

# LICENSEE EVENT REPORT

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CON'T

REPORT SOURCE

0 1 N Y I P S 2 0 0 0 0 0 0 0 0 0 3 4 1 1 1 1 4 5

7 8 9 14 15 25 26 30 37 CAT 38

LICENSEE CODE LICENSE NUMBER LICENSE TYPE

L 0 5 0 0 0 2 4 7 0 4 1 4 8 1 0 4 2 8 8 1 9

60 61 68 69 74 75 80

DOCKET NUMBER EVENT DATE REPORT DATE

### EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 |

0 3 | During the course of a hydrostatic test on the secondary side of

0 4 | steam generator No. 23, leakage was observed from one or more cold

0 5 | leg tubes. For the purpose of reporting this discovery, leakage was

0 6 | assumed to be greater than the Technical Specification limit of .3gpm.

0 7 |

0 8 |

7 8 9

09		SYSTEM CODE C B		11	CAUSE CODE E		12	CAUSE SUBCODE D		13	COMPONENT CODE H T E X C H				14	COMP. SUBCODE F		15	VALVE SUBCODE Z		16			
7	8	9	10		11		12		13					14		15		16						
17		LER/RO REPORT NUMBER		EVENT YEAR 8 1		21	22	SEQUENTIAL REPORT NO. 0 0 9		24	25	26	OCCURRENCE CODE 0 1		28	29	REPORT TYPE T		30	31	REVISION NO. 0		32	
ACTION TAKEN B		FUTURE ACTION X		18	EFFECT ON PLANT C		19	SHUTDOWN METHOD Z		20	HOURS 0 0 0 0		22	ATTACHMENT SUBMITTED Y		23	NPRD-4 FORM SUB. N		24	PRIME COMP. SUPPLIER N		25	COMPONENT MANUFACTURER W 1 2 0	
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | Our investigation has indicated that the leak in Steam Generator No. 23  
1 1 | was caused by denting of the tube at its support plate location.  
1 2 | Corrective action consisted of plugging the affected tube(s). In  
1 3 | addition an eddy current inspection of selected cold leg tubes in all  
1 4 | four steam generators was performed. (See attachment 1)

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

FACILITY STATUS (28) D

% POWER (29) 0 0 0

OTHER STATUS (30) N/A

METHOD OF DISCOVERY (31) C

DISCOVERY DESCRIPTION (32) Hydrostatic Test

ACTIVITY CONTENT  
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)  
1 6 L 33 M 34 0.067 curies total Main Steam Trap Drain to discharge  
7 8 9 10 11 44 45 canal

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	058	(37) E	(38) See attachment 2					

PERSONNEL INJURIES									
NUMBER				DESCRIPTION					
1	2	3	4	5	6	7	8	9	10
0	0	0	40	N/A					

		LOSS OF OR DAMAGE TO FACILITY		
		TYPE	DESCRIPTION	(43)
1	9	Z	N/A	(43)

8 9 10  
PUBLICITY  
ISSUED DESCRIPTION (45) 8105050521  
[2][0] [N] (44) N/A  
7 8 9 10 11 12 13 14 15 16 17 18 19 20  
NRC USE ONLY

<sup>10</sup> Kevin Burke

914-737-8116

NRC USE ONLY

PHONE:

ATTACHMENT 1

Steam Generator Cold Side Inspection  
Program and Results

1980/1981 Refueling  
and Maintenance Outage

Consolidated Edison Company of New York, Inc.  
Indian Point Unit No. 2  
Docket No. 50-247  
Facility Operating License No. DPR-26  
April 1981

STEAM GENERATOR INSPECTION PROGRAM AND RESULTS  
April 1981 Inspection-Cold Side

By letter from Mr. J. D. O'Toole of Con Edison to Mr. S. A. Varga of the NRC dated March 13, 1981, the details of the steam generator hot side tube inspection program results for the Unit's fourth refueling outage were submitted. The present supplemental report discusses the results of the cold side inspection performed on April 13-22, subsequent to the detection of a leak in Steam Generator 23, row 2/cold side, during startup testing.

A total of 476 cold side tubes were eddy current inspected for both dents and defects; 304 tubes in row 2, 168 tubes in row 3 and 4 tubes in row 4. Table 1 lists the identification of the cold side tubes inspected.

The eddy current inspection for tube defects was performed nominally at 400 KHz at standard gain. The inspection to identify tube dents was performed nominally at 400 KHz at a reduced gain. A 610 mil eddy current probe was used to perform the eddy current testing. If any tube did not permit passage of this 610 mil probe, the tube was eddy current tested with a 540 mil probe. If a tube did not pass a 540 mil probe, then it was plugged. In addition, the tubes immediately adjacent to any tube that did not pass the 610 mil probe were also eddy current inspected.

A total of 17 steam generator tubes did not pass a 610 mil probe. All of the tubes were located in row 2, that is, 2 tubes in SG21, 6 in SG22, 9 in SG23 and none in SG24. Table 2 lists the identification of these tubes as well as the support plate location where the probe was restricted. No tube defects were detected.

A total of 6 steam generator tubes did not pass a 540 mil probe and, therefore, were mechanically plugged. SG22 had 1 tube plugged and SG23 had 5 tubes plugged, including the suspected leaking tube(s) R2C46 and R2C47. The percentage of tubes plugged is well within the license limitations. Table 3 lists the identification of these tubes as well as the support plate location where the probe was restricted.

After review of the inspection results we have concluded that the leak in Steam Generator 23 can probably be attributed to denting of a tube at its support plate location. Also, the conclusions in our March 13, 1981 submittal on the hot side steam generator inspection remain unchanged. As part of our future steam generator eddy current inspection program cold side examinations will be performed.

Table 1-Cold Side Eddy Current Examination April 1981

<u>S/G</u>	<u>Row</u>	<u>Column</u>	<u>No. of Tubes</u>
21	2	1-3, 5-11, 13-21, 23-33, 35-43, 49-83 85-90, 92	81
	3	1,5,9,13-15,17,21,25,29,33,37,41,44,49, 52,56,60,64,68,72,76,80,84,88,92	26
22	2	2-6,8-15,18,21-28,34-44, 50-59,61-74,76-92	74
	3	1,5,9,13,14,16,17,21,25,29,33, 37,38,41,44,49-52,54,56,60,64, 68,72,76,79,80,84,88,92	31
23	2	14-32,34-43,45-48,50-92	76
	3	2-34,36-48,50-92	89
	4	45-48	4
24	2	1,3-33,43,49-53,55-56, 58-78,80-82,84-92	73
	3	1,5,9,13,17,21,25,29,33,37,41, 52,56,60,64,68,72,76,80, 84,88,92	22

Total No. of Tubes

476

Table 2-Tubes Not Passing 610 Probe

<u>SG</u>	<u>Total</u>	<u>Tube Coordinate (Support Plate Restriction)</u>
21	2	R2C14 (2), R2C15 (3)
22	6	R2C14 (1), R2C38 (4), R2C50 (1), R2C51 (4), R2C54 (4), R2C79 (3)
23	9	R2C18 (4), R2C31 (3), R2C32 (3), R2C46 (2), R2C47 (2), R2C61 (3), R2C62 (3), R2C63 (3), R2C81 (4)
24	0	

Table 5 Tubes Not Passing 540 Probe (Plugged)

<u>SG</u>	<u>Total</u>	<u>Tube Coordinate (Support Plate Restriction)</u>
21	0	
22	1	R2C14(1)
23	5	R2C32(3), R2C46(1), R2C47(1), R2C61(4), R2C81(4)
24	0	

ATTACHMENT 2

Steam Generator Cold Side Inspection  
Personnel Exposures

1980/1981 Refueling  
and Maintenance Outage

Consolidated Edison Company of New York, Inc.  
Indian Point Unit No. 2  
Docket No. 50-247  
Facility Operating License No. DPR-26  
April, 1981

ATTACHMENT 2

Docket No. 50-247

Consolidated Edison Company  
of N. Y. , Inc.

LER-81-009/01

Indian Point Unit No. 2

PERSONNEL EXPOSURES: DESCRIPTION

Maximum exposure rate at  
contact with tube sheet - 17 R/Hour.

<u>Worker Category</u>	<u>Number of Workers</u>	<u>Collective Dose (Man-Rem)</u>
Utility Maintenance	24	21.6
Contractor Maintenance	12	4.2
Testing	14	11.0
Health Physics	8	2.6
TOTAL	58	39.4

- All individual doses were  
within the limits of  
10CFR Part 20