

## LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Yankee Nuclear Power Station, Rowe, Mass.										DOCKET NUMBER (2) 0 5 0 0 0 0 2 9										PAGE (3) 1 OF 0 2							
TITLE (4) Condensate Pump Trip Circuit Inoperable																											
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	2	0	8	5	8	5	0	0	6	0	0	1	2	2	0	8	5	0 5 0 0 0								
OPERATING MODE (9)		6		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		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)											
				20.405(a)(1)(i)				50.38(c)(1)				50.73(a)(2)(v)				73.71(c)											
				20.405(a)(1)(ii)				50.38(c)(2)				50.73(a)(2)(vi)				OTHER (Specify in Abstract below and in Text, NRC Form 365A)											
				20.405(a)(1)(iii)				50.73(a)(2)(i)				50.73(a)(2)(vii)(A)															
				20.405(a)(1)(iv)				X 50.73(a)(2)(ii)				50.73(a)(2)(vii)(B)															
				20.405(a)(1)(v)				50.73(a)(2)(iii)				50.73(a)(2)(ix)															
LICENSEE CONTACT FOR THIS LER (12)																		TELEPHONE NUMBER									
NAME Brian Darcy, Instrumentation and Control Dept. Supervisor																		AREA CODE		4 1 3				4 2 4 - 5 2 6 1			
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											
X	J E	B L K	X 9 9 9	N																							
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)

On November 20, 1985 with the plant in Mode 6 for refueling, during surveillance testing, the three main condensate pump circuit breakers failed to open on receipt of a simulated Containment Isolation System (CIS) "A" trip signal and a coincident Non-Return Valve (NRV) Main Steam Line Low Pressure trip signal. The trip circuit was declared inoperable. A four hour notification was made to the NRC.

The trip circuit failure was caused by an open circuit resulting from stripped threads on the test plug at point 1 on circuit terminal block 906. To ensure this condition does not recur, the test plug configuration was modified with a permanently installed jumper between the terminals. The circuit was tested satisfactory and declared operable at 2155 hours on November 20, 1985. The open, automatic, trip circuit would not have prevented the pumps from being tripped manually from the Control Room. There was no adverse effect to the health and safety of the public as a result of this event.

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## LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

APPROVED OMB NO. 3150-0104  
EXPIRES 8/31/85

FACILITY NAME (1)  Yankee Nuclear Power Station Rowe, Massachusetts	DOCKET NUMBER (2)  0 5 0 0 0 0 2 9	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

On November 20, 1985, with the plant in Mode 6 for refueling, during surveillance testing, the three main condensate pump circuit breakers failed to open on receipt of a simulated Containment Isolation System (CIS) "A" trip signal and a coincident Non-Return Valve (NRV) Main Steam Line Low Pressure trip signal. The trip circuit was declared inoperable and a four hour ENS notification was made to the NRC.

The surveillance test of this circuit is performed during each refueling outage. The last test was June 6, 1984.

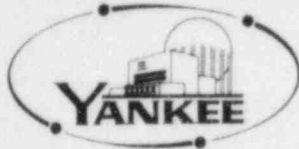
The failure of the trip circuit was due to an open circuit caused by stripped threads on the test plug at point 1 on circuit terminal board 906. To ensure this condition does not recur, the test plug configuration was modified with a permanently installed jumper between the terminals. The circuit was tested satisfactory and declared operable at 2155 hours on November 20, 1985. This is the first reportable occurrence of a test plug/terminal block failure of this type.

The circuit provides early termination of feedwater flow in the event of a steam line break inside the Vapor Container (VC). It operates on coincident NRV closure and CIS (Containment high pressure) trip signals. These two conditions are indicative of a main steam line break (MSLB) in the Vapor Container. If a MSLB had occurred in the VC during the time that the trip circuit was inoperative, the condensate pumps could have been tripped manually by the Control Room Operators (the open, automatic trip circuit would not have prevented the pumps from being tripped manually).

In addition, plant operating procedures require that, in the event of a reactor scram, the Control Room Operators immediately confirm the tripping of the Boiler Feed Pumps, and also that they close the motor operated and the air operated feed line isolation valves, thereby terminating feed flow.

A review of the analyses of potential accidents for which the condensate pump trip circuit provides protection to the plant, specifically, recriticality and containment excess pressure, show that operator immediate actions, in lieu of automatic actions, would be adequate to terminate feedwater flow. Therefore, there was no adverse effect to the health and safety of the public as a result of this event.

# YANKEE ATOMIC ELECTRIC COMPANY



Rowe, Massachusetts 01367

December 20, 1985

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

Reference: (a) License No. DPR-3 (Docket 50-29)  
(b) YAEK Letter to NRC dated May 8, 1980, "Response to IE  
Bulletin No. 80-04"

Subject: Licensee Event Report 50-29/85-06, Revision 0  
Condensate Pump Trip Circuit Inoperable

Dear Sir:

In accordance with 10 CFR 50.73(a)(2)(ii), the attached Licensee Event Report, is hereby submitted.

Very truly yours,

Normand N. St. Laurent  
Plant Superintendent

DAR/nm  
Enclosure

cc: [3] NSARC Chairman (YAEK)  
[1] Institute of Nuclear Power Operations (INPO)

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