NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: | | | | | | | (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)
	LICENSEE CODE	LICENSE NUMBER	LICENSE TYPE	CAT

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0 1	REPORT SOURCE L (6)	0 5 0 - 0 2 9 3 (7)	0 6 1 5 8 1 (8)	0 6 3 0 8 1 (9)
		DOCKET NUMBER	EVENT DATE	REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On June 15, 1981 it became apparent that management controls did not provide
0 3 for a comprehensive review and substantiation of analytical conclusions as set forth
0 4 in BECo letter #79-207. See attachment.
0 5
0 6
0 7
0 8

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	S E (11)	A (12)	X (13)	Z Z Z Z Z Z (14)	Z (15)	Z (16)

(17) LER/RO REPORT NUMBER

EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
8 1	—	0 2 1	/	0 1	T	—	0

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
X (18)	X (19)	Z (20)	Z (21)	0 0 0 0	X (23)	N (24)	Z (25)	Z 9 9 9 (26)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 Inadequate review of the analysis made by BECo in responding to the requirements
1 1 of 10 CFR 50.44 and a failure in management controls to identify the effects of
1 2 rendering the Post Accident Nitrogen Supply System inoperable. (See attachment).
1 3
1 4

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	Z (28)	Z Z Z (29)	..A.	C (31)	Management Review

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	N.A.	N.A.

PERSONNEL EXPOSURES

	NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	N.A.

PERSONNEL INJURIES

	NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	N.A.

LOSS OF OR DAMAGE TO FACILITY (43)

	TYPE	DESCRIPTION
1 9	Z (42)	N.A.

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PDR ADOCK 05000293
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PUBLICITY

	ISSUED	DESCRIPTION (45)	NRC USE ONLY
2 0	N (44)	.A.	

NAME OF PREPARER Mr. E. T. Graham/Mr. E. J. Ziemianski PHONE: 617-746-7900

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

Attachment to LER 81-021/01T-0

Event Description

As required per Technical Specification Section 6.9.B., this narrative material is intended to provide an explanation of the circumstances surrounding the event reported under LER 81-021/01X-0 regarding analyses dealing with post-LOCA combustible gas control per 10CFR50.44.

The prompt report was issued because BECo Nuclear Operations Department(NOD) personnel had been made aware by off-site support and engineering department personnel that a previous analysis which demonstrated conformance to 10CFR50.44 contained an assumption which could no longer be substantiated. The assumption involved accessibility to the Reactor Building following a LOCA to mitigate the effects of single active failures and/or postulated loss of power failures.

The following is a chronology of events leading to the submittal of LER81-021/01X-0:

3/37/81 - Per request of NRR in an attempt to closeout an open item, the Nuclear Engineering Department was asked to provide the analysis which demonstrated compliance to 10CFR50.44. NRR requested BECo to submit the analysis discussed in BECo letter #79-207, dated 10/19/79 in which BECo stated that an evaluation had been performed which demonstrated that Pilgrim Station equipment satisfied 10CFR50.44 requirements with no modifications required.

5/27/81 - At the request of the Nuclear Engineering Department(NED), Pilgrim Station performed an inspection of the nitrogen purge system to ascertain the actual position of two, 1" manually operated nitrogen supply valves. During this inspection small portions of the two, 1", post accident nitrogen purge branch supply lines were found cut and capped. The cutting and capping were determined to have been done on 7/21/80 with Maintenance Request #80-468. A Field Revision Notice (FRN) #81-21-21 was issued to remove the two check valves and replace them with spool pieces. The Maintenance Request (#80-468) issued to perform the work allowed the pipes to be cut and capped in lieu of installing the spool pieces because of an improperly processed FRN. This document control problem is being addressed in-house as a separate issue and will be resolved as part of the overall upgrade of the management controls.

5/28/81 - Failure and Malfunction Report #81-59 was initiated and the Nuclear Operations Manager and the NRC Resident Inspector were notified of the discovery. At this time it was thought that the operational requirements of the Post Accident Nitrogen Supply System were based on NUREG 0737, TAP IIE.4.1 which required the system to be operable by 7/1/81. However, questions raised regarding the system operability actually being based on the requirements of 10CFR50.44 were discussed between Pilgrim Station and BECo Licensing. The Nuclear Operations Manager immediately initiated action to restore the system to its intended condition.

5/29/81 - Based on conversations between the NRC Project Manager for Pilgrim and BECo Licensing, Edison management determined that further substantiation of the analytical assumptions would be required prior to submitting the 3/28/80 analysis to NRR.

6/3/81 - Following installation of spool pieces, the Nitrogen Purge System branch supply lines were returned to operational status.

6/13/81 - Subsequent to the substantiation effort alluded to earlier, an evaluation made to determine operational requirements regarding 10CFR50.44 was presented to the ORC.

6/15/81 - Boston Edison issued a letter (#81-127) which stated that the results of a recently performed evaluation demonstrate that though rapid access to the Reactor Building for brief periods of time is possible, the calculated upper limit dose rates may preclude personnel access for the extended periods of time projected as necessary to perform equipment maintenance to assure the single failure criterion is satisfied. Accordingly, system modifications which would have resulted from this awareness were in fact developed and installed during the 1980 Refueling Outage as a result of lessons learned from TMI.

6/16/81 - LER 81-021/01X-0 was submitted to the NRC.

Cause and Corrective Action

The cause of the events described above has been determined to be management controls which (1) did not provide for a comprehensive review and substantiation of analytical conclusions as set forth in BECo letter #79-207 and (2) did not provide adequate control of system operability requirements which exceed the bounds of the Technical Specifications.

Corrective actions were discussed at a meeting between Boston Edison and NRC management (NRR and I&E Headquarters) on June 18, 1981. In addition to describing the current efforts for an overall upgrade of management controls for the Boston Edison nuclear organization, BECo committed to conduct a re-review of previous BECo to NRC correspondence which stated that modifications to systems are not required because existing equipment satisfies specified requirements.