

# New Hampshire Yankee

Ted C. Feigenbaum  
President and  
Chief Executive Officer

NYN- 91113

July 12, 1991

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

Attention: Document Control Desk

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

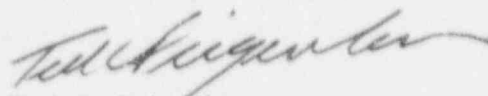
Subject: Licensee Event Report (LER) No. 91-007-00: Actuation of Control Room  
Emergency Air Cleanup and Filtration Subsystem

Gentlemen:

Enclosed please find Licensee Event Report (LER) No. 90-007-00 for Seabrook Station. This report documents an event which occurred on June 15, 1991, and is being submitted 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/ssl

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July 12, 1991  
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## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Seabrook Station										DOCKET NUMBER (2) 0 5 0 0 0 4 1 4 3				PAGE (3) 1 OF 0 3										
TITLE (4) Actuation of the Control Room Emergency Air Cleanup and Filtration Subsystem																								
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)											
0	6	1	5	9	1	9	1	0	0	7	0	0	0	7	1	2	9	1	0	5	0	0	0	0
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5 (Check one or more of the following) (11)																						
1		20.402(b)				20.406(c)				<input checked="" type="checkbox"/> 50.73(a)(2)(iv)				73.71(b)										
POWER LEVEL (10)		20.406(a)(1)(i)				50.36(a)(1)				50.73(a)(2)(v)				73.71(a)										
1		20.406(a)(1)(ii)				50.36(a)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text NRC Form 308A)										
		20.406(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)														
		20.406(a)(1)(iv)				50.73(a)(2)(ii)				50.73(a)(2)(viii)(B)														
		20.406(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)														
LICENSEE CONTACT FOR THIS LER (12)																								
NAME Allen L. Legendre, Lead Engineer-Compliance, Extension 2373										TELEPHONE NUMBER 610 134 1714 - 19 1512 11														
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	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRC					
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH DAY YEAR												
<input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)										<input checked="" type="checkbox"/> NO														

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single space typewritten lines) (16)

On June 15, 1991, at 8:23 a.m. EDT, 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 ESF actuation occurred while transferring the CBA ventilation from train "B" to train "A". The operator performing the transfer inadvertently operated the control switch for damper CBA-DP-27A. When this damper opened, fan CBA-FN-16A automatically started. The operator should have operated the control switch for fan CBA-FN-27A as required by step 6.6.2.1 of procedure OS1023.51, "Control Room Ventilation and Air Conditioning System Operation".

The root cause of this event has been determined to be personnel error involving a lack of attention to detail.

A contributing cause was the close proximity and the labeling of the two control switches.

Each Shift Superintendent will discuss this event and the lessons learned with their respective operating crews. In addition, the feasibility of a design change to improve the human factors in this area will be evaluated.

This is the third event of this type at Seabrook Station.

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED DMB NO. 3192-0104

EXPIRES 8-31-88

FACILITY NAME (1)  Seabrook Station	DOCKET NUMBER (2)  0 5 0 0 0 4 4 3 9 1	LER NUMBER (5)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		— 0 0 7	— 0 0 0 2	OF 0 3			

TEXT (If more space is required, use additional NRC Form 360a 1/17)

On June 15, 1991 at 8:23 a.m. EDT, 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 two remotely located intakes (500 cfm per intake). Opening of a discharge damper (CBA-DP-53A or CBA-DP-53B) for train "A" or train "B" respectively satisfies a permissive to start the train's corresponding fan (CBA-FN-27A or CBA-FN-27B). Only one fan, CBA-FN-27A or CBA-FN-27B, with its associated damper will be operating during normal operation. 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" Water Gauge with respect to adjacent areas.

The Control Room Emergency Makeup Air and Filtration Subsystem consists of fans CBA-FN-16A and CBA-FN-16B and their corresponding discharge dampers CBA-DP-27A and CBA-DP-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 CBA-FN-16B. A high radiation signal or starting fans CBA-FN-16A or CBA-FN-16B will trip CBA-FN-27A or CBA-FN-27B.

The ESF actuation occurred while the CBA ventilation line up was being transferred from train "B" to train "A". The operator performing the transfer inadvertently operated the control switch for damper CBA-DP-27A. When this damper opened, CBA-FN-16A automatically started which is an ESF actuation. The operator should have operated the control switch for an CBA-FN-27A as required by step 6.6.2.1 of procedure GS1023.51, "Control Room Ventilation and Air Conditioning System Operation".

#### Safety Consequences

There were no adverse safety consequences as a result of this event. All equipment operated as designed, thus 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 the close proximity and the labeling of the two control switches (CBA-FN-27A and CBA-DP-27A).

## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES 8/31/00

FACILITY NAME (1)  Seabrook Station	DOCKET NUMBER (2)  0500044391	LER NUMBER (6)			PAGE (3)  03 OF 03
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
		00	07	00	

TEXT (if more space is required, use additional NRC Form 365A (17))

Corrective Actions

Each Shift Superintendent will discuss this event and the lessons learned with their respective operating crews. In addition, the feasibility of a design change to improve the human factors in this area will be evaluated.

At the time of the event, the plant was in Mode 1, Power Operations, at 100% power, with a Reactor Coolant System (AB) temperature of 587 degrees Fahrenheit and pressure of 2235 psig.

This is the third event of this type at Seabrook Station. The previous events were reported by LER's 90-024-00 and 90-026-00.