

EDO Principal Correspondence Control

FROM: DUE: 12/14/11

EDO CONTROL: G20110824

DOC DT: 11/22/11

FINAL REPLY:

David Lochbaum  
Union of Concerned Scientists

TO:

Commission

FOR SIGNATURE OF :

\*\* PRI \*\*

CRC NO: 11-0624

Chairman Jaczko

DESC:

ROUTING:

Pace of Safety Fixes (EDATS: SECY-2011-0633)

Borchardt

Weber

Virgilio

Ash

Mamish

OGC/GC

Sheron, RES

Bowman, OEDO

DATE: 11/28/11

ASSIGNED TO:

CONTACT:

NRR

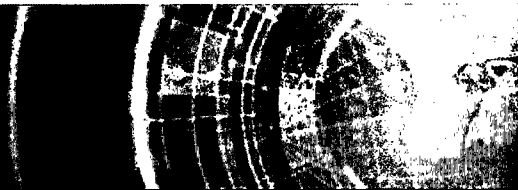
Leeds

SPECIAL INSTRUCTIONS OR REMARKS:

Please coordinate response with RES, as necessary.

# EDATS

Electronic Document and Action Tracking System



**EDATS Number:** SECY-2011-0633

**Source:** SECY

## General Information

**Assigned To:** NRR

**OEDO Due Date:** 12/14/2011 11:00 PM

**Other Assignees:**

**SECY Due Date:** 12/16/2011 11:00 PM

**Subject:** Pace of Safety Fixes

**Description:**

**CC Routing:** RES

**ADAMS Accession Numbers - Incoming:** NONE

**Response/Package:** NONE

## Other Information

**Cross Reference Number:** G20110824, LTR-11-0624

**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

**Signature Level:** Chairman Jaczko

**Sensitivity:** None

**Urgency:** NO

**Approval Level:** No Approval Required

**OEDO Concurrence:** YES

**OCM Concurrence:** NO

**OCA Concurrence:** NO

**Special Instructions:** Please coordinate response with RES, as necessary.

## Document Information

**Originator Name:** David Lochbaum

**Date of Incoming:** 11/22/2011

**Originating Organization:** Union of Concerned Scientists

**Document Received by SECY Date:** 11/28/2011

**Addressee:** Commission

**Date Response Requested by Originator:** NONE

**Incoming Task Received:** E-mail

**OFFICE OF THE SECRETARY  
CORRESPONDENCE CONTROL TICKET**

*Date Printed: Nov 28, 2011 08:12*

---

**PAPER NUMBER:** LTR-11-0624 **LOGGING DATE:** 11/22/2011  
**ACTION OFFICE:** EDO

**AUTHOR:** David Lochbaum  
**AFFILIATION:** UCS  
**ADDRESSEE:** CHRM Gregory Jaczko  
**SUBJECT:** Concerns pace of safety fixes

**ACTION:** Signature of Chairman  
**DISTRIBUTION:** RF, SECY to Ack.

**LETTER DATE:** 11/22/2011

**ACKNOWLEDGED** No

**SPECIAL HANDLING:** Commission Correspondence.  
Immediate public release via SECY/EDO/DPC.

**NOTES:**

**FILE LOCATION:** ADAMS

**DATE DUE:** 12/16/2011 **DATE SIGNED:**

EDO --G20110824

**Joosten, Sandy**

---

**From:** Dave Lochbaum [DLochbaum@ucsusa.org]  
**Sent:** Tuesday, November 22, 2011 9:53 AM  
**To:** CHAIRMAN Resource; CMRSVINICKI Resource; CMRAPOSTOLAKIS Resource; CMRMAGWOOD Resource; CMROSTENDORFF Resource  
**Cc:** Borchardt, Bill; Burnell, Scott  
**Subject:** UCS letter on pace of safety fixes  
**Attachments:** 20111122-ucs-nrc-safety-pace.pdf

Dear Mr. Chairman and Commissioners:

Attached is an electronic version of a letter submitted on behalf of the Union of Concerned Scientists regarding the double standard applied by the Nuclear Regulatory Commission to the resolution of safety problems at the nation's nuclear power plants. On one hand, the NRC sanctions plant owners when they fail to resolve safety problems in a timely manner. On the other hand, the NRC takes far longer to resolve safety problems of a significantly larger nature that affect a significantly higher number of reactors, and thus Americans. It is imperative that all safety problems be resolved in a timely manner; not just some of them.

A hard copy of the letter will be submitted upon request.

Sincerely,  
David Lochbaum  
Director, Nuclear Safety Project  
Union of Concerned Scientists  
PO Box 15316  
Chattanooga, TN 37415  
(423) 468-9272 office  
(423) 488-8318 cell  
[dlochbaum@ucsusa.org](mailto:dlochbaum@ucsusa.org)

Check out the UCS blog at nuclear weapons and nuclear power issues, including a weekly series called "Fission Stories" at <http://allthingsnuclear.org/>

Founded in 1969, the Union of Concerned Scientists is an independent, science-based nonprofit working for a healthy environment and a safer world.



## Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

November 22, 2011

Dr. Gregory B. Jaczko, Chairman  
Kristine L. Svinicki, Commissioner  
Dr. George Apostolakis, Commissioner  
Dr. William D. Magwood IV, Commissioner  
William C. Ostendorff, Commissioner

Dear Mr. Chairman and Commissioners:

The subject of this letter is the old saying, "Do as I say, not as I do." We are concerned about the nuclear safety implications from the Nuclear Regulatory Commission's employment of this practice.

### DO AS I SAY

The NRC's inspectors frequently identify longstanding violations of safety requirements at individual nuclear power plants that result in the agency sanctioning their owners. UCS selected eight samples from the sanctions available via the NRC's online inspection finding summary.<sup>1</sup> The following samples include the two most serious sanctions and a representative mix of the numerous white and green sanctions:

Sanction	Finding
Red	Browns Ferry Unit 1 operated from March 13, 2009, to October 23, 2009, (7.4 months) with one redundant half of a low pressure emergency core cooling system inoperable.
Yellow	From 2003 to 2008 (5 years), the Fort Calhoun licensee "failed to initiate corrective actions to ensure compliance of the external flooding design basis was maintained."
White	From 1997 to 2010 (13 years), the licensee failed "to ensure that some steps contained in Emergency Procedures at Cooper Nuclear Station would work as written and the concurrent failure to assure that a condition adverse to quality was promptly identified and corrected." The condition involved the response to a postulated fire.
White	Failure to include "appropriate acceptance criteria to ensure proper reassembly" of the lubricating oil cooler for emergency diesel generator 2A for Byron Unit 2 following maintenance on January 17, 2010, led to its failure during testing on November 17, 2010 (10 months).
Green	Workers at the Limerick nuclear plant failed "to correct a condition adverse to quality in accordance with 10 CFR 50 Appendix B, Criterion XVI, during the timeframe of June 1, 2008 to September 14, 2008" (3.4 months) by not initiating flushing of coolers for emergency core cooling system components being impaired by the buildup of silt in the cooling water.

<sup>1</sup> Available at: [http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/pim\\_summary.html](http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/pim_summary.html). NOTE: Sanctions are posted to this webpage for a finite period. Sanctions cited in this letter not currently on the summary of findings webpage will have been relocated to the archives at <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/prevqtr.html>.

Sanction	Finding
Green	For 3 years, the 125-volt dc battery system at the Columbia Generating Station was in a degraded and unanalyzed condition because the test procedure had non-conservative acceptance criteria.
Green	For nearly 18 months, a door credited as a 1-hour fire barrier in the fire hazards analysis for Diablo Canyon Unit 1 was in a degraded condition.
Green	The Seabrook licensee failed to monitor the condition of the intake transition structure (used in obtaining cooling water from the Atlantic Ocean for the facility) between 1995 and 2009 (14 years) as required by NRC regulation 10 CFR 50.65.

The duration of the violation was among the factors the NRC considered in determining the severity of the associated sanction. Other factors included the risk importance of the system, structure, or component and the likelihood that the impairment would have contributed to an accident. However, all other things being equal, shorter-term violations received less severe sanctions than violations lasting for longer periods.

The NRC's inspection findings and sanctions make it abundantly clear that the agency quite properly does not tolerate its licensees taking unjustifiably long to resolve safety problems at individual plants. The NRC recognizes that lack of timeliness has adverse nuclear safety implications.

#### NOT AS I DO

In contrast, the NRC pays little attention to timeliness when it comes to dealing with the generic safety issues that are in its court. The NRC submits semiannual reports to Congress about its progress in certain areas. The most recent report<sup>2</sup> informed the Congress of the status of five open generic issues. The semiannual report did not indicate when the NRC identified and initiated work on these five generic issues. That information was found in the NRC staff's internal memo on the generic issues program.<sup>3</sup> Combined, these two status reports yield the following information:

Generic Issue Number	Status
186	Titled "Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants," this safety issue has been unresolved for over 12 years. It was scheduled for closure in October 2011.
189	Titled "Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident," this safety issue has been unresolved for over 10 years. It was scheduled for closure in October 2011.

<sup>2</sup> Available online at <http://www.nrc.gov/reading-rm/doc-collections/congress-docs/correspondence/2011/carper-06-02-2011.pdf>

<sup>3</sup> The most recent report (April 2011) is available online at <http://adamswebsearch2.nrc.gov/IDMWS/ViewDocByAccession.asp?AccessionNumber=ML110810919>

Generic Issue Number	Status
191	Titled "Assessment of Debris Accumulation on PWR Sump Performance," this safety issues has been unresolved for over 15 years. Despite working on this safety issue for a decade and a half, the NRC does not have a closure date scheduled. The NRC informed Congress that it "will determine a closure date for this GI after meeting with the Commission in mid-2012."
193	Titled "BWR ECCS Suction Concerns," this safety issue has been unresolved for 9.3 years. Despite working on this safety issue for nearly a decade, the NRC has neither scheduled a target closure date nor identified a date when that target might be determined.
199	Titled "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States for Existing Reactors," this safety issue – the 'baby' among the five – has been unresolved for a mere 6.3 years. Despite having worked on this safety issue for over half a decade, the NRC has not yet identified a target closure date.

The average duration of these five unresolved safety issues is 10.7 years, and counting. Safety IOUs protect zero Americans. If a U.S. pressurized water reactor experienced an accident made worse by an unresolved sump issue, the NRC could not defend itself very well by pointing out that it was only 8 months away from determining a target closure date for this 15 year old safety problem.

#### DO AS I SAY, NOT AS I DO

The NRC often sanctions its licensees for improperly evaluating a non-conforming condition and consequently not correcting it swiftly enough, and for the closely related malady of identifying a non-conforming condition but not resolving it in a timely fashion. For example, the Cooper sanction summarized above entailed the latter problem: the NRC's inspectors determined that workers identified the problem and entered it into the site's corrective action program, but had not taken action to resolve it.

As another example, the NRC sanctioned the Davis-Besse licensee in October 2011 with a green finding for the following problem:<sup>4</sup>

Specifically, the inspectors identified a trend on the part of the licensee to leave certain low significance/low priority corrective actions for various safety-related SSCs [structures, systems and components] completely unscheduled and unaddressed, in some cases for extensive periods of time that ranged up to 8 years.

The Davis-Besse licensee allowed unresolved safety problems to languish for up to eight years and was sanctioned by the NRC for this unacceptable practice. Yet the NRC lets unresolved safety problems languish on its plate for far longer periods.

The NRC's Generic Issue 193 involves the emergency core cooling systems at boiling water reactors. The red finding that the NRC issued to Browns Ferry's owner was for a problem affecting only one half of

<sup>4</sup> NRC inspection report available online at <http://adamswebsearch2.nrc.gov/IDMWS/ViewDocByAccession.asp?AccessionNumber=ML112991544>

one emergency core cooling system at this boiling water reactor. The other half of that system and all other emergency core cooling systems were totally unaffected. Having that sub-part of the emergency core cooling systems impaired for 7.4 months at this one boiling water reactor warranted a Red finding. Having questions about the entire array of emergency core cooling systems at every boiling water reactor in the United States can somehow remain unanswered by the NRC after nearly a decade. That's unacceptable.

The NRC's Generic Issue 199 involves seismic hazards in the central and eastern United States, which are greater than they were understood to be when the 27 reactors in this region were designed, constructed, and placed into operation. This issue has been unresolved for over six years now. Yet the NRC issued a yellow finding to Fort Calhoun's owner for operating for five years with its design flood protection levels less than the known flooding hazard. And the green finding that the NRC issued to Diablo Canyon's owner was for the 18 month degradation of one small part (a single door) below the level needed against the known fire hazard. Having inadequate protection against the external hazards posed by floods and fires warranted sanctions by the NRC at Fort Calhoun and Diablo Canyon. Having inadequate protection against the external seismic hazard at up to 27 reactors for more than six years—and without a target resolution date—is inexcusable.

Generic safety problems at nuclear power plants have to be resolved in a timely manner, just as do those tracked by the plant owners at individual reactors. Those generic safety problems being sidetracked by the NRC need to get back on the main line to ensure they are resolved in a timely fashion.

JUST DO IT

The NRC properly holds its licensees accountable for resolving safety problems in a timely manner.

The NRC must be equally accountable for resolving generic safety problems in a timely manner.

It is simply unacceptable for the NRC to not even have target closure dates for three of its five open unresolved generic issues so long after their initiation. The NRC must establish target dates for generic issues, even if target dates have to be later revised. Similarly, the NRC must establish target dates for implementation of the lessons learned from Fukushima.

We urge you to require the NRC staff to establish target dates for resolving generic safety issues and implementing the lessons learned from Fukushima.

Sincerely,



David Lochbaum  
Director, Nuclear Safety Project

(423) 468-9272, office  
P.O. Box 15316  
Chattanooga, TN 37415