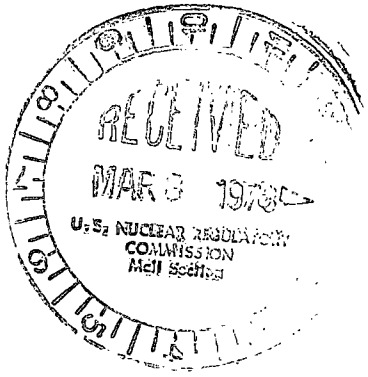
PSE&G ● 05 300816 ●

Public Service Electric and Gas Company 80 Park Place Newark, N.J. 07101 Phone 201/622-7000

March 2, 1978

Mr. Boyce H. Grier
Director of USNRC
Office of Inspections and Enforcements
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406



Dear Mr. Grier:

LICENSE NO. DPR-70
DOCKET NO. 50-272
REPORTABLE OCCURRENCE 78-08/03L

Pursuant to the requirements of Salem Generating Station Unit No. 1 Technical Specifications, Section 6.9.1.b, we are submitting Licensee Event Report for Reportable Occurrence 78-08/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

F. P. Librizzi
General Manager -
Electric Production

CC: Director, Office of Inspection
and Enforcement (30 copies)
Director, Office of Management
Information and Program Control

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Report Number: 78-08/03L

Report Date: February 23, 1978

Occurrence Date: February 3, 1978

Facility: Salem Generating Station
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Inoperable Boron Injection Tank

CONDITIONS PRIOR TO OCCURRENCE:

Operational Mode 1
Reactor Power: 89%

DESCRIPTION OF OCCURRENCE:

At 1520 hours while decreasing reactor power to clean condensate pump strainers, boron samples showed 19,991 ppm boron in the BIT. BAT's showed 20,200 ppm boron. BIT concentration being below the 20,100 ppm boron allowed by Technical Specifications required Action Statement 3.5.4.1 to be implemented. Boric Acid Transfer Pumps were placed in fast speed to increase recirculation flow. At 1608 hours, one batch of boric acid was added to the BAT's and fast recirculation flow continued. BIT sampling continued on a 1/2 hour schedule. At 1700 hours BIT samples showed 21,270 ppm boron and Action Statement 3.5.4.1 was terminated.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The cause of this occurrence was lack of mixing resulting from low recirculation flow.

ANALYSIS OF OCCURRENCE:

Technical Specification 3.5.4.1 states that with the Boron Injection Tank inoperable, restore the tank to operable status within one hour or be in Hot Standby and borated to a shutdown margin equivalent to 1% $\Delta K/K$ at 200°F within the next six hours; restore the tank to operable status within the next seven days or be in Hot Standby within the next 12 hours. The Boron Injection Tank was returned to operable status in 1 hour 40 minutes. The load reduction was continued until the BIT was within the boron limits.

CORRECTIVE ACTION:

Addition of boric acid to the BAT's and fast speed recirculation flow re-established BIT boron concentration.

A procedural revision will require fast speed recirculation flow to be run one shift per day to provide increased mixing.

FAILURE DATA:

N/A

Prepared by T. L. Spencer

SORC Meeting No. 10-78

S/J. McCarthy

Manager - Salem Generating Station

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | N J S G S 1 (2) | 0 0 - 0 0 0 0 0 - 0 0 (3) | 4 1 1 1 1 (4) | (5)

7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T

0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 2 7 2 (7) | 0 2 0 3 7 8 (8) | 0 2 2 3 7 8 (9)

7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During a planned power reduction BIT boron sample showed 19,991 ppm

0 3 | boron.Action Statement 3.5.4.1 implemented.Fast Speed recirculation

0 4 | started.One batch boric acid added.BIT samples showed 21,270 ppm boron.

0 5 | Total inoperable time, 1 hr 40 minutes.This is the third occurrence

0 6 | of this type.

0 7 |

0 8 | 7 8 9 80

0 9 | 7 8

SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
S F (11)	D (12)	Z (13)	X X X X X X (14)	Z (15)	Z (16)
9 10	11	12	13 18	19	20

(17) LER RO REPORT NUMBER: EVENT YEAR 7 8 (21 22) | — (23) | SEQUENTIAL REPORT NO. 0 0 8 (24 26) | / (27) | OCCURRENCE CODE 0 3 (28 29) | REPORT TYPE L (30) | — (31) | REVISION NO. 0 (32)

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
E (18)	G (19)	B (20)	Z (21)	0 0 0 1	Y (23)	N (24)	Z (25)	Z 9 9 9 (26)
33	34	35	36	37 40	41	42	43	44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The cause of this occurrence was boron stratification caused by

1 1 | low recirculation flow. A procedure change will require fast speed

1 2 | recirculation flow to be established for approximately 8 hours per day.

1 3 |

1 4 | 7 8 9 80

FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
F (28)	0 8 9 (29)	N/A	B (31)	Routine Boron Samples
9 10	10 12	13 44	45 46	80

ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
Z (33)	Z (34)	N/A	N/A
9	10 11	44	45 80

PERSONNEL EXPOSURES NUMBER	TYPE	DESCRIPTION (39)
0 0 0 (37)	Z (38)	N/A
9 11	12	13 80

PERSONNEL INJURIES NUMBER	DESCRIPTION (41)
0 0 0 (40)	N/A
9 11	12 80

LOSS OF OR DAMAGE TO FACILITY TYPE	DESCRIPTION (43)
Z (42)	N/A
9 10	80

PUBLICITY ISSUED	DESCRIPTION (45)	NRC USE ONLY
Z (44)	N/A	
9 10	68	69 80

NAME OF PREPARER T. L. Spencer PHONE: (609) 365-7000 Salem Ext.

GPO 917-926