NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Pilgrim Nuclear Power Station - Unit 1	0 5 0 0 0 2 9 3	1 OF 0 3

TITLE (4)
Containment Isolation Due to High Reactor Water Level

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
1 2	2 5	8 4	8 4	- 0 2 0	- 0 0	0 1	2 4	8 5		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	X 50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)	0 0 1	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)	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
Paul J. Hamilton - Senior Plant Engineer	AREA CODE 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 NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS
B	B 0	H C	G 0 8 0	Y	B	B 0	M 0	L 2 0 0	Y

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 12/25/84, when starting up after a refueling outage, a group 1 containment isolation was received as the result of a high reactor water level signal. The high water level was caused by a LPCI injection valve that was not fully seated. The immediate corrective action was to isolate the LPCI valve and lower the reactor water level.

Two component failures were identified during this event. One of the problems was a faulty control switch which was rewired; the other was an inoperable motor operator which was repaired.

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

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

On 12/25/84, at approximately 1905 hours, a group 1 containment isolation was received as the result of a reactor high water level signal.

The event occurred when starting up after a refueling outage. At the time of the event, the RHR system had just been placed in the suppression pool cooling mode to facilitate a HPCI (uncoupled) surveillance test. In addition, reactor pressure was approximately 100 psig, the mode switch was in "startup," and the reactor water level was being manually controlled.

Cause of the high water level was an outboard LPCI injection valve, MO-1001-28A, leaking past its seat into the reactor. As an immediate corrective action, the inboard LPCI injection valve, MO-1001-29A, was then closed to isolate the reactor from the suppression pool cooling water.

Upon investigation on 12/26/84, maintenance personnel cycled MO-1001-28A and checked the torque switch settings which were found to be operating properly. Although the 28A valve indicated closed at the time of the event, it is believed that it did not fully seat on its last manual operation because the control switch was probably released when the open indication cleared and before the torque switch torqued out. Subsequent system operation in suppression pool cooling caused no further increase in reactor water level.

During the investigation of MO-1001-28A, it was necessary to again close the inboard LPCI injection valve, MO-1001-29A. When the control switch was actuated from Panel 903 in the control room, the valve would not close. At that time, a reactor shutdown was initiated in accordance with the requirements of T.S. 3.5.A. In addition, surveillance testing for an inoperable LPCI subsystem was initiated as required by T.S. 3.5.A. The faulty control switch was the first component failure identified during the event.

Cause of the 1001-29A not opening was determined to be faulty contacts in the hand-operated control switch. Corrective action was to rewire the control switch by moving the wiring terminations to the unused spare set of contacts. This modification was made in accordance with Station procedures (Reference: TM 84-089).

The 1001-29A valve was satisfactorily tested and returned to service on 12/26/84 at approximately 1700 hours. No further corrective action is planned. The SMB model control switch is manufactured by the General Electric Company. A search of records indicates no previous hand-operated control switch failures for MO-1001-29A.

On 12/26/84, during the above-mentioned surveillance testing for operation with an inoperable LPCI subsystem, it was discovered that LPCI injection valve, MO-1001-28B, would not close. This was the second and last component failure identified during the event.

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

Cause of the valve not closing was determined to be stiff grease in the Belleville spring pack of the Limitorque SMB-5 motor operator. Corrective action was to clean the motor operator and regrease it with new grease which is less susceptible to stiffening. In addition, a recently implemented preventive maintenance practice will require periodic inspection and/or changeout of the grease in selected motor operators. The valve was satisfactorily tested and returned to service on 12/26/84 at approximately 1750 hours.

A search of records indicates no previous occurrences of a similar nature for MO-1001-28B.

The events listed in this report 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

January 24, 1985
BECo Ltr. #85-015

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

Docket Number 50-293
License DPR-35

Dear Sir:

The attached Licensee Event Report 84-020-00, "Containment Isolation Due to High Reactor Water Level," 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

RS:caw

Enclosure: LER 84-020-00

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

Standard BECo LER Distribution

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