

EDO Principal Correspondence Control

FROM: DUE: 04/11/12

EDO CONTROL: G20120199

DOC DT: 03/16/12

FINAL REPLY:

Senator Dianne Feinstein

TO:

Chairman Jaczko

FOR SIGNATURE OF :

\*\* PRI \*\*

CRC NO: 12-0113

Chairman Jaczko

DESC:

ROUTING:

Near Term Task Force Addressing Lessons Learned  
from Fukushima - Implementation of Recommendations  
(EDATS: SECY-2012-0140)

Borchardt  
Weber  
Virgilio  
Ash  
Mamish  
OGC/GC  
Leeds, NRR  
McCree, RII  
Wiggins, NSIR  
Burns, OGC  
Schmidt, OCA

DATE: 03/26/12

ASSIGNED TO:

CONTACT:

EDO

Rihm

SPECIAL INSTRUCTIONS OR REMARKS:

Please prepare response in accordance with OEDO  
Notice 2009-0441-02 (ML093290179). NRR, Region II  
and NSIR to provide input to Roger Rihm, OEDO, if  
required. Roger Rihm to coordinate response with  
OGC and OCA.

Template: SECY-017

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# EDATS

Electronic Document and Action Tracking System

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**Source:** SECY

## General Information

**Assigned To:** OEDO

**OEDO Due Date:** 4/11/2012 11:00 PM

**Other Assignees:**

**SECY Due Date:** 4/13/2012 11:00 PM

**Subject:** Near Term Task Force Addressing Lessons Learned from Fukushima - Implementation of Recommendations

**Description:**

**CC Routing:** NRR; RegionII; NSIR; OGC; OCA

**ADAMS Accession Numbers - Incoming:** NONE

**Response/Package:** NONE

## Other Information

**Cross Reference Number:** G20120199, LTR-12-0113

**Staff Initiated:** NO

**Related Task:**

**Recurring Item:** NO

**File Routing:** EDATS

**Agency Lesson Learned:** NO

**OEDO Monthly Report Item:** NO

## Process Information

**Action Type:** Letter

**Priority:** Medium

**Sensitivity:** None

**Signature Level:** Chairman Jaczko

**Urgency:** NO

**Approval Level:** No Approval Required

**OEDO Concurrence:** YES

**OCM Concurrence:** NO

**OCA Concurrence:** NO

**Special Instructions:** Please prepare response in accordance with OEDO Notice 2009-0441-02 (ML093290179). NRR, Region II and NSIR to provide input to Roger Rihm, OEDO, if required. Roger Rihm will coordinate response with OGC and OCA.

## Document Information

**Originator Name:** Senator Dianne Feinstein

**Date of Incoming:** 3/16/2012

**Originating Organization:** Congress

**Document Received by SECY Date:** 3/26/2012

**Addressee:** Chairman Jaczko

**Date Response Requested by Originator:** NONE

**Incoming Task Received:** Letter

OFFICE OF THE SECRETARY  
CORRESPONDENCE CONTROL TICKET

*Date Printed: Mar 26, 2012 09:18*

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**PAPER NUMBER:** LTR-12-0113 **LOGGING DATE:** 03/21/2012  
**ACTION OFFICE:** EDO

**AUTHOR:** SEN Dianne Feinstein  
**AFFILIATION:** CONG  
**ADDRESSEE:** Gregory Jaczko  
**SUBJECT:** Concerns Near Term Task Force addressing lessons learned from Fukushima.

**ACTION:** Signature of Chairman  
**DISTRIBUTION:** RF, OCA to Ack

**LETTER DATE:** 03/16/2012  
**ACKNOWLEDGED** No  
**SPECIAL HANDLING:** Commission Correspondence

**NOTES:**  
**FILE LOCATION:** ADAMS

**DATE DUE:** 04/13/2012 **DATE SIGNED:**



## United States Senate

WASHINGTON, DC 20510-0504

<http://feinstein.senate.gov>

March 16, 2012

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

Dear Chairman Jaczko:

As we mark the one year anniversary of the earthquake and tsunami that created the nuclear crisis in Fukushima, Japan, it is appropriate for policy makers and regulators to reflect on whether we have done all that we can to prevent nuclear disasters in the United States. In this past year, a reactor in the United States shut down for an extended period due to an earthquake beyond its design basis, and another remains shut down after experiencing radiation leaks. In light of these developments, I am writing to inquire whether we are acting with sufficient wisdom and aggressiveness to prevent nuclear disasters.

I am pleased that the Nuclear Regulatory Commission (NRC) acted on three of the twelve safety improvements proposed by its own Near Term Task Force last week. The new orders requiring plants to better protect safety equipment, to install water level monitors in spent fuel pools, and to improve venting systems for some boiling-water reactors represent a step in the right direction.

However, there is clearly far more work to do. The NRC is not acting as aggressively as French regulators, who are advancing a large number of new safety policies and requiring substantial facility upgrades based on lessons learned from the Fukushima crisis. In the Conference Report that accompanied the legislation funding the Nuclear Regulatory Commission for Fiscal Year 2012, the Congress directed the NRC to implement the rest of the Near Term Task Force recommendations "consistent with, or more expeditiously than" the schedules laid out by NRC staff. Progress in Europe

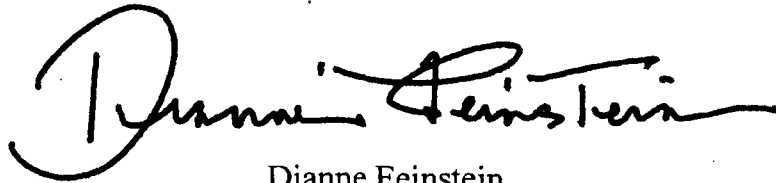
suggests that the NRC could move even faster and more aggressively , and I strongly encourage the Commission to do so.

Congress also requested in the Conference Report "that the Commission provide a written status report ... on its implementation of the Task Force recommendations on the one year anniversary of the Fukushima disaster." As I have not received this status report, I would appreciate it if you could provide me with answers to the attached questions as expeditiously as possible.

I thank you, your fellow commissioners, and the NRC staff for their dedication and commitment to ensuring that nuclear power in the United States is as safe as possible. I share this commitment.

If you have any questions about this inquiry, please do not hesitate to contact me in my Washington, DC office. I look forward to hearing your responses.

Sincerely,

A handwritten signature in black ink, reading "Dianne Feinstein". The signature is fluid and cursive, with the first name "Dianne" being larger and more prominent than the last name "Feinstein".

Dianne Feinstein  
United States Senator

CC: Commissioner Kristine L. Svinicki  
Commissioner George Apostolakis  
Commissioner William D. Magwood, IV  
Commissioner William C. Ostendorff

DF/mbn

1. European nuclear regulators appear to be moving more aggressively than the NRC to address the lessons learned from Fukushima. According to a recent report by James Acton and Mark Hibbs of the Carnegie Endowment for International Peace: "In France alone, regulators will issue about one hundred new rules, and plant owner Electricite de France will implement scores of actions at 58 plants concerning issues such as the possible loss of power and loss of heat sinks during extreme events costing an estimated 10 billion euros." Of particular note are requirements to harden and waterproof back up power systems on site to prevent the loss of power and heat sinks in the event of an external event.

Based on the actions and reports thus far, it does not appear that the NRC plans to require the same degree of facility upgrades as French regulators. Please explain why the NRC has concluded that the large scale physical upgrades to nuclear power plants required in France are not also appropriate in the United States.

2. The Fukushima facility was struck by both an earthquake and tsunami beyond its "design basis," and the event knocked out most of the plant's designed safety systems in a single common mode failure.

Even a single event that exceeds the design basis of a nuclear power plant should alarm regulators, but in the past fifteen years beyond design basis events have occurred repeatedly. In 1999, a storm surge caused flooding at the Blayais Nuclear Power Plant in France. The 2004 Indian Ocean tsunami flooded seawater pumps at the Madras Atomic Power Station in India. In 2007, an earthquake exceeded the design basis of Japan's largest nuclear power plant, the Kashiwazaki-Kariwa Nuclear Power Station. And in August, an earthquake exceeded the design basis of the North Anna Nuclear Generating Station in Virginia.

These events demonstrate the need to improve the precision and methods for determining design basis, especially in the U.S. where reactors are all more than 20 years old. Scientific knowledge has advanced considerably over recent decades.

The NRC's Near Term Task Force recommended that nuclear plants undergo a full design basis review every ten years. Congress agreed, requiring in Public Law 112-74 that "the Nuclear Regulatory

Commission shall require reactor licensees to re-evaluate the seismic, tsunami, flooding, and other external hazards at their sites ... as expeditiously as possible ... and require licensees to update the design basis for each reactor, if necessary.”

Please explain what steps the Commission is taking to comply with the statutory requirement and provide a schedule for implementing this requirement.

3. The NRC recently allowed the North Anna plant to reopen after its beyond-design-basis earthquake without seismic retrofit, structural improvement, or a change to the plant’s design basis. It appears that the NRC conducted an inspection and concluded that the facility was safe to reopen because it found no structural damage – even though the facility had never been designed to endure the earthquake that struck.

NRC’s conclusion has effectively eliminated the safety buffer that is supposed to exist between the maximum threat a nuclear plant is designed to endure and the maximum threat it will ever face. I am concerned that the NRC appears to have allowed North Anna to reopen without demanding evidence that the facility is engineered and built to survive earthquakes of similar size in the future.

- a. Did the NRC reevaluate the seismic threat at North Anna, in consultation with seismic experts, using the new data from the August 2011 earthquake, in order to establish a new understanding of the seismic threat at this plant? If not, why not?
- b. Did the NRC study the margins of safety built into the North Anna reactors’ designs and determine what size of earthquake the plant can safely withstand? Did the NRC determine whether a significant revision of the design basis at North Anna would necessitate extensive physical renovations? Did NRC conduct a detailed technically-informed analysis of the newly identified seismic risk at North Anna before allowing the plant to reopen?
- c. It has been reported that NRC only conducted a thorough inspection of one of the two North Anna reactors, while one reactor was allowed to restart under cautious procedures instead.

Is this true? If so, why didn't NRC conduct a complete and thorough inspection of both reactors?

4. NRC requires all nuclear power plants to provide "adequate safety" regardless of cost. However, it is my understanding that the Commission considers preparation for a beyond-design-basis event to be beyond the requirements of "adequate safety." Therefore, all requirements to prepare for such an event are subject to a cost-benefit evaluation.
  - a. In making decisions about whether to require power plants to enhance the redundancy of safety systems designed to maintain safety, cooling, and heat sinks during station blackouts in the aftermath of beyond-design-basis events, to what degree has the use of this cost benefit evaluation formed the basis of the Commission's decisions to require less redundancy than regulators have required in Europe?
  - b. When considering the potential costs of a nuclear crisis, is it correct that the NRC does not factor in the potential economic impact of evacuations that may be necessary in the event of a beyond design basis event? The costs associated with an evacuation of citizens near plants, even if the crisis is controlled without radiation leaks, could run into the billions of dollars. This is especially true for plants near large population centers. Why does NRC choose not to consider these costs when evaluating safety improvements?