

New Hampshire Yankee

Ted C. Feigenbaum
President and
Chief Executive Officer

NYN-90214

December 14, 1990

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Reference: Facility Operating License No. NPF-86, Docket No. 50-443

Subject: Licensee Event Report (LER) No. 90-026-00: Control Room Emergency Air
Cleanup and Filtration Subsystem Actuation

Gentlemen:

Enclosed please find Licensee Event Report (LER) No. 90-026-00 for Seabrook Station. This submittal documents an event which occurred on November 16, 1990, and is being reported pursuant to 10CFR50.73(a)(2)(iv).

Should you require further information regarding this matter, please contact Mr. Allen L. Legendre, Lead Engineer - Compliance, at (603) 474-9521, extension 2373.

Very truly yours,



Ted C. Feigenbaum

Enclosures: NRC Forms 366, 366A

TCF:WJT/act/ssl

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United States Nuclear Regulatory Commission
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cc: Mr. Thomas T. Martin
Regional Administrator
United States Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406

Mr. Noel Dudley
NRC Senior Resident Inspector
P.O. Box 1140
Seabrook, NH 03874

INPO
Records Center
1100 Circle 75 Parkway
Atlanta, GA 30339

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Seabrook Station	DOCKET NUMBER (2) 0 5 0 0 0 4 4 3	PAGE (3) 1 OF 0 4
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TITLE (4)
Control Room Emergency Air Cleanup and Filtration Subsystem Actuation

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)		
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)
1	1	16	90	02	6	1	2	14			0 5 0 0 0
											0 5 0 0 0

OPERATING MODE (9) 5	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)									
POWER LEVEL (10) 0 0 0	<input type="checkbox"/> 20.402(b)	<input type="checkbox"/> 20.405(e)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)						
	<input type="checkbox"/> 20.405(a)(1)(i)	<input type="checkbox"/> 50.38(a)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(e)						
	<input type="checkbox"/> 20.405(a)(1)(ii)	<input type="checkbox"/> 50.38(a)(2)	<input type="checkbox"/> 50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 386A)						
	<input type="checkbox"/> 20.405(a)(1)(iii)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(vii)							
	<input type="checkbox"/> 20.405(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)							
	<input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)							
<input type="checkbox"/> 20.405(a)(1)(vi)	<input type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 50.73(a)(2)(ix)								

LICENSEE CONTACT FOR THIS LER (12)

NAME Allen L. Legendre, Lead Engineer - Compliance, Extension 2373	TELEPHONE NUMBER AREA CODE: 6 0 3 4 7 4 - 9 5 2 1
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC

SUPPLEMENTAL REPORT EXPECTED (14)

<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On November 16, 1990, at 10:46 p.m. EST, an Engineered Safety Features (ESF) actuation occurred causing the Control Room Normal Makeup Air Subsystem (CBA) to transfer to the Control Room Emergency Air Cleanup and Filtration Subsystem.

The inadvertent ESF actuation occurred during the performance of a surveillance test. The I&C technician performing the test inadvertently operated the wrong control/display module (1-RM-RK-6507-A). The operation of this control module caused a high alarm condition in the train A west air intake radiation monitor. This condition initiated the transfer of the Control Room Normal Makeup Air Subsystem to the Control Room Emergency Makeup Air and Filtration Subsystem mode. The technician should have operated control/display module 1-RM-RK-6576-A (Containment High Range Radiation Monitor) as required by the test procedure. Module 1-RM-RK-6576-A is located to the immediate right of module 1-RM-RK-6507-A.

The primary root cause has been determined to be personnel error involving a lack of attention to detail. A contributing cause was failure to follow procedure. If the technician had referred to the procedure step prior to manipulating the switch he would have realized that he was on the wrong control module prior to initiating the high alarm resulting in the CBA actuation.

The technician involved was counselled on the event and the need for increased attention to detail. Additionally, the technician discussed the event and the lessons learned at meetings with I&C department personnel held on November 29, 1990.

This is the second event of this type involving personnel error resulting in a CBA actuation.

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		9 0	0 2 6	0 0	0 2	OF	0 4

TEXT (If more space is required, use additional NRC Form 365A's) (17)

On November 16, 1990 at 10:46 p.m. EST, while performing a surveillance procedure, an Engineered Safety Features (ESF) actuation [JE] occurred causing the Control Room Normal Makeup Air Subsystem (CBA) [VI] to transfer to the Control Room Emergency Air Cleanup and Filtration Subsystem.

Description of Event

During normal plant operation, the Control Room Normal Makeup Air Subsystem is aligned to deliver approximately 1000 cfm of outside air from remotely located intakes (500 cfm per intake). Opening of a discharge damper (CBA-DP-53A or 53B) satisfies a permissive to start its corresponding fan (CBA-FN-27A or 27B). Only one fan, CBA-FN-27A or 27B, with its associated damper will be operating under normal conditions. Redundant radiation monitoring instruments are provided for each remote intake. Detection of high radiation at either remote intake will automatically close the damper and shut down the fan. The Control Room Exhaust and Static Pressure Control Subsystem functions with exhaust fan (CBA-FN-15) operating and its discharge control damper modulating to maintain the Control Room complex at a pressure of at least (+) 1/8" W.G. with respect to adjacent areas.

The Control Room Emergency Makeup Air and Filtration Subsystem consists of fans CBA-FN-16A and 16B and its corresponding discharge dampers CBA-DP-27A and 27B. In the auto mode, these dampers will open upon receipt of a high radiation signal or a safety injection ("S") signal. Opening of these dampers will automatically start the associated fan CBA-FN-16A or 16B. A high radiation signal or starting fans 16A and 16B will trip CBA-FN-27A and 27B. (See Figure 1 for a diagram of the CBA system).

The inadvertent ESF actuation occurred during the performance of surveillance procedure IX1660.689, "R-6576-A Containment Post-LOCA Train "A" High-Range Area Radiation Monitor Operational Test". The I&C technician performing the test inadvertently operated the wrong RM-23 control/display module (1-RM-RK-6507-A). The operation of this control module caused a high alarm condition in the train A west air intake radiation monitor. This condition initiated the transfer of the Control Room Normal Makeup Air Subsystem to the Control Room emergency Makeup Air and Filtration Subsystem mode. The technician should have operated control/display module 1-RM-RK-6576-A (Containment High Range Radiation Monitor), located to the immediate right of module 1-RM-RK-6507-A, as required by step 8.1.5 of the test procedure.

Safety Consequences

There were no adverse safety consequences as a result of this event. All equipment operated as designed fulfilling the Engineered Safety Features (ESF) function. At no time during this event was there any impact on the health and safety of plant employees or the public.

Root Cause

The primary root cause of this event has been determined to be personnel error involving a lack of attention to detail. A contributing cause was failure to follow procedure. If the technician had referred to the procedure step prior to manipulating the switch he would have realized that he was on the wrong control module prior to initiating the high alarm resulting in the CBA actuation.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Seabrook Station	DOCKET NUMBER (2) U 5 0 1 0 0 4 4 3	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
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TEXT (If more space is required, use additional NRC Form 266A's) (17)

Corrective Actions

The technician involved was counselled on the event and the need for increased attention to detail. Additionally, the technician discussed the event and the lessons learned at meetings with I&C department personnel held on November 29, 1990.

Plant Conditions

At the time of the event, the plant was in Mode 5, Cold Shutdown, with a Reactor Coolant System [AB] temperature of 120 degrees Fahrenheit and pressure of 0 psig.

Similar Events

This is the second event of this type involving personnel error resulting in a CBA actuation. The previous event was reported by LER 90-024-00.

FACILITY NAME (1)

DOCKET NUMBER (2)

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Seabrook Station

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TEXT (if more space is required, use additional NRC Form 305A's) (17)

FIGURE 1

