

**LICENSEE EVENT REPORT**

CONTROL BLOCK: 

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 (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	M	A	P	P	S	1	2	0	0	-	0	0	0	0	0	-	0	0	3	4	1	1	1	1	4			5		
7	8	LICENSEE CODE						14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57	CAT		58

CON'T

REPORT SOURCE L 6 0 5 0 - 0 2 9 3 7 0 9 1 3 8 3 8 0 9 2 7 8 3 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On 9/13/83, during steady state operation, the "A" recirculation pump low low water level trip relay #16A-K8A was found to be smoking. Operations personnel immediately de-energized the normally energized relay to prevent further damage. Resistance measurements taken following the event revealed that one of the two sets of contacts would not have made contact as designed. Other redundant pump trip systems were operable. This event caused no threat to public health and safety.

09		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE							
7	8	C	B	11	E	12	A	13	R	E	L	A	Y	X	14	A	15	Z	16		
		9	10		11	12	13	14	15	16	17	18	19	20							
17		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.											
LER/RO REPORT NUMBER		8	3	—		0	4	7	/	0	1	T	—	0							
		21	22	23	24	25	26	27	28	29	30	31	32								
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER					
C	18	X	19	Z	20	Z	21	0	0	0	0	Y	23	N	24	N	25	G	0	8	0
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1		0	Overheating of the relay coil (G.E. Model 12HFA51A49F) coated one set of
1		1	contact surfaces which prevented the relay from completing the pump trip
1		2	circuit. The damaged relay was replaced with a Century Series relay (G.E.
1		3	12HFA151A9F) and the system returned to service. See attachment.

1 4 90

FACILITY STATUS		% POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION					
1	5	F	(28)	0	0	(29)	NA	A	(31)	Observation

7 8 9 10 12 13 44 45 46 80

ACTIVITY RELEASED CONTENT AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

PERSONNEL EXPOSURES		TYPE		DESCRIPTION	
NUMBER					
1	6	Z	(33)	Z	(34)
				NA	
				NA	

1 7 0 0 0 (37) Z (38) NA

PERSONNEL INJURIES		(41)
NUMBER	DESCRIPTION	
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NTA

1	8	0	0	0	(40)	NA	
7	8	9	11	12			80

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7 8 9 10 80

PUBLICITY ISSUED DESCRIPTION (45) NRC USE ONLY

2 0 N 44 NA

NAME OF PREPARED:

G. G. Whitney

PHONE: 617-746-7900

8310190174 830927  
PDR ADOCK 05000293  
S PDR

BOSTON EDISON COMPANY  
PILGRIM NUCLEAR POWER STATION  
DOCKET NO. 50-293

Attachment to LER 83-047/01T-0

The most probable root cause of the overheated relay coil (G.E. Model No. 12HFA51A49F) is believed to be thermal aging of the normally energized nylon bobbin coil. The overheated coil created by-products which coated the contact surfaces, thus preventing one set of contacts from completing their designed trip circuit. The damaged relay was replaced with a General Electric Company recommended replacement (G.E. Century Series 12HFA151A9F) and the system returned to service.

We are identifying the other relays of this type installed at PNPS and are reviewing whether they can fail in this same mode.

We are also developing appropriate actions, such as additional preventive maintenance, to preclude such events if the failures are identified to affect safety or overall plant reliability.

We believe the actions taken and to be taken are adequate to preclude recurrence of similar events.

BOSTON EDISON COMPANY  
800 BOYLSTON STREET  
BOSTON, MASSACHUSETTS 02199

WILLIAM D. HARRINGTON  
SENIOR VICE PRESIDENT  
NUCLEAR

September 27, 1983

BECO. #83-243

Regional Administrator, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Docket No. 50-293  
License DPR-35

Dear Sir:

The attached License Event Report 83-047/01T-0, "Recirculation Pump Trip Relay, 16A-K8A," is hereby submitted in accordance with the requirements of Pilgrim Nuclear Power Station Technical Specification 6.9.B.1.i.

If there are any questions on this subject, please contact us.

Respectfully submitted,

*W D Harrington*

WDH/baw

Enclosure: LER 83-047/01T-0

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

Standard BECO. LER distribution

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