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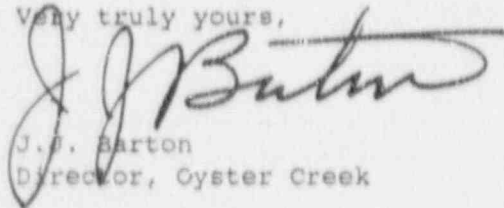
U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Dear Sir:

Subject: Oyster Creek Nuclear Generating Station  
Docket No. 50-219  
Licensee Event Report

This letter forwards one (1) copy of Licensee Event Report (LER) No. J-015.

Very truly yours,



J. J. Barton  
Director, Oyster Creek

Enclosure

cc: Mr. Thomas Martin, Administrator  
Region I  
U.S. Nuclear Regulatory Commission  
475 Allendale Road  
King of Prussia, PA 19406

Mr. Alexander W. Dromerick  
U.S. Nuclear Regulatory Commission  
Mail Station P1-137  
Washington, DC 20555

NRC Resident Inspector  
Oyster Creek Nuclear Generating Station  
Forked River, NJ 08731

(docs/ler/covltrs)

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LICENSEE EVENT REPORT (LER):

FACILITY NAME (1): Oyster Creek, Unit 1  
DOCKET NUMBER (2): 0 5 0 0 0 2 1 9 1  
PAGE (3): 1 OF 0 4

TITLE (4): Two Isolation Condenser Pipe Break Sensors Found Out of Specification Due to Excessive Drift

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						
1	2	1	9	0	9	0	0	1	5	0	0	0	0	0	0
									DOCKET NUMBER(S): 0 5 0 0 0						
									DOCKET NUMBER(S): 0 5 0 0 0						

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5				tick one or more of the following: (11)			
POWER LEVEL (10): 5.5	20.402(b)	20.406(a)	60.73(a)(2)(iv)	73.71(b)				
	20.406(a)(1)(i)	60.36(a)(1)	60.73(a)(2)(v)	73.71(a)				
	20.406(a)(1)(ii)	60.36(a)(2)	60.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 305A)				
	20.406(a)(1)(iii)	X 60.73(a)(2)(i)	60.73(a)(2)(vii)(A)					
	20.406(a)(1)(iv)	60.73(a)(2)(ii)	60.73(a)(2)(vii)(B)					
20.406(a)(1)(v)	60.73(a)(2)(iii)	60.73(a)(2)(viii)						
20.406(a)(1)(vi)	60.73(a)(2)(iv)	60.73(a)(2)(ix)						

LICENSEE CONTACT FOR THIS LER (12):  
NAME: Paul Cervanka  
TELEPHONE NUMBER: AREA CODE 6 1 0 1 9 9 7 1 1 - 1 4 1 8 1 9 1 4

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
B	B	L P D	I S 1	2 0 4					

SUPPLEMENTAL REPORT EXPECTED (14):  
YES (If yes, complete EXPECTED SUBMISSION DATE):  
NO

EXPECTED SUBMISSION DATE (15): MONTH DAY YEAR

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

During a surveillance test on December 21, 1990 at 0940 hours, both of the "B" Isolation Condenser condensate return line pipe break sensors were found to trip at a differential pressure greater than the maximum allowable trip setpoint specified in the technical specifications. At the time of the occurrence the plant was in the RUN mode at 55% power. The cause of the event is excessive component drift experienced since a 1980 field modification on the switches. The safety significance is minimal due to the operability of the pipe break sensors at a slightly higher setpoint. Immediate corrective action was taken to adjust the switches to trip within Technical Specification limits. Long term corrective action will be to replace these sensors as presently committed in the Integrated Schedule.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (3)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
	0   5   0   0   0				OF

TEXT (if more space is required, use additional NRC Form 888A's) (17)

DATE OF OCCURRENCE

The condition occurred on December 21, 1990 at approximately 0940 hours.

IDENTIFICATION OF OCCURRENCE

During a surveillance test, the "B" Isolation Condenser condensate return line pipe break sensors were found to trip at a differential pressure greater than the maximum allowable trip setpoint specified in the Technical Specification. This event is considered reportable in accordance with 10CFR50.73(a)(2)(i)(B).

CONDITIONS PRIOR TO OCCURRENCE

The plant was in the RUN mode at approximately 55% power.

DESCRIPTION OF OCCURRENCE

On December 21, 1990 at approximately 0940 hours an instrument technician performed the scheduled monthly test of the Isolation Condenser (E11S Code BL) pipe break sensors (IEEE component code PDIS). Both of the "B" Isolation Condenser condensate return line pipe break sensors had trip setpoints, which had drifted above the maximum allowable setpoint specified in the Technical Specifications.

Surveillance test results were as follows:

SWITCH DESIGNATION	SENSOR LOCATION	TECH SPEC LIMIT	"AS FOUND"
IB11B1	Condensate Line, Cond. B	≤ 27 in H <sub>2</sub> O	29.1 in H <sub>2</sub> O
IB11B2	Condensate Line, Cond. B	≤ 27 in H <sub>2</sub> O	27.3 in H <sub>2</sub> O

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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			0 1 5	0 1 0	0 1 3	OF

TEXT IS PRINTED AS RECEIVED, AND CONTAINS NRC FORM 308A (1/77)

APPARENT CAUSE OF OCCURRENCE

Prior to 1980, the isolation condenser pipe break sensor differential pressure switches contained mercury switches. While these provided stable service, it was determined that their use would no longer be acceptable due to changes in seismic requirements. The internally installed mercury switches were replaced with snap-acting switches through a field modification program completed in 1980. The existing differential pressure unit, switch housing, and indicator were retained. The alignment of the snap-acting switch linkage within the housing must be precise in order for the device to properly function. Experience has shown that this precise alignment is difficult to achieve in field modifications. Since this modification, these switches have not demonstrated the desired setpoint repeatability. The switch performance is attributed to excessive drift due to the 1980 field modification.

ANALYSIS OF OCCURRENCE AND SAFETY ASSESSMENT

The purpose of the isolation condensers is to depressurize the reactor and to remove reactor decay heat in the event that the main condenser is unavailable as a heat sink. Four pipe break flow sensors are installed in the piping of each isolation condenser; two sensors are for the detection of high flow in the steam line, and two are for the detection of high flow in the condensate return line. Should one or more of these sensors detect a high flow condition lasting longer than 35 seconds, the isolation valves for that condenser are given a close signal and the control room alarm indicating a pipe break condition annunciates.

Technical Specifications specify the maximum allowable isolation condenser pipe break sensor differential pressure trip setpoints. These are approximately equivalent to 300% of normal rated flow. It should be noted that with the "B" Isolation Condenser actuated, a single steam line break sensor would have isolated the Isolation Condenser within the Technical Specification limit regardless of where the pipe break occurred. In this event, the "B" isolation condenser condensate return line would have isolated at approximately 301.6% of normal rated flow. In addition to the pipe break sensors, an isolation condenser condensate or steam line break would be detected by the alarming of the Area Radiation Monitoring System (EIS Code IL) and the Temperature Monitoring System (EIS Code IM) which have sensors near the isolation condenser steam and condensate lines. The control room operator is procedurally directed to manually isolate the affected condenser when it has been determined to be the source of the alarms.

Based on the above analysis, the safety significance of this occurrence is considered minimal.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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		YEAR	SEQUENTIAL NUMBER	
		0 1	1 5	

TEXT OF THIS EVENT IS PRESENTED, WITH EXPLANATION, NRC FORM 3054 (1/77)

CORRECTIVE ACTIONS

Immediate corrective action was taken to adjust the sensors to trip within Technical Specification limits. Long term corrective action is to replace these sensors as committed in the Oyster Creek Integrated Schedule.

SIMILAR EVENTS

LER No.	Title
80-050	"Isolation Condenser Pipe Break Sensor"
81-050	"Isolation Condenser Pipe Break Sensor"
81-070	"Isolation Condenser Pipe Break Sensor"
85-005	"6 of 8 Isolation Condenser Pipe Break Sensors Out of Specification"
86-003	"Three Out of Eight Isolation Condenser Pipe Break Sensors Out of Spec"
87-016	"Setpoints for Three Out of Eight Isolation Condenser Pipe Break Sensors Out of Specification Due to Instrument Drift"
88-006	"Past Modification Causes Four Isolation Condenser Pipe Break Sensors to be Out of Specification During Surveillance"
89-024	"Six Out of Eight Isolation Condenser Pipe Break Sensors Found Out of Specification Due to Excessive Drift"