CONNECTICUT YANKEE ATOMIC POWER COMPANY
HADDAM NECK PLANT
RR#1 • BOX 127E • EAST HAMPTON, CT 06424-9341

July 16, 1991
Re: 10CFR50.73(a)(2)(i)(B)

U. S. Nuclear Regulatory Commission
Document Control Desk
Washington, D. C. 20555

Reference: Facility Operating License No. DPR-61
Docket No. 50-213
Reportable Occurrence LER 50-213/91-013-00

Gentlemen:

This letter forwards the Licensee Event Report 91-013-00, 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 50-213/91-013-00

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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NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/88

LICENSEE EVENT REPORT (LER)

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

TITLE (4)
Load Reduction Due To Erratic Steam Flow Indication

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 5 0 0 0
0 6	2 0	9 1	9 1	0 1 3	0 0	0 7	1 6	9 1		0 5 0 0 0

OPERATING MODE (9)	1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	1 0 0	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
J. Leger, Associate Engineer	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

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

ABSTRACT

On June 20, 1991, at 1500 hours, with the plant in Mode 1 at 100 percent power, control room operators noted that the no. 1 steam generator steam flow indication was erratic and transferred the no. 1 feedwater regulating valve from automatic to manual to maintain proper feedwater control. Placing the valve in manual control defeats both channels of the steam generator overfill protection circuitry, therefore, a load reduction was initiated at 1518 hours in accordance with Technical Specification 3.0.3. At 1705 hours the NRC granted a temporary waiver of compliance with the feedwater isolation Technical Specification and the load reduction was terminated. The root cause of this event was inadequate licensee review of the initial feedwater isolation Technical Specification submittal. The erratic steam flow indication was a contributing cause, however, subsequent troubleshooting of the steam flow instrumentation did not reveal any apparent reason for the fluctuations. Corrective action consists of revising the Technical Specifications and reinforcing the need for increased attention to detail during the technical review of proposed Technical Specification changes. This event is reportable under 10CFR50.73(a)(2)(i)(B) since it resulted in a condition prohibited by the plant's Technical Specifications.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

BACKGROUND INFORMATION

The automatic feedwater isolation system (EIIS Code: JE) for the Haddam Neck plant consists of two trains of protection for each steam generator. Each train consists of one channel, each capable of closing the associated feedwater regulating valve (EIIS Code: FCV) at 69 percent steam generator wide range level. The system design is such that when a feedwater regulating valve is placed in manual the automatic feedwater isolation feature is defeated. License Amendment No. 136 dated May 6, 1991 revised Table 3.3-2, "Engineered Safety Features Actuation System Instrumentation" by adding a new section titled "6. Feedwater Isolation". This new section requires that a minimum number of 2 channels per steam generator be operable above 10 percent power for feedwater isolation. Action Statement No. 26 allows one channel to be inoperable for 24 hours, however, since placing a feedwater regulating valve in manual defeats both channels the 24 hour period cannot be utilized forcing entry into Technical Specification 3.0.3. The licensee identified this as a potential problem and submitted a proposed change to the Technical Specifications on June 14, 1991.

EVENT DESCRIPTION

On June 20, 1991, at 1500 hours, with the plant in Mode 1 at 100 percent power, control room operators noted that the no. 1 steam generator steam flow indication was erratic. Since steam flow is an input to the feedwater control system the no. 1 feedwater regulating valve was transferred from automatic to manual to maintain proper feedwater control. A load reduction was initiated at 1518 hours in accordance with Technical Specification 3.0.3. Also, due to the erratic steam flow indication, a steam flow/feed flow mismatch trip signal was inserted at 1548 hours for the no. 1 steam generator. This partial trip signal coincident with low steam generator level would initiate a reactor trip. At 1705 hours the NRC granted a temporary waiver of compliance with the feedwater isolation Technical Specification and the load reduction was terminated. Subsequent troubleshooting of the steam flow instrumentation did not reveal any apparent cause for the fluctuation and the valve was returned to automatic at 1820 hours.

CAUSE OF THE EVENT

The root cause of this event was inadequate licensee review of the initial proposed Technical Specification change request which was subsequently issued as License Amendment No. 136. A contributing cause was the erratic steam flow indication.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

SAFETY ASSESSMENT

This event is reportable under 10CFR50.73(a)(2)(i)(B) since it resulted in a condition prohibited by the plant's Technical Specifications. Since the action statement for item 6 of Table 3.3-2 does not address the inoperability of more than one channel it was necessary to implement Technical Specification Section 3.0.3. Prior to the implementation of Amendment 136, plant procedures allowed manual operation of the feedwater controllers. During such operation a "operator in attendance" policy is implemented. With one controller in manual, operation is handled by the control operator. With more than one controller in manual, an additional operator is called in to relieve the existing operator and is assigned to monitor the feedwater controllers The design basis excess feedwater analysis does not take credit for the automatic feedwater control system.

Steam generator high level indication provides annunciation in the control room when the controllers are in automatic or manual mode. Since level in the affected steam generator was already in manual control the operator would respond quickly to a high level alarm. If steam generator level cannot be controlled, feedwater to the affected loop is isolated with the associated feedwater isolation motor operated valve, thereby preventing an overfill condition. If level continues to rise, the operator would trip the reactor and turbine.

Given the above and since there has been no change in the way the plant is operated, the safety significance of this event is small.

CORRECTIVE ACTION

Corrective action consists of revising the Technical Specifications and reinforcing the need for increased attention to detail during the technical review of proposed changes to the Technical Specifications. Subsequent troubleshooting of the steam flow instrumentation did not reveal any apparent cause for the fluctuations and the no. 1 feedwater regulating valve was returned to automatic.

ADDITIONAL INFORMATION

None

PREVIOUS SIMILAR EVENTS

None