NRC [illegible] 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

CON'T 0 1 | REPORT SOURCE L (6) | 0 5 0 - 0 2 9 3 (7) | 0 8 1 4 8 1 (8) | 0 8 2 4 8 1 (9)

DOCKET NUMBER | EVENT DATE | REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On August 14, 1981, Boston Edison received an analysis report from the Yankee
0 3 Atomic Environmental Laboratory which indicated that a reportable concentration
0 4 of Cs-134 and Cs-137 existed in a sediment sample collected on May 27, 1981.
0 5 The above sediment sample concentrations do not present a hazard to the health
0 6 and safety of the public due to the extremely limited distribution of the
0 7 activity and the absence of any ingestion pathway or direct radiation hazard.
0 8 REFER TO ATTACHMENT FOR FURTHER INFORMATION.

0 9

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP SUBCODE	VALVE SUBCODE
X X (11)	X (12)	Z (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 4 2	/	0 4	T	—	0

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

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 These concentrations were most likely due to a hot particle contained in the
1 1 controlled releases from PNPS-1 sometime during the past year.
1 2
1 3
1 4

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	E (28)	1 0 0 (29)	N.A.	D (31)	Notification by Environmental Lab

	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.

PUBLICITY

	ISSUED	DESCRIPTION (45)
2 0	N (44)	N.A.

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NRC USE ONLY

NAME OF PREPARER C.E. Bowman/G.G. Whitney PHONE: 617-746-7900

GPO 917-926

BOSTON EDISON COMPANY

PILGRIM NUCLEAR POWER STATION

DOCKET NO. 50-293

Attachment to LER #81-042/04T-0

On August 14, 1981, Boston Edison received an analysis report from the Yankee Atomic Environmental Laboratory (YAEL) which indicated that a reportable concentration of Cs-134(1491.±27.pCi/kg) and Cs-137(17733.±80 pCi/Ku.pCi/kg) existed in a sediment sample of 24-26cm taken from the Rocky Point Discharge Canal Outfall area on May 27, 1981.

The above concentrations are in excess of ten (10) times the Cs-134 LLD (29.0pCi/kg) and Cs-137 (36.0±7.)pCi/kg) concentrations for the control station sediment sample of 24-26cm taken from Duxbury Beach of May 28, 1981.

The Cs-134/Cs-137 ratio of the indicator sample is indicative of older controlled liquid releases from PNPS-1.

The indicator sample underwent confirmatory reanalyses, and neither Cs-134 nor Cs-137 were detected above the LLD. In addition, neither Cs-134 nor Cs-137 were detected above the LLD in the other indicator sediment samples (top layer 0-2cm, bottom layer 28-30cm). This would indicate the existance of a "hot" particle, most likely due to past controlled liquid releases from PNPS-1.

The above sediment sample concentrations do not present a hazard to the health and safety of the public due to the extremely limited distribution of the activity and the absence of any ingestion pathway or direct radiation hazard.