

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Pilgrim Nuclear Power Station										DOCKET NUMBER (2) 0 5 0 0 0 0 0 0 0 0										PAGE (3) 1 OF 0 12																																			
TITLE (4) HFA Relay Problem																																																							
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)															
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OPERATING MODE (9) N									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)									50.36(c)(1)									X 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)									50.73(a)(2)(i)									50.73(a)(2)(viii)(A)																												
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LICENSEE CONTACT FOR THIS LER (12)																																																							
NAME P. J. Hamilton - Plant Engineer																				TELEPHONE NUMBER 6 1 7 7 4 6 - 7 9 0 0																																			
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																							
CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NPROS				CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NPROS																																			
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SUPPLEMENTAL REPORT EXPECTED (14)																																																							
YES (If yes, complete EXPECTED SUBMISSION DATE)																				X NO										EXPECTED SUBMISSION DATE (15)																									
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ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On 5/21/84, during a refueling outage, an HFA relay in the Reactor Protection System was found to be hot and smoking. The relay is a GE 5I series AC type and is normally energized. There was no fuel in the Reactor Vessel at the time of the event.

The relay was immediately de-energized and replaced with a GE "Century" series relay. The relay, although smoking, remained operable. Cause is attributed to previously identified generic HFA relay problems.

Long-term corrective action is being developed and will be included in the response to IE Bulletin No. 84-02 entitled "Failures of General Electric Type HFA Relays in Use in Class IE Safety Systems."

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) Pilgrim Nuclear Power Station Unit No. 1	DOCKET NUMBER (2) 0 5 0 0 0 2 9 3 8 4	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 368A's) (17)

On 5/21/84, during a refueling outage, HFA Relay 16A-K3C in the Reactor Protection System was observed to be smoking. The relay was discovered when Control Room operators noticed a burning smell coming from the panel (915) which contains the relay. The nameplate of the faulty relay is GE Model 12HFA51A49F, Type HFA, 115V, 60 Cycles. The subject relay is in the "A" channel of the RPS and provides a main steam line high flow trip signal if de-energized. This relay is normally energized and contains a nylon bobbin coil.

Prior to replacement, the smoking relay was de-energized and tested for resistance across the relay contacts. Test results prove that the smoking relay was operable at the time of replacement.

The relay was replaced with a GE Century series relay, Model #12HFA151A9F, Type HFA, 120V, 60 Cycles. Replacement was in accordance with General Electric (GE) Service Information Letter (SIL) #44, Supplement 2 and 4.

Cause of the relay smoking is attributed to the generic problems associated with HFA relays previously identified in several GE Service Advice Letters (SAL's), SIL's, and IE Bulletin 84-02. A corrective action plan is being developed to address the generic HFA relay problem and will be included in our response to IE Bulletin 84-02.

There have been five previously identified HFA relay problems, all of which have been with normally energized, AC, nylon bobbin coil relays.

This event did not impact the health and safety of the public.

BOSTON EDISON COMPANY
800 BOYLSTON STREET
BOSTON, MASSACHUSETTS 02199

WILLIAM D. HARRINGTON
SENIOR VICE PRESIDENT
NUCLEAR

BECO Ltr. #84-090
June 21, 1984

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

Docket No. 50-293
License DPR-35

Dear Sir:

The attached Licensee Event Report 84-008-00, "HFA Relay Problem," is hereby submitted in accordance with the requirements of 10CFR50.73.

If there are any questions on this subject, please do not hesitate to contact me.

Respectfully submitted,

W D Harrington
W. D. Harrington

PH/ko

Enclosure: LER 84-008-0

cc: Dr. Thomas E. Murley
Regional Administrator, Region 1
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

Standard BECO LER Distribution

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