

EDO Principal Correspondence Control

FROM: DUE: 04/11/07

EDO CONTROL: G20070163
DOC DT: 03/13/07
FINAL REPLY:

David A. Lochbaum
Union of Concerned Scientists

TO:

Reyes, EDO

FOR SIGNATURE OF :

** GRN **

CRC NO:

Reyes, EDO

DESC:

ROUTING:

Safety Culture Problems at Point Beach

Reyes
Virgilio
Kane
Silber
Johnson
Cyr/Burns
Borchardt, NRO
Carpenter, OE
Caldwell, RIII

DATE: 03/14/07

ASSIGNED TO:

CONTACT:

NRR

Dyer

SPECIAL INSTRUCTIONS OR REMARKS:

Coordinate with OE, Region III and NRO, as appropriate.

Template: EDO-001

E-RIDS: EDO-01



Union of Concerned Scientists

Citizens and Scientists for Environmental Solutions

March 13, 2007

Luis A. Reyes
Executive Director for Operations
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

**SUBJECT: NRC'S THUNDERING SILENCE – SAFETY CULTURE PROBLEMS AT
POINT BEACH**

Dear Mr. Reyes:

The Nuclear Regulatory Commission (NRC) staff has expended considerable effort identifying and inducing the remediation of safety culture problems at the Point Beach nuclear plant in Wisconsin. We wonder why the agency has not utilized its generic communications program to inform other licensees about Point Beach's safety culture problems. The agency has routinely used its generic communications program to alert licensees to Point Beach's equipment problems. For example, in the past five years the NRC called the industry's attention to these equipment problems at Point Beach:

- Information Notice 2006-31:¹ The licensee identified that postulated three-phase fault currents in the electrical distribution system exceeded the maximum listed interrupting rating of circuit breakers and associated bus bar bracing rating for some of the 13.8 kV, 4.16 kV, and 480 V switchgear.
- Information Notice 2005-19:² The Emergency Plan specified instrument and control (I&C) technicians as 30-minute responders and relied on on-shift auxiliary equipment operators to collect seismic data. A subsequent change replaced the seismic instrumentation with an instrument using a laptop computer to retrieve seismic data. Only I&C technicians were trained to use the laptop to retrieve seismic data. As a result, the licensee could not have assessed the seismic activity to support timely declaration of an emergency condition.
- Information Notice 2005-16:³ During refueling of Unit 1 with the reactor in midloop operations, the installation of hot leg nozzle dams was authorized prior to establishing an adequate reactor coolant system vent path.

¹ Nuclear Regulatory Commission Information Notice 2006-31, "Inadequate Fault Interrupting Rating of Breakers," December 26, 2006.

² Nuclear Regulatory Commission Information Notice 2005-19, "Effect of Plant Configuration Changes on the Emergency Plan," July 18, 2005.

³ Nuclear Regulatory Commission Information Notice 2005-16, "Outage Planning and Scheduling – Impacts on Risk," June 20, 2005.

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- Information Notice 2004-07:⁴ Point Beach experienced lakeweed clogging of the 3/8-inch diameter tubes of safety-related coolers on the G1/G2 emergency diesel generators.
- Information Notice 2004-01:⁵ On October 24, 2002, the flow through the auxiliary feedwater (AFW) pump recirculation line was 64.5 gpm, less than the 70 gpm acceptance criterion. Investigation identified 24 of the 54 holes in the restricting orifice to be blocked with debris. It was found that the basket strainer on the service water system had a larger mesh size than the restricting orifice's channel holes.
- Information Notice 2002-29:⁶ A The licensee identified a potential common mode failure of the auxiliary feedwater (AFW) system in that a loss of the instrument air system could cause the AFW minimum flow recirculation valves to fail closed.
- Information Notice 2002-27:⁷ A fire at Point Beach Unit 1 on April 24, 2001, during shutdown lasted for 23 minutes and left 50 percent of the containment basement floor, 30 percent of the "A" reactor coolant pump vault, and 50 percent of the "A" steam generator vault covered in soot and/or white dust from the dry chemical fire extinguishing agent.

Over the same five year span, the NRC has issued the following generic communications to the industry about safety culture problems at Point Beach:

Here's that same listing sorted chronologically:

And now the listing sorted from most consonants to least consonants:

It's not like the NRC didn't have anything to share with industry about safety culture problems at Point Beach. Here are but some of the many examples of safety culture problem information not generically communicated to the industry by the NRC:

⁴ Nuclear Regulatory Commission Information Notice 2004-07, "Plugging of Safety Injection Pump Lubrication Oil Coolers with Lakeweed," April 7, 2004.

⁵ Nuclear Regulatory Commission Information Notice 2004-01, "Auxiliary Feedwater Pump Recirculation Line Orifice Fouling – Potential Common Cause Failure," January 21, 2004.

⁶ Nuclear Regulatory Commission Information Notice 2002-29, "Recent Design Problems in Safety Functions of Pneumatic Systems," October 15, 2002.

⁷ Nuclear Regulatory Commission Information Notice 2002-27, "Recent Fires at Commercial Nuclear Power Plants in the United States," September 20, 2002.

- Nuclear Management Company's presentation at annual assessment public meeting:⁸ Recent safety culture survey rated overall nuclear safety culture as good to very good, general culture and work environment as adequate to good, management practices as adequate, and response to INPO SOER 02-04 as adequate to good.
- NRC PI&R IR 2005-12:⁹ NRC inspectors reported "results of the most recent survey culture indicated a significant decline in the general trust environment since the previous survey, that several significant employee perceptions affected the results of the survey, and that some specific departments needed management attention."
- NRC / NMC Safety Culture Meeting:¹⁰ The NRC met with the licensee in a March 2006 public meeting to discuss the results from the December 2004 safety culture survey and the steps taken and to be taken to address weaknesses identified by the survey.
- NRC's Mid-cycle Performance Review:¹¹ The NRC informed the licensee of its plans to review the results from an August 2006 safety culture survey in its baseline problem identification and resolution inspection scheduled for December 2006.
- NRC's 50.7-related Confirmatory Order:¹² The NRC's Office of Investigations concluded that an NRC-licensed senior reactor operator at Point Beach had been discriminated against, in part, for raised safety concerns using the corrective action program. Under the terms of the NRC's Confirmatory Order, the licensee agreed to, among other things, develop action plans to address significant issues identified as needing management attention in the 2004 and 2006 comprehensive cultural assessments.

The NRC takes steps to ensure its licensees address actual and potential safety problems at nuclear power plants. When those safety problems involve equipment issues, the NRC also takes steps via its generic communications program to ensure other licensees are at least aware of the issues. But when those safety problems involve non-equipment issues like the safety culture problems at Point Beach, the NRC does not employ its generic communications program to inform other licensees. A perusal of issuances from the generic communications program (browse <http://www.nrc.gov/reading-rm/doc-collections/gen-comm/>) reinforces this point.

UCS believes it is very wrong for the NRC to run its generic communications program with a myopic focus on equipment problems. The operating experience programs used by licensees are very adept at taking information, evaluating it, and incorporating applicable lessons into training modules, procedures, and practices. But those programs don't function in a vacuum – they rely on inputs from sources such as the NRC's generic communications program.

⁸ Nuclear Management Company, "Point Beach Nuclear Plant," April 7, 2003.

⁹ Mark A. Satorius, Director – Division of Reactor Projects, Nuclear Regulatory Commission, to Dennis L. Koehl, Site Vice President, Nuclear Management Company, "Point Beach Nuclear Plant, Units 1 and 2 – NRC Problem Identification and Resolution Inspection Report No. 05000266/2005012 and 05000301/2005012," November 16, 2005.

¹⁰ Patrick L. Loudon, Chief – Branch 5 Division of Reactor Projects, Nuclear Regulatory Commission, to Dennis L. Koehl, Site Vice President, Nuclear Management Company, "Public Meeting on March 23, 2006, to Discuss Point Beach Safety Culture Survey Results," April 3, 2006.

¹¹ James L. Caldwell, Regional Administrator, Nuclear Regulatory Commission, to Dennis L. Koehl, Site Vice President, Nuclear Management Company, "Mid-Cycle Performance Review and Inspection Plan – Point Beach Nuclear Plant," August 31, 2006.

¹² Cynthia A. Carpenter, Director – Office of Enforcement, Nuclear Regulatory Commission, to Douglas E. Cooper, Senior Vice President & Chief Nuclear Officer, Nuclear Management Company, "Confirmatory Order (Effective Immediately) (Office of Investigation Report No. 3-2005-010)," January 3, 2007.

We strongly urge you to fix whatever is wrong with the NRC's generic communications program to enable it to alert licensees to safety culture problems as it as long alerted them to equipment problems.

Sincerely,

A handwritten signature in black ink, appearing to read "David O. Lochbaum". The signature is written in a cursive, flowing style.

David Lochbaum
Director, Nuclear Safety Project

From: "Dave Lochbaum" <dlochbaum@ucsusa.org>
To: "Luis Reyes" <lar1@nrc.gov>
Date: 03/13/2007 10:43:34 AM
Subject: Point Beach safety culture

Dear Mr. Reyes:

Attached is an electronic copy of a letter on safety culture at Point Beach, or more specifically the NRC's non-use of its generic communications program to inform its licensees about non-equipment problems. We don't intend to also submit a hard copy, unless you request one.

We think this is a problem for operating reactors. We also believe it is a problem if construction of new reactors occurs. Past construction projects were fraught with non-equipment issues like QA breakdowns, severe H&I matters, and such.

The NRC must have a robust, aggressive generic communications program for old and new reactors.

Thanks,

Dave Lochbaum
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CC: "Scott Burnell" <SRB3@nrc.gov>

Mail Envelope Properties (45F6B88C.200 : 16 : 20992)

Subject: Point Beach safety culture
Creation Date 03/13/2007 10:45:45 AM
From: "Dave Lochbaum" <dlochbaum@ucsusa.org>

Created By: dlochbaum@ucsusa.org

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Mime.822	352926	

Options

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Priority: Standard
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Security: Standard