

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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7	8	LICENSEE CODE					14	15	LICENSE NUMBER										25	26	LICENSE TYPE					30	57	CAT	58

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REPORT SOURCE 0 1 7 8 L 6 0 5 0 - 0 2 9 3 7 1 2 2 9 8 0 8 0 1 1 8 8 1 9
60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

On December 29, 1980, Boston Edison received an analysis report from Yankee Atomic Electric Laboratory which indicated that a reportable concentration of Iodine-131 (1.7 ± 0.1 pCi/Kg) existed in a sample of milk collected from indicator station (Plimouth Plnstation 2.2 mi. west) on November 20, 1980. This concentration was in excess of 10 times the measure I-131 concentration at the control station (Whitman Farm 21 mi. N.W.) which was $0.056 \pm .02$ pCi/Kg.

SYSTEM CODE 9 10		CAUSE CODE 11		CAUSE SUBCODE 12		COMPONENT CODE 13 14						COMP. SUBCODE 15		VALVE SUBCODE 16			
X X		X		Z		Z Z Z Z Z Z						Z		Z			
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17		LER/RO REPORT NUMBER		EVENT YEAR 21 22		SEQUENTIAL REPORT NO. 23 24 25 26		OCCURRENCE CODE 27 28 29		REPORT TYPE 30 31		REVISION NO. 32					
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21 22		23 24 25 26		27 28 29		30 31		32									
ACTION TAKEN 33 34		FUTURE ACTION 35 36		EFFECT ON PLANT 37 38		SHUTDOWN METHOD 39 40		HOURS 41 42 43 44		ATTACHMENT SUBMITTED 45 46		NPRD-4 FORM SUB. 47 48		PRIME COMP. SUPPLIER 49 50		COMPONENT MANUFACTURER 51 52 53 54	
Z 18		Z 19		Z 20		Z 21		0 0 0 0		Y 23		N 24		A 25		Z 9 9 9 9 26	
33 34		35 36		37 38		39 40		41 42 43 44		45 46		47 48		49 50		51 52 53 54	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 This measurement of I-131 is unquestionable the result of recent Chinese
1 1 weapons test. For comparison, consumption of milk with the measured
1 2 concentration of 1.7 /Kg by the maximum exposed individual for a full
1 3 year would result in about 3 mrem to the thyroid of a child while
1 4 the annual dose due to natural background is about 100 mrem/yr.

FACILITY STATUS (28) 1 5 E 10 0 0 % POWER (29) 10 0 0 OTHER STATUS (30) NA
 METHOD OF DISCOVERY (31) D Environmental Lab Notification
 DISCOVERY DESCRIPTION (32)
 ACTIVITY CONTENT (33) 1 6 Z 10 0 0 RELEASED OF RELEASE (34) 10 0 0 AMOUNT OF ACTIVITY (35) NA
 LOCATION OF RELEASE (36) NA

PERSONNEL EXPOSURES

NUMBER		TYPE	DESCRIPTION
1	7	000(37)Z(38)	This does not represent a significant threat to the health of the public.

PERSONNEL INJURIES

PERSONNEL INJURIES				DESCRIPTION (41)
NUMBER				
1	3	0	0	0 (40) NA

7 8 9 11 12 80

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE DESCRIPTION

1	9	Z	42	NA	
7	8	9	10		90

PUBLICITY DESCRIPTION (45) NRC USE ONLY

ISSUED (44) NA

7 8 9 10 68 69 80

NAME OF PREPARER Mr. M. Thomas McLoughlin

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BOSTON EDISON COMPANY
PILGRIM NUCLEAR POWER STATION

Attachment to LER 80-094/04T-1

Docket Number

On December 29, 1980 Boston Edison Company received an report from the Yankee Atomic Electric Environmental Laboratory indicated that a milk sample taken from an indicator station Plantation 2.2 mi. west) on November 20, 1980 contained a concentration of I-131 of 1.7 ± 0.1 pCi/kg. This concentration was in excess 10 times the measured I-131 concentration at the control station (Whitman Farm - 21 mi. N.W.) which was $0.056 \pm .02$ pCi/kg.

This measurement is unquestionably the result of the recent weapons test which was first witnessed by the presence of airborne gaseous I-131 measurements by Boston Edison and other organizations conduct environmental radiation measurement programs in the New England region. Elevated airborne gaseous I-131 activity was observed of Boston Edison indicator station charcoal filter samples which air during the period from 10/29/80 to 11/4/80.

The presence of an elevated concentration of I-131 at the station in the milk sample is conclusive evidence that the source of the activity is fresh weapons fallout affecting a large area.

For comparison, consumption of milk with the measured concentration of 1.7 pCi/kg by the maximum exposed individual for a full year result in only about 3 mrem to the thyroid of a child. When compared to the annual dose due to natural background of about 100 mrem/year, the increase does not represent a significant threat to the health of the public.