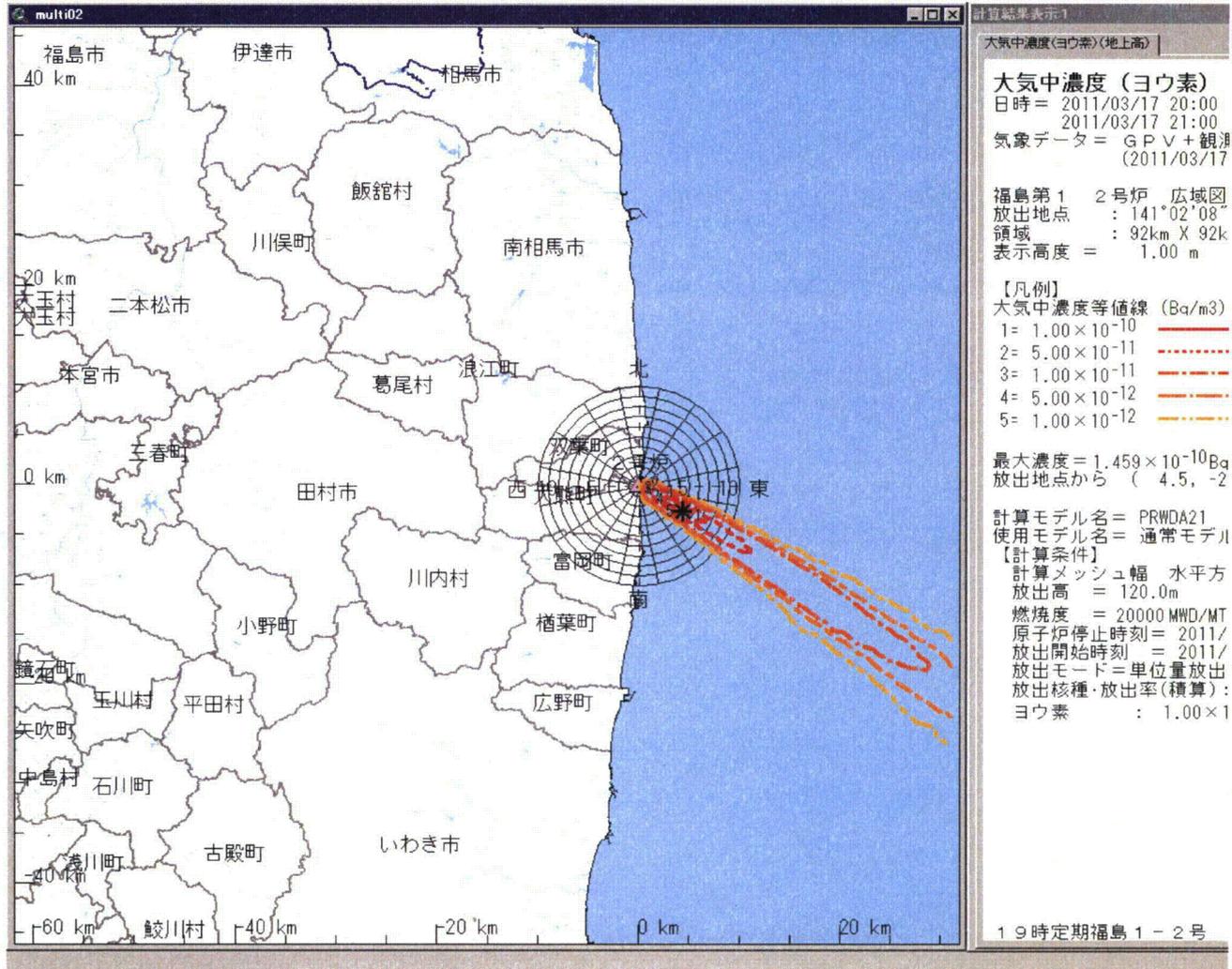


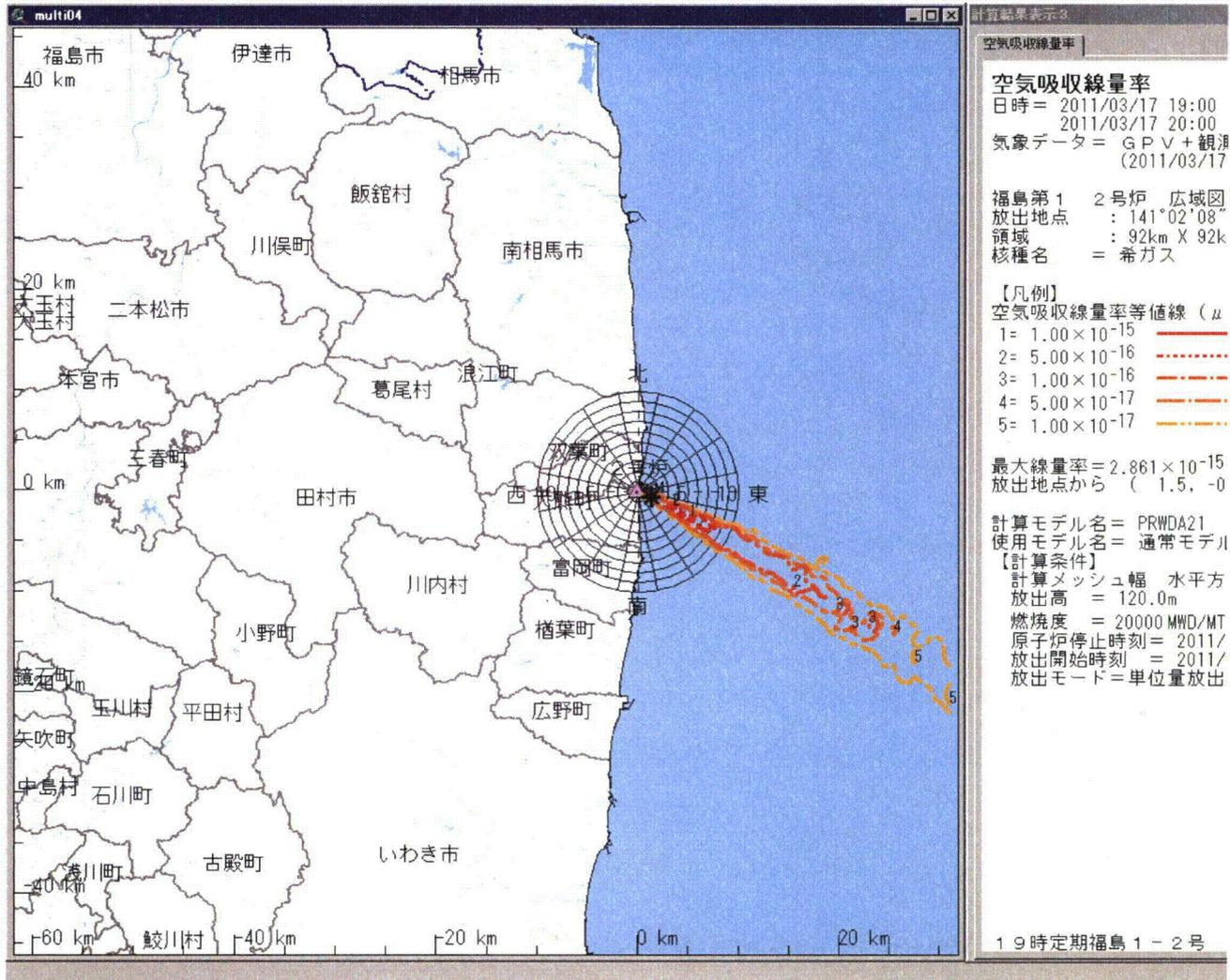












---

**From:** OST01 HOC  
**Sent:** Thursday, March 17, 2011 4:38 AM  
**To:** PMT11 Hoc; PMT02 Hoc  
**Subject:** FW: 1730 Speedi Data  
**Attachments:** FUKUSHIMA1 air doseüi19-20hüj.gif; FUKUSHIMA1 air doseüi17-18hüj.gif; FUKUSHIMA1 air doseüi18-19hüj.gif; FUKUSHIMA1 wind(17hüj.gif; FUKUSHIMA1 air concentrationüi17-18hüj.gif; FUKUSHIMA1 air concentrationüi18-19hüj.gif; FUKUSHIMA1 air concentrationüi19-20hüj.gif

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

From: HOO Hoc  
Sent: Thursday, March 17, 2011 4:36 AM  
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC  
Subject: FW: 1730 Speedi Data

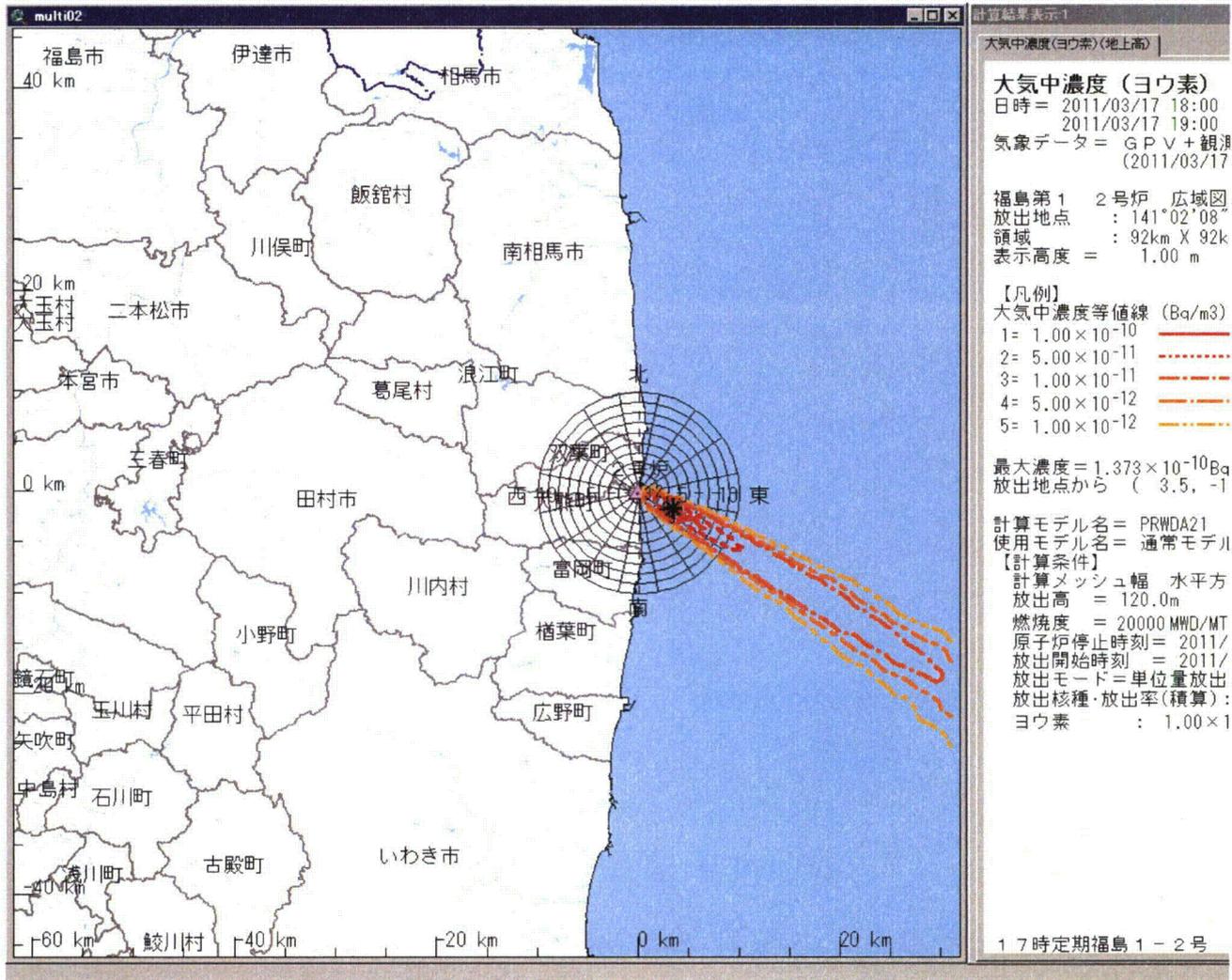
Headquarters Operations Officer  
U.S. Nuclear Regulatory Commission  
Phone: 301-816-5100  
Fax: 301-816-5151  
email: [hoo.hoc@nrc.gov](mailto:hoo.hoc@nrc.gov)  
secure e-mail: [hoo1@nrc.sgov.gov](mailto:hoo1@nrc.sgov.gov)

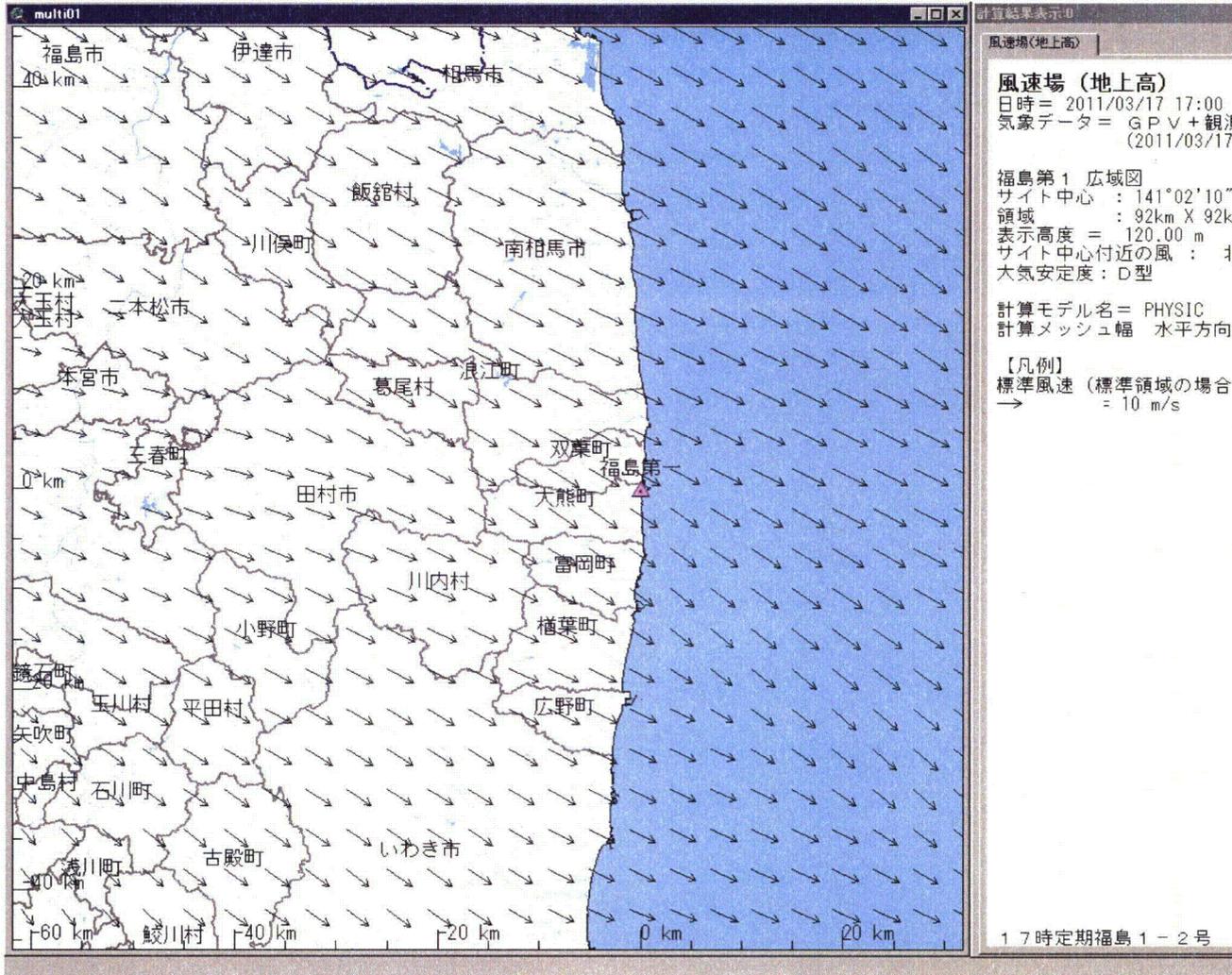
-----Original Message-----

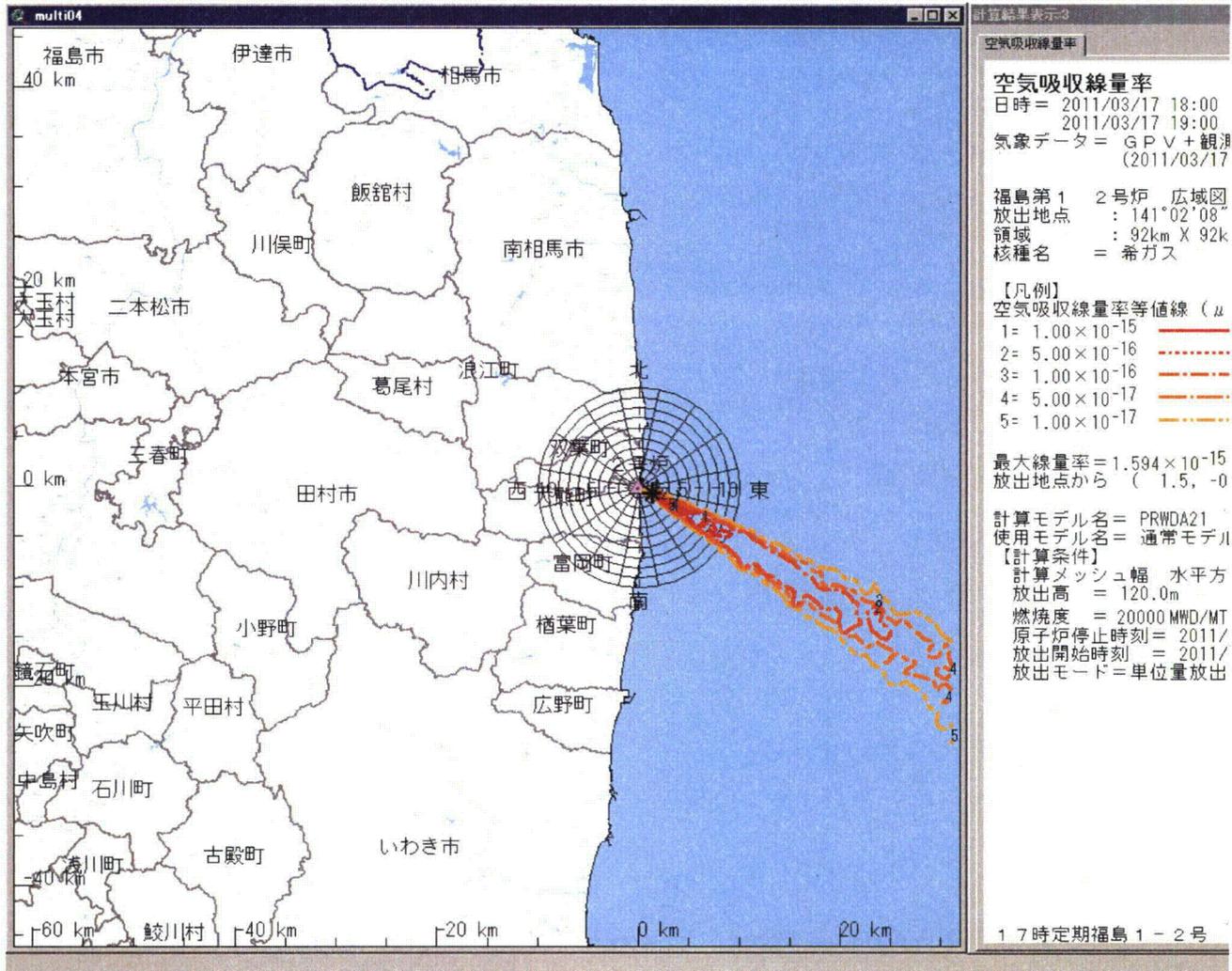
From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]  
Sent: Thursday, March 17, 2011 4:35 AM  
To: Alex Robinson; Ulses, Anthony; CAT 5; Cherry, Ronald C; cmht@nnsa.doe.gov; Craig Haas; Curry Wright; DART Liaison; HOO Hoc; Trapp, James; John Okon; Mears, Jeremy M; Morales, Russell A; Hoc, PMT12; PMT01 Hoc; Theodore Shaw; Uchida, Koichi  
Subject: 1730 Speedi Data

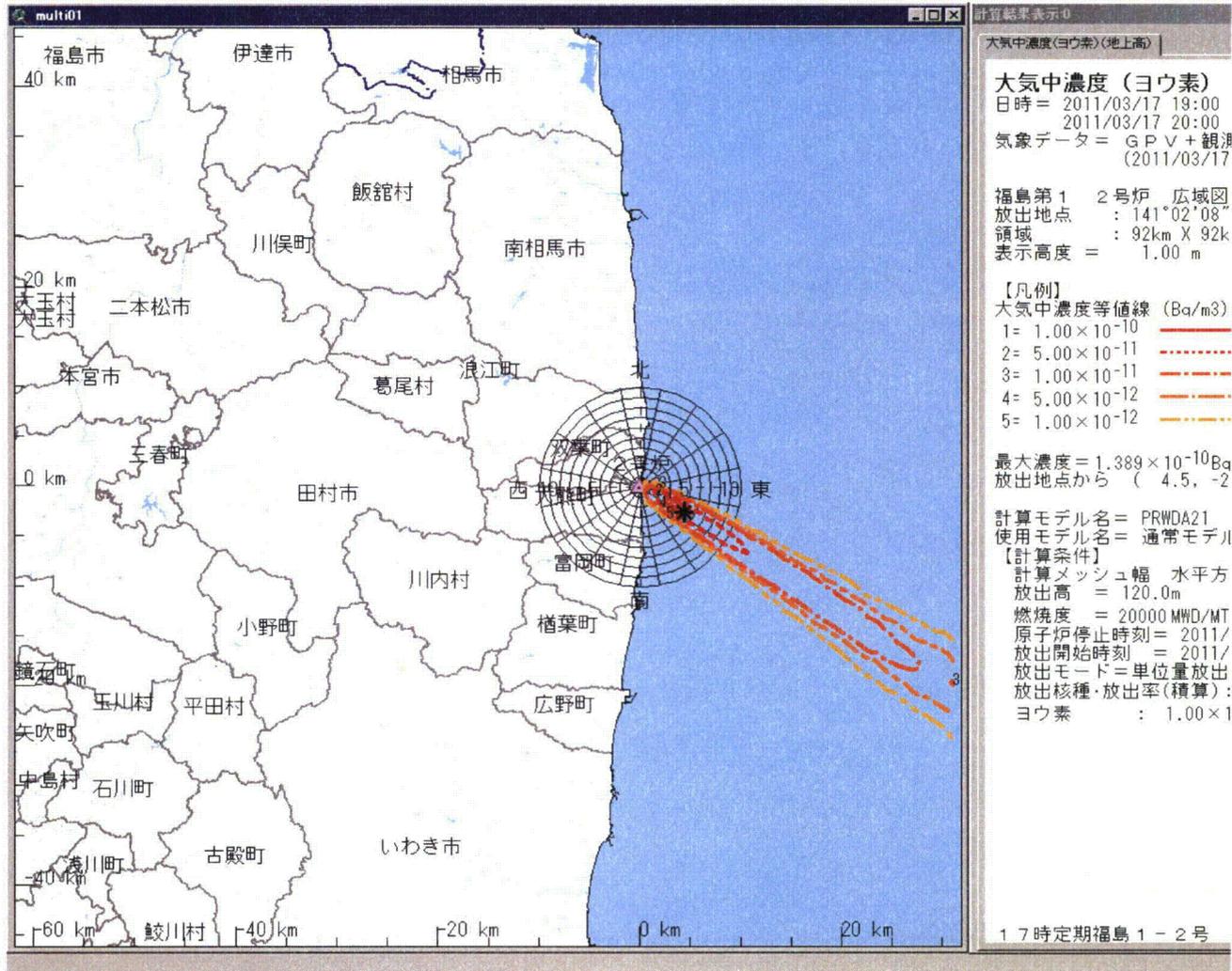
HHHHH/30

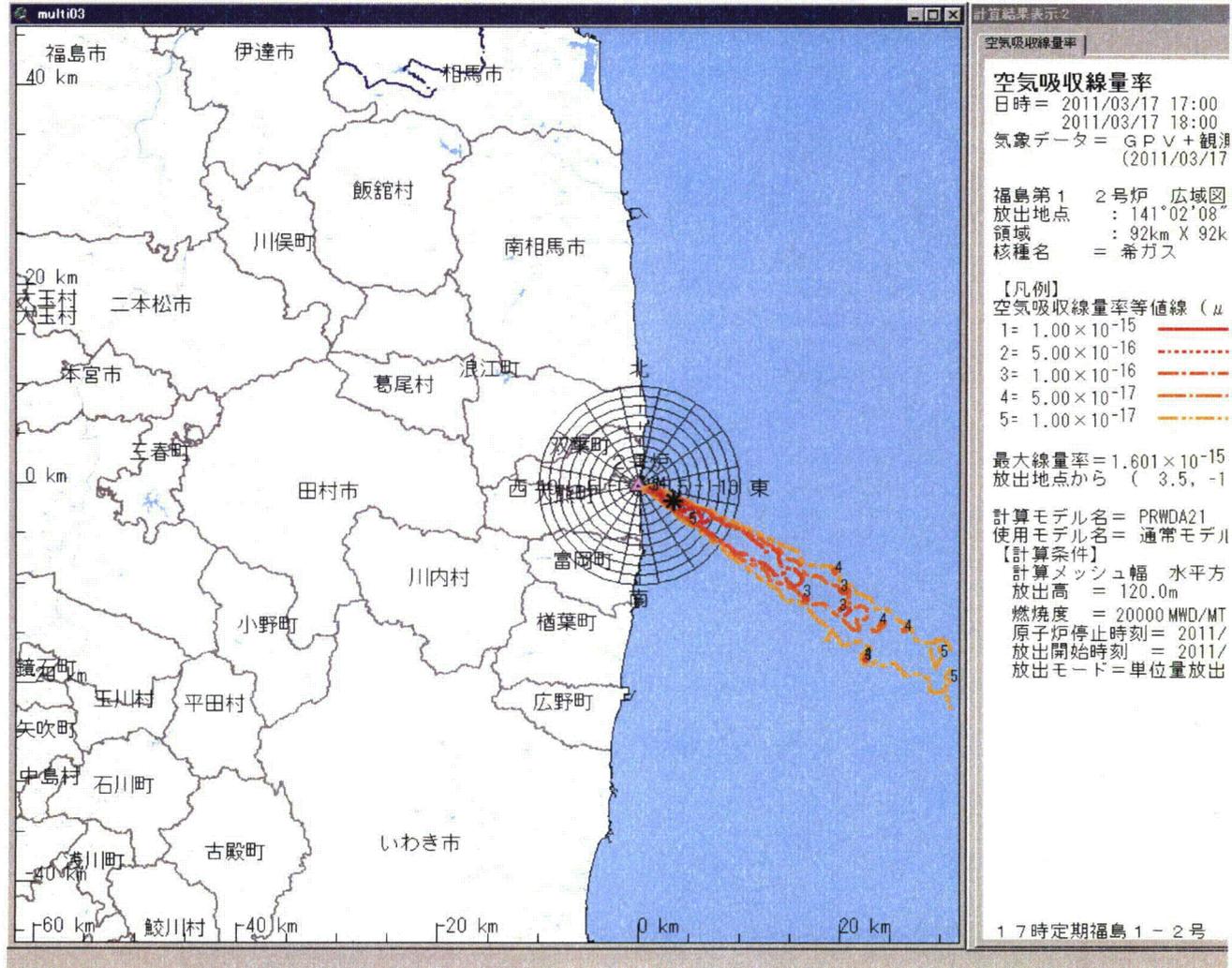


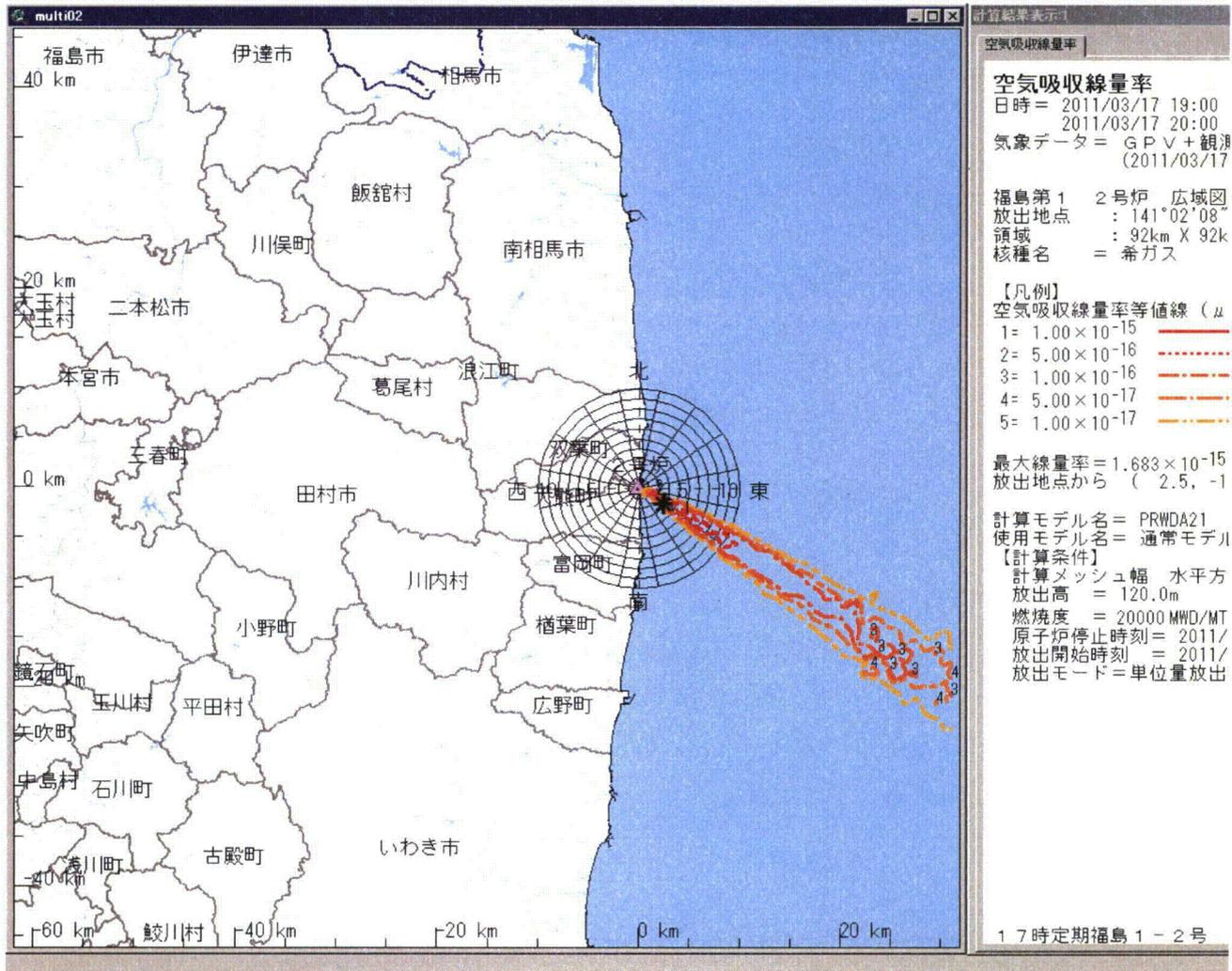












---

**From:** OST01 HOC  
**Sent:** Thursday, March 17, 2011 3:41 AM  
**To:** PMT02 Hoc; PMT11 Hoc  
**Subject:** FW: 1627 Speedi Data  
**Attachments:** FUKUSHIMA1 air doseüi16-17hüj.gif; FUKUSHIMA1 air doseüi17-18hüj.gif;  
FUKUSHIMA1 air doseüi18-19hüj.gif; FUKUSHIMA1 air concentrationüi16-17hüj.gif;  
FUKUSHIMA1 air concentrationüi18-19hüj.gif; FUKUSHIMA1 air  
concentrationüi17-18hüj.gif; FUKUSHIMA1 wind(16hüj.gif

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

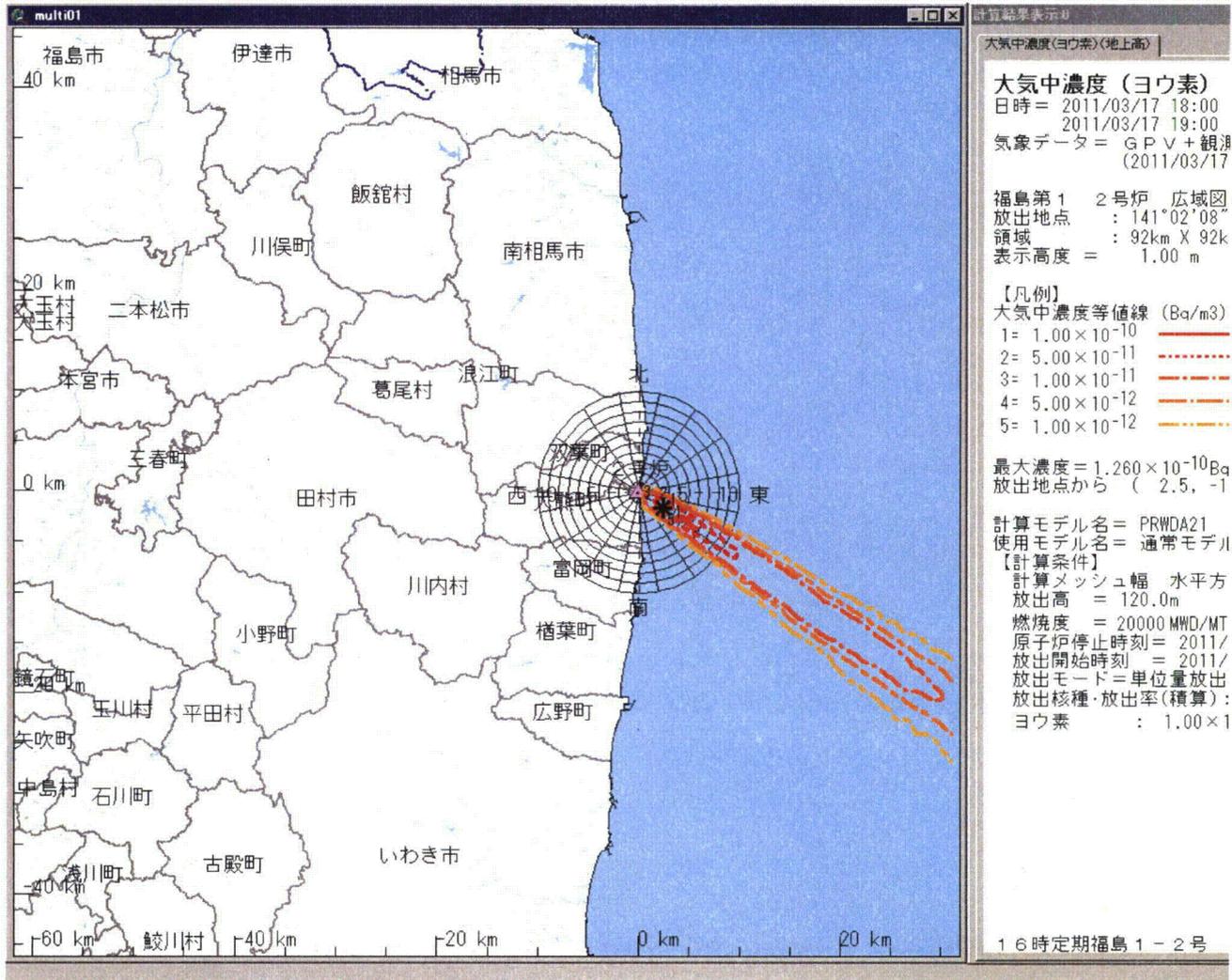
From: HOO Hoc  
Sent: Thursday, March 17, 2011 3:38 AM  
To: LIA07 Hoc; OST01 HOC; OST02 HOC; OST03 HOC  
Subject: FW: 1627 Speedi Data

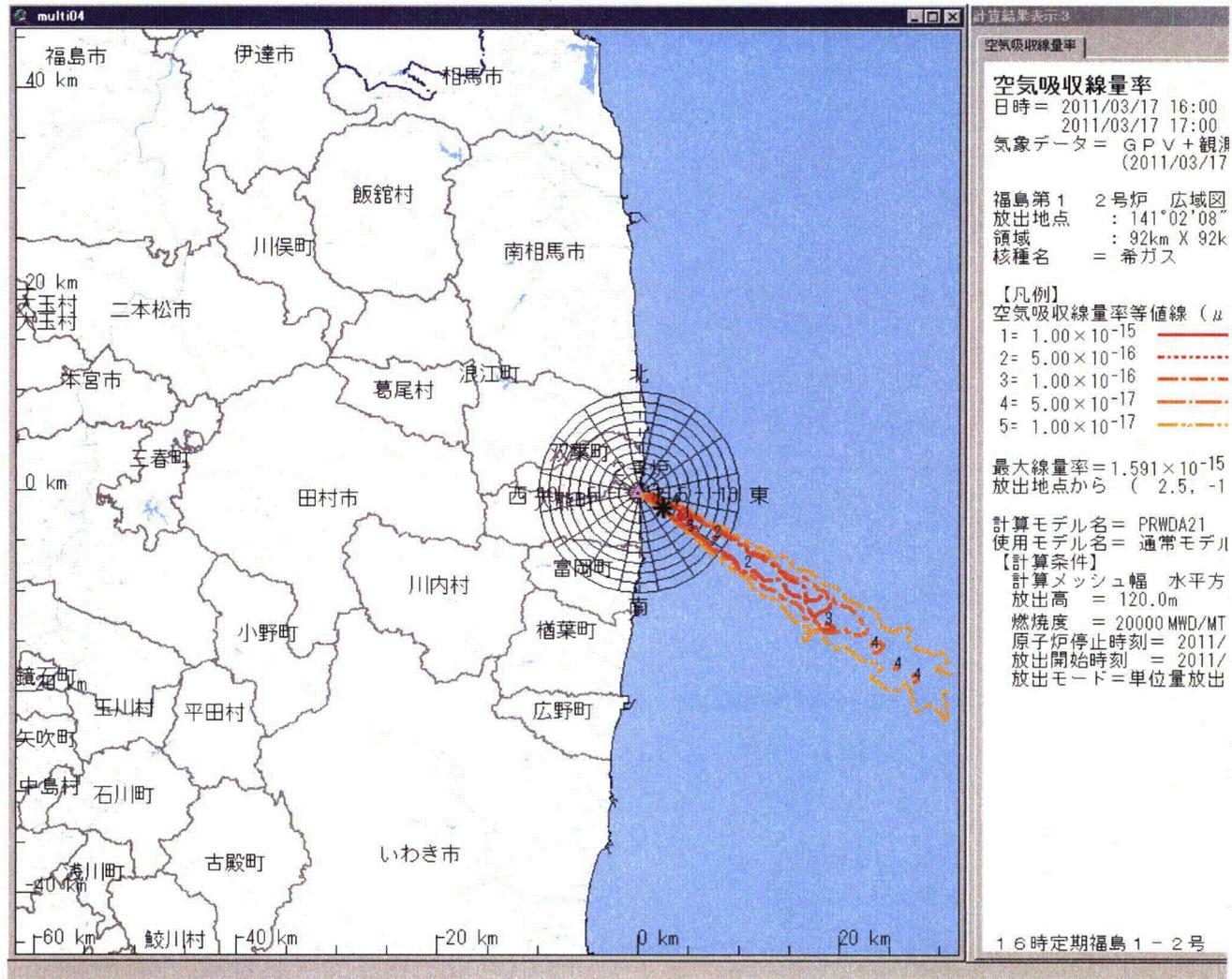
Headquarters Operations Officer  
U.S. Nuclear Regulatory Commission  
Phone: 301-816-5100  
Fax: 301-816-5151  
email: [hoo.hoc@nrc.gov](mailto:hoo.hoc@nrc.gov)  
secure e-mail: [hoo1@nrc.sgov.gov](mailto:hoo1@nrc.sgov.gov)

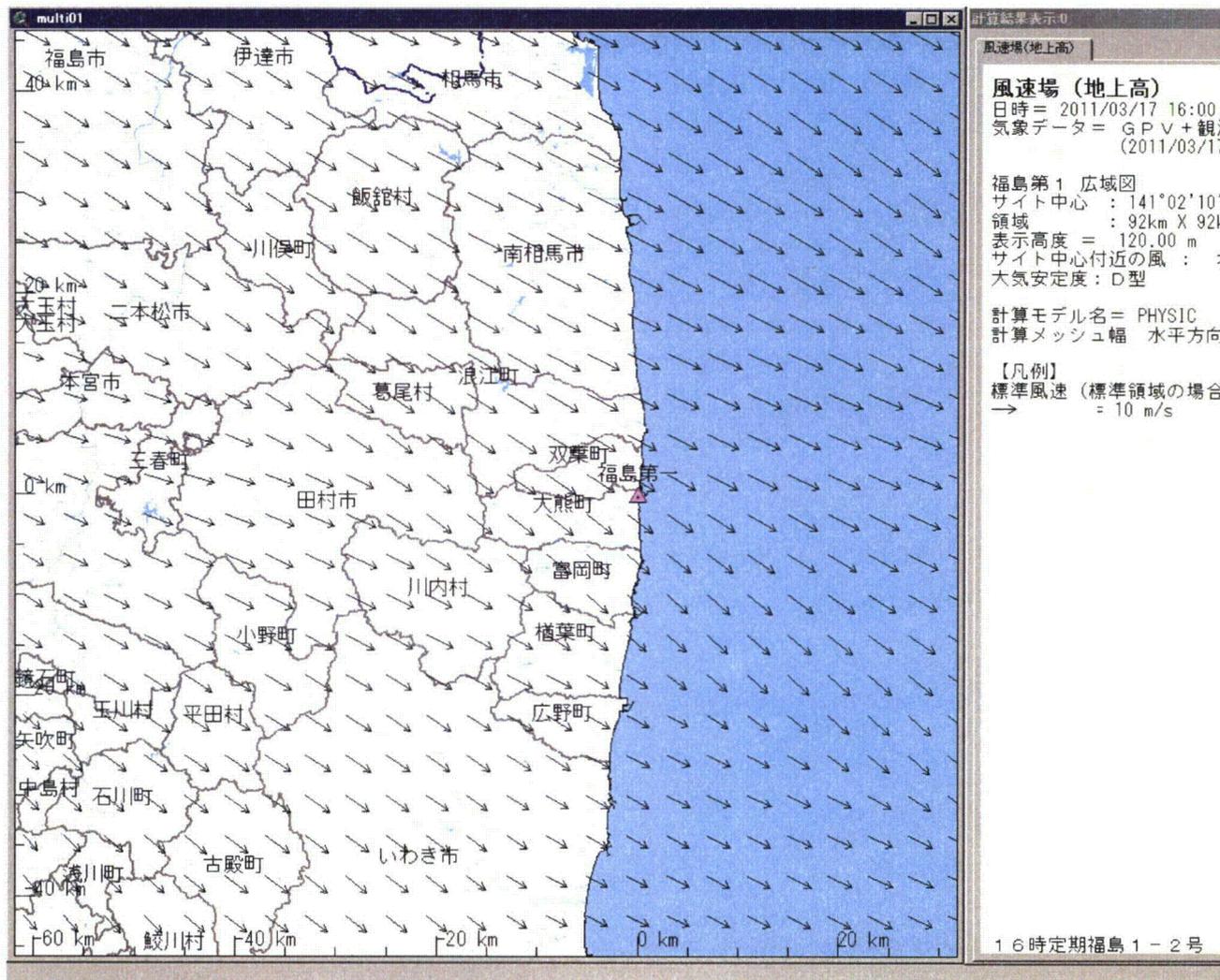
-----Original Message-----

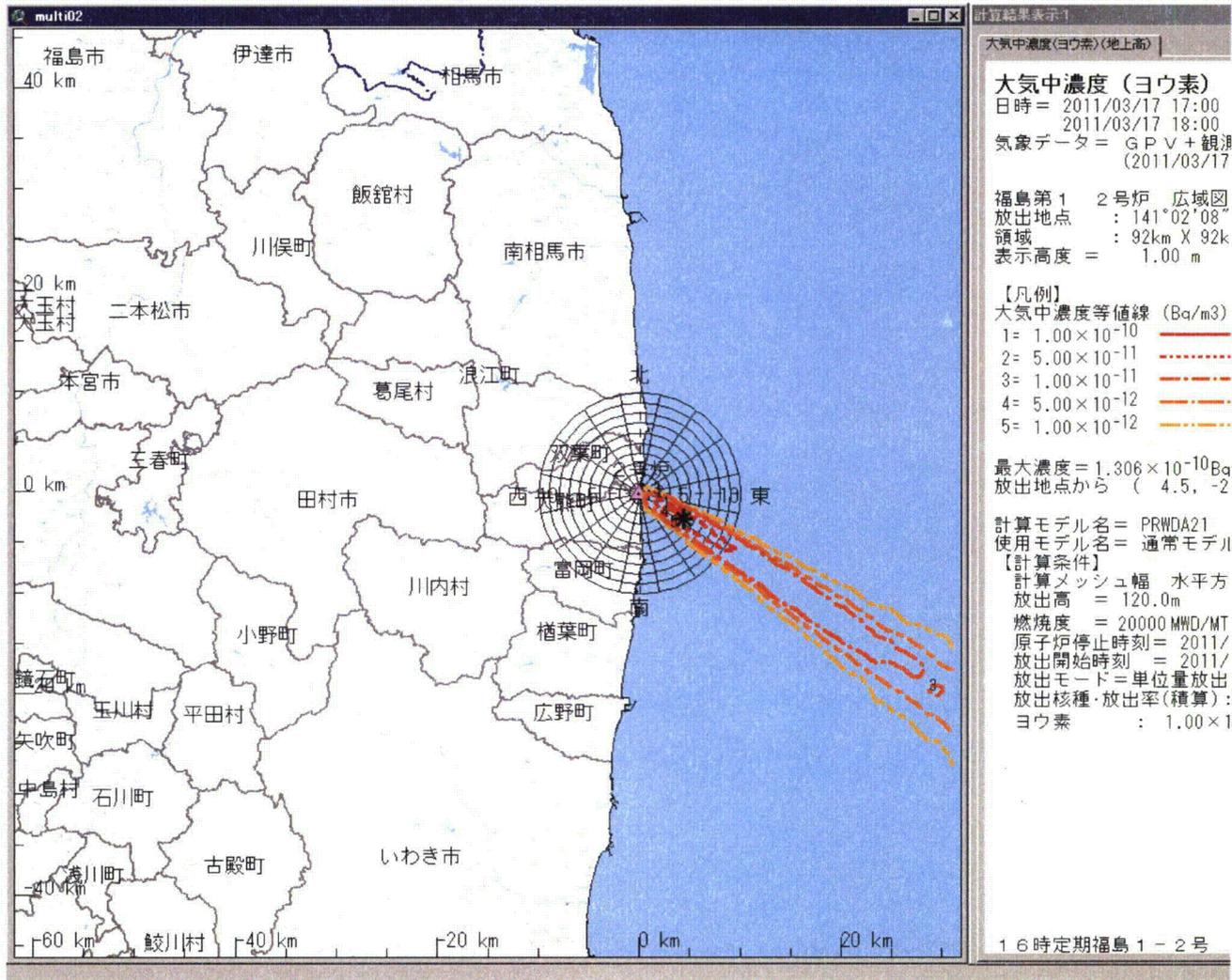
From: JapanEmbassy, TaskForce [mailto:JapanEmbassyTaskForce@state.gov]  
Sent: Thursday, March 17, 2011 3:36 AM  
To: Alex Robinson; Ulses, Anthony; CAT 5; Cherry, Ronald C; cmht@nnsa.doe.gov; Craig Haas; Curry Wright; DART  
Liaison; HOO Hoc; Trapp, James; John Okon; Mears, Jeremy M; Morales, Russell A; Hoc, PMT12; PMT01 Hoc; Theodore  
Shaw; Uchida, Koichi  
Subject: 1627 Speedi Data

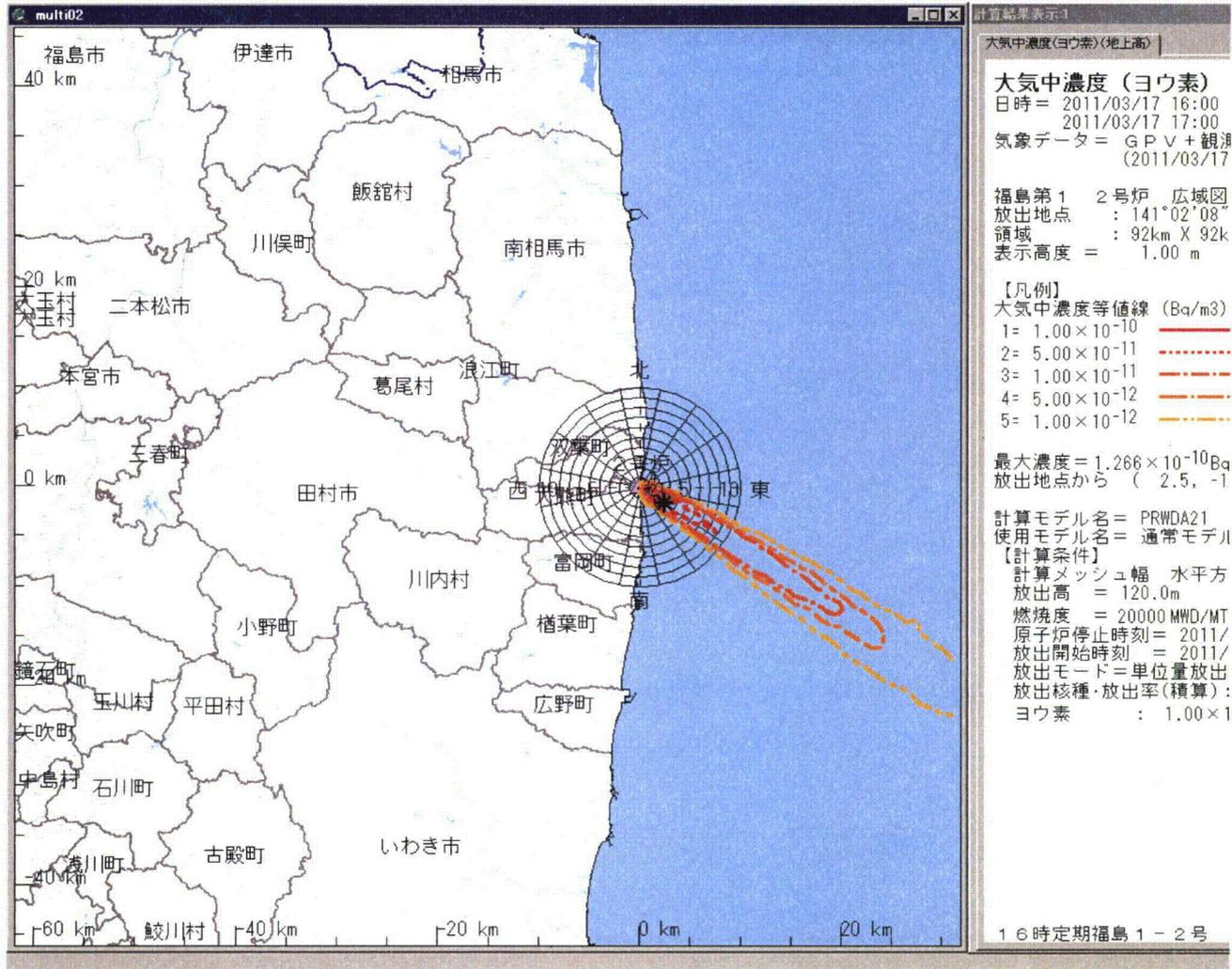
HHHH/37

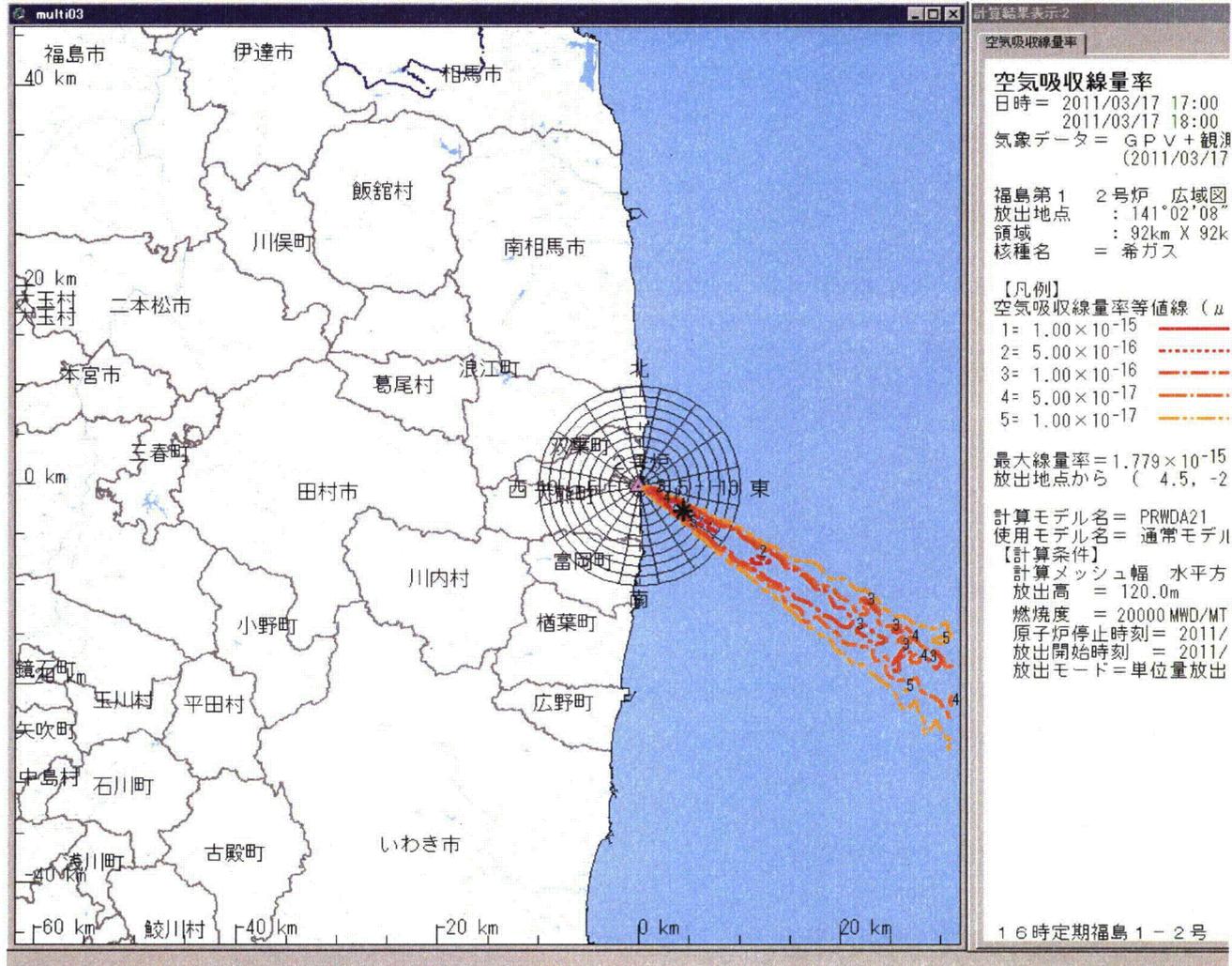


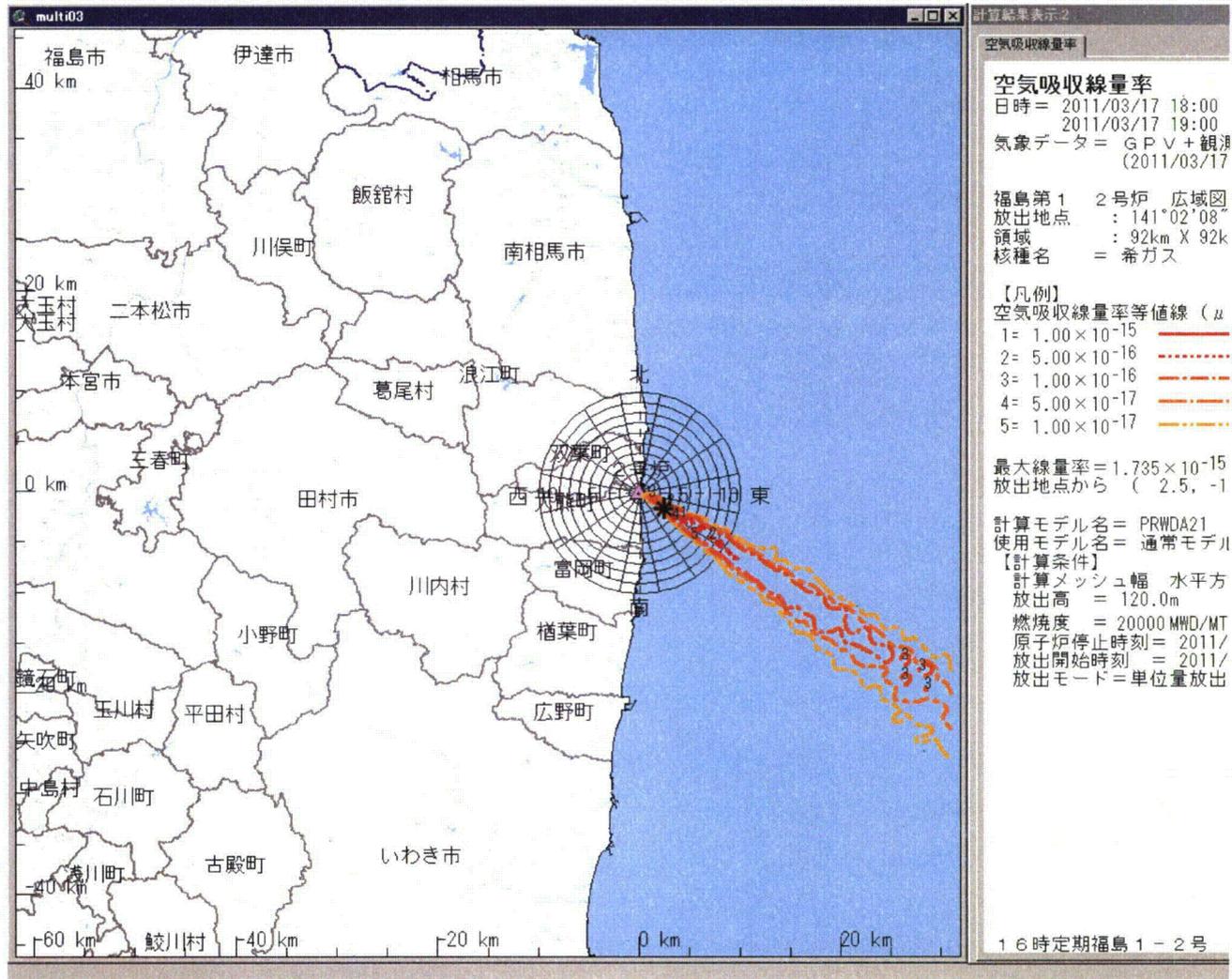












[Inside This Issue:]

- \*\* NRG pulls out of planned expansion of South Texas Project
- \*\* NGNP designer General Atomics says project is not economical
- \*\* DOE aims to roll out small reactor initiative in May
- \*\* Due to Fukushima I accident, NRC delays SMR regulations
- \*\* NRC staff completes environmental statement for proposed Summer units
- \*\* NRC reactor oversight process meets most performance metrics in 2010
- \*\* US nuclear net generation declines in February
- \*\* Reactor report
- \*\* IAEA to send fact-finding team to Japan
- \*\* IAEA sees 'decreasing trend' in radiation levels from Fukushima I
- \*\* Tepco begins first phase of removing contaminated water from Fukushima I units
- \*\* Areva to supply water treatment at Fukushima
- \*\* EDF provides evidence for UK safety review
- \*\* Areva starts production at Georges Besse II enrichment plant

---

---

\*\*\* NRG pulls out of planned expansion of South Texas Project

NRG Energy said April 19 it will write down its investment in the development of two nuclear units at the South Texas Project and will not invest further in the expansion project.

In a statement, NRG President and CEO David Crane said the accident at the Fukushima I plant in Japan "has introduced multiple uncertainties around new nuclear development in the United States which have had the effect of dramatically reducing the probability that STP [units] 3 and 4 can be successfully developed in a timely fashion."

Crane said NRG continues "to believe both in the absolute necessity of a US nuclear renaissance and that STP 3 and 4 is the best new nuclear development project in the country bar none." But he said "the

HHH/38

| North America |  
| Tel: 800-PLATTS-8 (toll-free) |  
| +1-212-904-3070 (direct) |

| Latin America |  
| Tel: + 54-11-4804-1890 |

| Europe & Middle East |  
| Tel: +44-20-7176-6111 |

| Asia Pacific |  
| Tel: +65-6530-6430 |

The reactors, housed inside steel reinforced concrete containment buildings, were not affected by the tornado, no one was injured and personnel were working to restore the main power connection to the grid, Dominion said.

---

\*\*\* NPPD board OKs \$18.4 million turbine contract

The Nebraska Public Power District board of directors has approved an \$18.4 million contract with Siemens Energy for a high-pressure turbine to be installed during Cooper's 2016 fall refueling outage. The new turbine would position the 830-MW reactor for a 145-MW boost in output in 2018 if NPPD decides to pursue a 20% power uprate, NPPD spokesman Mark Becker said April 15 in an email response to questions.

Approval of the contract came during the board's regularly scheduled meeting April 14-15.

Cooper began commercial operation in 1974. The plant's existing high-pressure turbine has a 30-year design life, according to Becker's email.

Becker said that while a 2009 inspection found no immediate problems with the current turbine, reliability issues could arise if it is not replaced. A new high-pressure turbine would ensure reliable operation through Cooper's renewed license, which expires in 2034, he said.

---

\*\*\* US reactor report

Braidwood-2 shut down the evening of April 17 for scheduled refueling and maintenance, Exelon Nuclear said in a statement April 18. The company does not disclose the expected duration of outages.

FirstEnergy Nuclear Operating Co.'s Perry shut for a scheduled refueling and maintenance outage early April 18, the company said in a statement. It did not say how long the outage will last.

FirstEnergy Nuclear Operating Co.'s Beaver Valley-1 returned to service April 16, company spokesman Todd Schneider said in an April 18 email. He said the unit "will remain at 82 percent power for the next several days for condenser cleaning." The unit was shut April 14 to replace a sensor that monitors the reactor power level.

Progress Energy's Brunswick-2 was taken offline April 17, one day after the unit returned to service from a refueling outage, company spokeswoman Jessica Lamberty said April 18. She said workers found that the reactor's drywell needed "additional repairs" after it was connected to the grid early April 16. Lamberty said she does not have details of the drywell's condition and declined to say how long this outage might last. Brunswick-2 had been shut March 5 for refueling.

---

\*\*\*

Contact Us:

reactor even if personnel had left the station, he said, without elaborating.

"We took on board all the European and American proposals [on security requirements for nuclear power plants], formed our own requirements, and fully transferred and expanded the requirements of our partners," he said.

Kirienko said there was a need for more transparent discussion about nuclear power at a global level and that there should be mandatory international standards on nuclear power plant safety.

---

\*\*\* Rolls-Royce names general manager-Canada

Neil Alexander has been appointed general manager, civil nuclear-Canada, by Rolls-Royce, the company said April 18.

Alexander will be responsible for "extending our product and service offerings by drawing on the broad nuclear capabilities of Rolls-Royce globally" in the North American market, the company said.

Rolls-Royce holds an American Society of Mechanical Engineers N stamp, which attests to the company's ability to manufacture nuclear-grade equipment. NRC requires that US nuclear power plants install only nuclear-grade equipment. The company employs about 100 people at its Peterborough, Ontario office near Toronto.

---

\*\*\* Surry-1, -2 down after tornado strike in switchyard

A tornado apparently touched down in the switchyard at Dominion's Surry nuclear plant, cutting offsite power to the station, but the reactors are stable after an automatic shutdown, the utility said April 17.

The tornado touched down the evening of April 16, and the company informed the NRC and state and local officials.

Dominion declared an unusual event, the lowest of four NRC emergency classifications for nuclear power plants. The emergency will remain in effect until redundant sources of offsite power are restored for both units, Dominion spokesman Richard Zuercher said April 18. Each reactor now has one offsite power source and emergency diesel generators are available if needed, Zuercher said.

Surry-1 and -2 each have 847-MW capacity.

"Both reactors at the station shut down automatically as designed and back-up diesel generators started immediately to provide electricity necessary to maintain both units in a safe and stable condition," Dominion said in a statement April 17.

"No release of radioactive material has occurred beyond those minor releases associated with normal station operations. These minor releases are below federally approved operating limits, and pose no threat to station workers or the public," the utility said.

The same day plant operator Tokyo Electric Power Co. released radiation data and photos the US-made robots took during an April 17-18 survey of the plant.

Tepco said the robots surveyed the first floor of unit 1 for about 50 minutes and detected maximum radiation readings of 49 millisieverts per hour. A person in that environment for five hours would be exposed to 250 mSv of radiation, the legal limit for nuclear workers in emergency situations, NHK reported.

Robots were inside unit 3 for about two hours. Tepco said the robots had difficulty moving around because of debris. The maximum radiation reading was 57 mSv per hour.

On April 17, Tepco announced its plan for a steady reduction of radiation at the site and said it could have the release of radioactive materials under control in six to nine months. NHK reported Japan's Chief Cabinet Secretary Yukio Edano April 18 said displaced residents will not be able to return to homes around the plant for at least six months. He said Tepco's timetable was feasible.

Tepco said April 17 it will use a chemical hardening agent at the site to prevent the migration of radioactive dust and soil. The utility said it will begin spraying a polymer emulsion on top of debris near the reactor buildings April 26. It has been test-spraying the emulsion since April 1.

To prevent debris from scattering, Tepco has been coating it with an emulsion used at construction sites to settle dust. Tepco said the polymer has hardened over the debris and that radiation levels at the plant have remained relatively low, NHK reported.

Tepco said it hoped to finish spraying around the reactor buildings by the end of May and around the rest of the site by late June.

Separately, Prime Minister Naoto Kan told an Upper House Budget Committee April 18 the government had underestimated the potential impact of a large tsunami on Japanese nuclear power plants, NHK reported. The government had believed reactor cooling systems would not be affected by a major earthquake because emergency diesel generators would restore power, Kan said. He apologized for the government's failure to check the systems and said there was no excuse for not preparing for a worst-case scenario.

-----  
\*\*\* Stress tests prove reliability of Russian plants, Rosatom official says

Stress tests in the wake of the ongoing accident at the Fukushima I nuclear power plant in Japan have confirmed the safety of Russian reactors, Sergey Kirienko, general director of state nuclear corporation Rosatom, said April 18.

Kirienko spoke at a press briefing in Kiev ahead of an international conference this week to mark the 25th anniversary of the Chernobyl accident. His comments were posted on Rosatom's web site the same day.

Reactors of Russian design would have withstood a 9.0-magnitude earthquake and a tsunami height of 14 meters, Kirienko said.

In addition, a release of radiation would not have occurred from a Russian

**From:** [Library Resource](#)  
**To:** [EPUB - Nuclear News Flashes](#)  
**Subject:** FW: Platts Nuclear News Flashes  
**Date:** Monday, April 18, 2011 6:43:26 PM  
**Attachments:** [NNE\\_20110418.txt](#)

---

-----  
**From:** Platts[SMTP:SUPPORT@PLATTS.COM]  
**Sent:** Monday, April 18, 2011 6:43:02 PM  
**To:** Library Resource  
**Subject:** Platts Nuclear News Flashes  
**Auto forwarded by a Rule**



Dear Subscriber,

This email contains your Platts newsletter subscription.

Platts(R) is a trademark owned by The McGraw-Hill Companies, Inc. and protected by registration in several countries. This document is Copyright (c) Platts (a division of The McGraw-Hill Companies, Inc.) 2011. All rights reserved. Reproduction or dissemination of Platts information is prohibited. Please contact Platts at [support@platts.com](mailto:support@platts.com) if you wish to expand your subscription rights.

Nuclear News Flashes  
Monday, Apr 18, 2011  
Copyright Platts 2011 A Division of The McGraw-Hill Companies, Inc.  
All rights reserved. <http://www.platts.com>

---

---

---

[Inside This Issue:]

- \*\* Robots survey conditions inside Fukushima I
  - \*\* Stress tests prove reliability of Russian plants, Rosatom official says
  - \*\* Rolls-Royce names general manager-Canada
  - \*\* Surry-1, -2 down after tornado strike in switchyard
  - \*\* NPPD board OKs \$18.4 million turbine contract
  - \*\* US reactor report
- 
- 
- 

\*\*\* Robots survey conditions inside Fukushima I

Remote-controlled robots have detected high levels of radiation inside reactor buildings at the Fukushima I nuclear power plant, Japan news agency NHK reported April 18.

12, it said.

It said SET's goal is to start up the eight cascades in the plant's first module by this summer.

The plant is scheduled to reach its initial nominal capacity of 7.5 million SWU in 2016, with a potential expansion to 11 million SWU. It represents an investment of Eur3 billion.

Francois-Xavier Rouxel, director of the enrichment business unit, said in the statement that Areva supplies about one-quarter of world enrichment services.

-----  
\*\*\*  
-----

Contact Us:

| To reach Platts |  
| E-mail: [support@platts.com](mailto:support@platts.com) |

| North America |  
| Tel: 800-PLATTS-8 (toll-free) |  
| +1-212-904-3070 (direct) |

| Latin America |  
| Tel: + 54-11-4804-1890 |

| Europe & Middle East |  
| Tel: +44-20-7176-6111 |

| Asia Pacific |  
| Tel: +65-6530-6430 |

Owen, Lucy

---

**From:** Champ, Billie  
**Sent:** Friday, March 18, 2011 10:13 AM  
**To:** Commission E-Reader Distribution; E-Reader Distribution  
**Subject:** COMMISSION E-READER....FRIDAY, MARCH 18, 2011  
**Attachments:** Tab A 03-16-11 Senators Boxer and Feinstein 11-0127 .pdf; Tab B 03-16-11 -- Merlino.pdf; Tab C 03-14-11 Armijo.pdf; Tab D 02-24-11 Ferriero-NARA 11-0121.pdf; Tab E 02-15-11 Alexander-DOD 11-0123.pdf; Tab F 03-17-11 FRN.pdf; Tab G 03-16-11 FRN-10 Part 52.pdf

~~INTERNAL USE ONLY~~

Some of the information contained in the  
Reader is not publicly available.  
If there are any questions, please contact SECY.

READING FILE

INDEX

March 18, 2011

INCOMING CORRESPONDENCE

- Tab "A" 03/16/11 -- Letter from Senators Barbara Boxer and Diane Feinstein, concerns the safety of nuclear power plants in the U.S. specifically, Diablo Canyon.
- Tab "B" 03/16/11 -- Letter from Sandra Merlino, concerns Nye County Resolution No. 2011-21 supporting completion of the NRC's review of Yucca Mountain license application.
- Tab "C" 03/14/11 -- Memorandum from Frank Armijo, concerns solicitation No. 33-11-325 entitled "Information Infrastructure Services and Support (ITISS)."
- Tab "D" 02/24/11 -- Memorandum from David Ferriero, NARA, concerns checklist of current NARA bulletins and list of records management guidance in effect.
- Tab "E" 02/15/11 -- Memorandum from Keith Alexander, DOD, requests nominations for the Annual Rowlett Information Assurance Awards.

OUTGOING CORRESPONDENCE

- Tab "F" 03/17/11-- Federal Register Notice: Advisory Committee on Reactor Safeguards. .. Meeting Notice.
- Tab "G" 03/16/11 -- Federal Register Notice: 10 CFR Part 52 ESBWR Design Certification.

HHHH/39

# United States Senate

WASHINGTON, DC 20510

March 16, 2011

The Honorable Gregory Jaczko  
Chairman  
U. S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

Dear Chairman Jaczko:

The unfolding nuclear disaster in Japan has raised questions about the safety of nuclear power plants here in the U.S. As Senators from California, we are particularly interested in the safety of San Onofre Nuclear Generating Station, located in San Clemente, and the Diablo Canyon Nuclear Power Plant near San Luis Obispo, both of which are near earthquake faults.

Roughly 424,000 live within 50 miles of the Diablo Canyon and 7.4 million live within 50 miles of San Onofre Nuclear Generating Station. Although many safety measures have been taken to address potential hazards associated with these facilities, we need to ensure that the risk is fully evaluated.

For example, a 2008 California Energy Commission report presented very clear warnings of potential threats at both of these plants. This report found that the San Onofre plant could experience "larger and more frequent earthquakes" than the maximum 7.0 magnitude earthquake predicted when the plant was designed. It is our understanding that the NRC has not taken action to address these warnings in the report. It is also our understanding that the 2008 report found that there is an additional fault near the Diablo Canyon plant that should be taken into consideration as part of NRC's relicensing process. We want to know if the NRC will address all of the threats, including seismic threats, described in the 2008 report at these facilities.

We ask that the Nuclear Regulatory Commission (NRC) perform a thorough inspection at these two plants to evaluate their safety and emergency preparedness plans.

3/17...To EDO to Prepare Response for Chairman's Signature...Date due Comm:  
April 8...Cpy to: RF, OCA to Ack...11-0127 COMMISSION CORRESPONDENCE

HHHH/40

In addition, we ask the NRC to answer the questions below regarding plant design and operations, type of reactor, and preparedness to withstand an earthquake or tsunami and other potential threats.

### Plant Design and Operations

1. What changes to the design or operation of these facilities have improved safety at the plants since they began operating in the mid-1980s?
2. What emergency notification systems have been installed at California nuclear power plants? Has there ever been a lapse of these systems during previous earthquakes or emergencies?
3. What safety measures are in place to ensure continued power to California reactors in the event of an extended power failure?

### Type of Reactor

1. What are the differences and similarities between the reactors being used in California (pressurized water reactors) and those in Japan (boiling water reactors), as well as the facilities used to house the reactors, including the standards to which they were built and their ability to withstand natural and manmade disasters?

### Earthquakes and Tsunamis

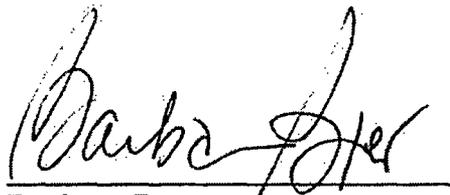
1. We have been told that both Diablo Canyon and San Onofre Nuclear Generating Station are designed to withstand the maximum credible threat at both plants, which we understand to be much less than the 9.0 earthquake that hit Japan. What assumptions have you made about the ability of both plants to withstand an earthquake or tsunami? Given the disaster in Japan, what are our options to provide these plants with a greater margin for safety?
2. Have new faults been discovered near Diablo Canyon or San Onofre Nuclear Generating Station since those plants began operations? If so, how have the plants been modified to account for the increased risk of an earthquake? How will the NRC consider information on ways to address risks posed by faults near these plants that is produced pursuant to state law or recommendations by state agencies during the NRC relicensing process?

3. What are the evacuation plans for both plants in the event of an emergency? We understand that Highway 1 is the main route out of San Luis Obispo, what is the plan for evacuation of the nearby population if an earthquake takes out portions of the highway and a nuclear emergency occurs simultaneously?
4. What is the NRC's role in monitoring radiation in the event of a nuclear accident both here and abroad? What is the role of EPA and other federal agencies?
5. What monitoring systems currently are in place to track potential impacts on the U.S., including California, associated with the events in Japan?
6. Which federal agency is leading the monitoring effort and which agencies have responsibility for assessing human health impacts? What impacts have occurred to date on the health or environment of the U.S. or are currently projected or modeled in connection with the events in Japan?
7. What contingency plans are in place to ensure that the American public is notified in the event that hazardous materials associated with the events in Japan pose an imminent threat to the U.S.?

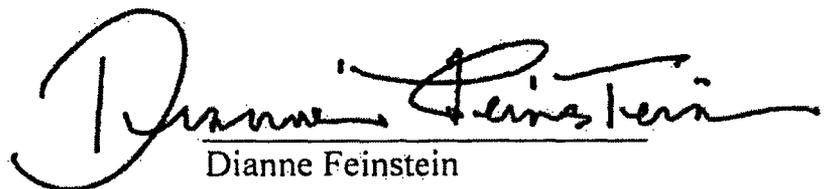
The NRC was created in the mid-1970s specifically to ensure the protection of public health and safety with regard to civilian nuclear power. The Commission plays an essential role ensuring that we learn from nuclear accidents and near misses. We hope you agree that we must identify whatever lessons are to be learned from the disaster in Japan in order to make facilities in the United States as safe as possible.

We look forward to working with you to ensure the safety of our nation's nuclear power plants and to make the changes necessary to ensure a nuclear tragedy does not occur in this country.

Sincerely,



Barbara Boxer



Dianne Feinstein

## McKelvey, Harold

---

**From:** OST05 Hoc  
**Sent:** Friday, March 18, 2011 8:56 AM  
**To:** Maier, Bill; LIA04 Hoc; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena  
**Cc:** Piccone, Josephine; LIA06 Hoc; Harrington, Holly; Flannery, Cindy; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtill, Richard; Virgilio, Rosetta; Howell, Linda; Collins, Elmo; Howell, Art  
**Subject:** RE: 10 mile EPZ and 50 mile evacuation zone in Japan

All,

It has been confirmed that this statement may be sent out to our Federal, State, and Local partners.

Kim Lukes  
State Liaison – Liaison Team  
Incident Response Center

---

**From:** Maier, Bill  
**Sent:** Friday, March 18, 2011 9:52 AM  
**To:** LIA04 Hoc; Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena  
**Cc:** Piccone, Josephine; LIA06 Hoc; OST05 Hoc; Harrington, Holly; Flannery, Cindy; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtill, Richard; Virgilio, Rosetta; Howell, Linda; Collins, Elmo; Howell, Art  
**Subject:** RE: 10 mile EPZ and 50 mile evacuation zone in Japan

I still have my reservations about the adequacy of the statement below to satisfy our partners in off-site radiological emergency preparedness.

I believe if a discussion of some of the conservative assumptions used in the development of the 50 mile protective action recommendation could be included, that would make it a more satisfactory answer.

I recognize that maybe we can't share that information at this time, so I am willing to limit my information sharing to the statement below.

My request is:

DO THE RSLOs HAVE PERMISSION TO FORWARD THIS STATEMENT ON TO OUR FEDERAL, STATE AND LOCAL PARTNERS?

This action is preferable to just using it as a talking point within the NRC, as it will get the information out more quickly.

I will wait for permission to come from the NRC Liaison Team in Headquarters before sending it out.

Bill Maier

---

**From:** LIA04 Hoc  
**Sent:** Thursday, March 17, 2011 7:49 PM  
**To:** Barker, Allan; Browder, Rachel; Erickson, Randy; Logaras, Harral; Maier, Bill; McNamara, Nancy; Tifft, Doug; Trojanowski, Robert; Woodruff, Gena

HHHH/41

**Cc:** Piccone, Josephine; LIA06 Hoc; OST05 Hoc; Harrington, Holly; Collins, Elmo; Dean, Bill; Heck, Jared; McCree, Victor; Pederson, Cynthia; Satorius, Mark; Flannery, Cindy; LIA04 Hoc; Lukes, Kim; Noonan, Amanda; Rautzen, William; Rivera, Alison; Ryan, Michelle; Turtill, Richard; Virgilio, Rosetta

**Subject:** 10 mile EPZ and 50 mile evacuation zone in Japan

**Importance:** High

RSLOs:

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

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

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

Richard Turtill  
State Liaison – Liaison Team  
Incident Response Center