



CONNECTICUT YANKEE ATOMIC POWER COMPANY

HADDAM NECK PLANT

RR#1 • BOX 127E • EAST HAMPTON, CT 06424-9341

November 29, 1990

Re: 10CFR50.73(a)(2)(v)(D)

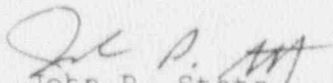
U. S. Nuclear Regulatory Commission
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Washington, D. C. 20555

Reference: Facility Operating License No. DPR-61
Docket No. 50-213
Reportable Occurrence LER 50-213/90-025-00

Gentlemen:

This letter forwards the Licensee Event Report 90-025-00, required to be submitted, pursuant to the requirements of Connecticut Yankee Technical Specifications.

Very truly yours,


John P. Stetz
Station Director

JPS/dl

Attachment: LER 50-213/90-025-00

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

J. T. Shedlosky
Sr. Resident Inspector
Haddam Neck

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LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) **Haddam Neck** DOCKET NUMBER (2) **0 5 0 0 0 0 2 1 3 1** PAGE (3) **1 OF 0 3**

TITLE (4) **Auxiliary Feedwater Flow Instrumentation Potentially Unqualified**

EVENT DATE (5)				LER NUMBER (6)				REPORT DATE (7)				OTHER FACILITIES INVOLVED (8)															
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)													
1	0	0	6	9	0	9	0	0	2	5	0	0	1	1	2	9	9	0			0	5	0	0	0		

OPERATING MODE (9) **5** THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following: (11))

POWER LEVEL (10) 0, 0, 0	20.402(a)	20.405(a)	50.73(a)(2)(iv)	72.71(b)
	20.405(a)(1)(ii)	50.36(a)(1)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)	72.71(c)
	20.405(a)(1)(iii)	50.36(a)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text NRC Form 365a)
	20.405(a)(1)(iv)	50.73(a)(2)(i)	50.73(a)(2)(vii)(A)	
	20.405(a)(1)(v)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(vi)	50.73(a)(2)(iii)	50.73(a)(2)(ix)(1)(B)	
	20.405(a)(1)(vii)	50.73(a)(2)(iv)	50.73(a)(2)(ix)(2)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **L. E. Lebaron, Associate Engineer** TELEPHONE NUMBER **2 0 3 2 6 7 - 2 5 5 6**

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15) MONTH **11** DAY **15** YEAR **1990**

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

ABSTRACT

On November 1, 1990, at 0945 hours, with the plant in Mode 5 (cold shutdown) a reportability evaluation determined that the terminations on the auxiliary feedwater flow transmitters may not have performed their function in a harsh environment prior to October 6, 1990, and that this condition was reportable under 10CFR50.72(b)(2)(iii). This condition existed since August 25, 1990, when operator action to control auxiliary feedwater was credited in the steam line break outside containment accident analysis. The root cause of this event was an inadequate engineering review conducted in 1981 that incorrectly determined that the instruments did not require environmental qualification. No immediate corrective action was necessary since the terminations were replaced on October 6, 1990, with qualified splices. Since 1981 additional emphasis has been placed on equipment qualification resulting in more detailed reviews that should prevent recurrence of this type of event. This event is reportable under 10CFR50.73(a)(2)(v)(D) since a condition existed that alone could have prevented the fulfillment of the safety function of a system needed to mitigate the consequences of an accident.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Haddam Neck	DOCKET NUMBER (2) 0 6 0 0 0 2 1 3 9 0	LER NUMBER (3)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		0	2	5	0	0	2

TEXT IF more space is required, use additional NRC Form 288A's (17)

BACKGROUND INFORMATION

The auxiliary feedwater system (EIIS Code: BA) provides flow to the steam generator through the four main feedwater (EIIS Code: 50) bypass lines. These bypass lines allow feedwater flow around both the main feedwater flow control valves and the main feedwater stop valves. The flow in each of the four bypass lines is indicated on the main control board.

The auxiliary feedwater flow transmitters (EIIS Code: FT) FT-1301-1C, 2C, 3C and 4C were installed in 1979 under PDCR (Plant Design Change Request) 339 in response to "TMI Short Term Lessons Learned".

This indication meets the requirements of NUREG-0578, Section 2.1.7a, NUREG-0660, Section II.E.1.2 and NUREG-0737, Section II.E.1.2.4. This installation is not Category 1E, and is not Environmentally Qualified (EQ).

Plant Technical Specification Section 3.3.2.5, Table 3.3-7, "Accident Monitoring Instrumentation" requires all four AFW flow instruments to be operable in Modes 1, 2, and 3.

EVENT DESCRIPTION

On November 1, 1990, at 0945 hours, with the plant in Mode 5 (cold shutdown) a reportability evaluation determined that the terminations on the auxiliary feedwater flow transmitters may not have performed their function in a harsh environment prior to October 6, 1990, and that this condition was reportable under 10CFR50.72(b)(2)(iii). This condition existed since August 25, 1990, when operator action to control auxiliary feedwater was credited in the accident analysis for steam line break outside containment. Previously, it was believed that the instruments were located in a non-harsh environment so that they did not require environmental qualification. During a recent audit, it was determined that the instruments were located in a harsh environment (turbine building) and that they did require environmental qualification. Therefore, on October 6, 1990, since there was no documentation available that could substantiate that the terminations would perform their function in a harsh environment the instruments were conservatively removed from service for corrective action.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Haddam Neck	KEY NUMBER (2) 05000213	LER NUMBER (3)			PAGE (3)	
		YEAR 90	SEQUENTIAL NUMBER 025	REVISION NUMBER 00		
					03	OF 03

TEXT IF more space is required, use additional NRC Form 888A's (2)

CAUSE OF THE EVENT

The root cause of this event was an inadequate engineering review conducted in 1981 that incorrectly determined that the instruments did not require environmental qualification.

SAFETY ASSESSMENT

The event is reportable under 10CFR50.73(a)(2)(v)(D) since a condition existed that alone could have prevented the fulfillment of the safety function of a system needed to mitigate the consequences of an accident. The safety consequences of this event are minimal based on the following:

1. The AFW system was operable for the entire duration of this condition and was able to perform its function with or without flow indication.
2. The main method of ensuring heat removal capability is steam generator level indication. The wide range steam generator level instruments (two per steam generator) were operational during the entire duration of this condition. The failure of the AFW flow indication would not have prevented the operator from maintaining steam generator level in the required range.

Based on the above, plant safety was not adversely affected by this event.

CORRECTIVE ACTION

The terminations on the auxiliary feedwater flow transmitters were replaced with qualified Ray-Chem splices on October 6, 1990. Since 1981 additional emphasis has been placed on equipment qualification resulting in more detailed reviews that should prevent recurrence of this type of event.

ADDITIONAL INFORMATION

None

PREVIOUS SIMILAR EVENTS

- LER 90-016
- LER 90-022