

Report Number: 79-43/01T
Report Date: 6/05/79
Occurrence Date: 5/22/79
Facility: Salem Generating Station
Public Service Electric & Gas Company
Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Auxiliary Feedwater Pumps Discharge Valves Closed during Surveillance Testing

CONDITIONS PRIOR TO OCCURRENCE:

Refueling Mode 6

DESCRIPTION OF OCCURRENCE:

In reviewing the surveillance procedure which demonstrates the operability of No. 13 (23) steam driven auxiliary feedwater pump during operational modes 1, 2, and 3 as required by Technical Specification 3.7.1.2, it was discovered the procedure called for the valve demand to be reduced to 0% for the motor driven feedwater pumps discharge control valves (AF-21's) in addition to the closure of the steam driven feedwater pump discharge control valves (AF-11's).

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The cause of this occurrence was a deficiency in the surveillance procedure. The AF-21 and AF-11 valves were originally required to be shut to insure a single test flow path and to insure no auxiliary feedwater flow to the steam generator during the test evolution. However, the AF-21's are normally closed and open to a preset valve demand only when the associated motor driven pump develops the required discharge pressure.

ANALYSIS OF OCCURRENCE:

Technical Specification 3.7.1.2 requires at least three independent steam generator auxiliary feedwater pumps and associated flow paths operable when in modes 1, 2 or 3, with two feedwater pumps capable of being powered from separate vital busses and one feedwater pump capable of being powered from an operable steam supply system. With one feedwater pump inoperable, restore at least three auxiliary feedwater pumps to operable status within 72 hours or be in hot shutdown within the next 12 hours. The average duration of the pump test has been 10 minutes after which normal auxiliary feedwater system lineup is verified. The ECCS automatic start of the motor driven feedwater pumps is not disabled nor is remote control of the AF-21 valves taken from the control room reactor operator during the steam driven pump test.

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CORRECTIVE ACTION:

To insure full operability of the motor driven auxiliary feedwater pumps during the surveillance evolution, an on-the-spot change has been initiated to leave the demand signal for the AF-21 valves at the normal value. Also, the AF-1, 3, 10, 20, 22, 23 and 86 manually operated valves normal position has been changed from open to locked open.

A further review of the surveillance procedures found no other procedure deficiencies. No further corrective action is required.

FAILURE DATA:

Not Applicable

Prepared By A. W. Kapple

SORC Meeting No. 43-79

H. J. Repidum
Manager - Salem Generating Station

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(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CONTROL BLOCK:

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 (1)

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 14 15 25 26 37 CAT 38
LICENSEE CODE LICENSE NUMBER LICENSE TYPE JO

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | During review of the surveillance procedure which demonstrates operability of No. 13

03 (23) Aux. Feed Pump as required by T/S 3.7.1.2, it was discovered the procedure called

0	4	for the valve demand to be reduced to 0% for the motor driven No. 11 and 12 Aux. Feed
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0	5	Pump discharge control valves and the closure of No. 13 Aux. Feed Pump discharge con-
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0 6 | trol valves. T/S 3.7.1.2 requires three Aux. Feed Pumps available in Modes 1, 2, and

0 7 | 3. The auto start of No. 11 and 12 Aux. Feed Pumps was not disabled nor was control

03 of No. 11 and 12 discharge taken from the control room operator. This is the first

7	8	9	occurrence of this type.	CAUSE CODE	CAUSE CODE	COMP SUBCODE	VALVE SUBCODE
1	2	3	4	5	6	7	8

[illegible]

(17) LER RO REPORT

7	9
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0	4	3
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 CODE

0	1
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 TYPE

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 NO.

0

[illegible]

33 G 34 (18) Z 35 (19) 36 Z 37 (20) 38 Z 39 (21) 40 0 0 0 0 41 X 42 (22) 43 N 44 (23) 45 Z 46 (24) 47 Z 48 (25) 49 Z 50 (26) 51 Z 52 (27) 53 Z 54 (28) 55 Z 56 (29) 57 Z 58 (30) 59 Z 60 (31) 61 Z 62 (32) 63 Z 64 (33) 65 Z 66 (34) 67 Z 68 (35) 69 Z 70 (36) 71 Z 72 (37) 73 Z 74 (38) 75 Z 76 (39) 77 Z 78 (40) 79 Z 80 (41) 81 Z 82 (42) 83 Z 84 (43) 85 Z 86 (44) 87 Z 88 (45) 89 Z 90 (46) 91 Z 92 (47) 93 Z 94 (48) 95 Z 96 (49) 97 Z 98 (50) 99 Z 100 (51)

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1	0	The deficient procedure was originally intended to insure a single test flow path and
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insure no auxiliary feed flow to the S/G's during the test. An on-the-spot change has

1 2 been initiated to leave the motor driven Auxiliary Feed Pump discharge valve demand

signals at the normal value and change the normal position of the AF-1, 3, 10, 20, 22,

1	4	23 and 86 manual valves from open to locked open.
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FACILITY STATUS	% POWER	OTHER STATUS	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION
		(30)		(32) Special Surveillance Review

1 5 A (28) 0 0 0 (29) N/A C (31) Special Surveillance Review

ACTIVITY		CONTENT		AMOUNT OF ACTIVITY		LOCATION OF RELEASE	
RELEASED		OF RELEASE					
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
7	8	9	10	11	12	13		

PERSONNEL INJURIES		DESCRIPTION (41)	
NUMBER			
13	0000	(40)	N/A
			2255 012

7 8 9 11 12

LOSS OF OR DAMAGE TO FACILITY (43)

TYPE DESCRIPTION

2255 012

1 9 Z 42 N/A

PUBLICATION		ISSUED		DESCRIPTION		N/A		N/A	
3	0	7	44						

NAME OF PREPARER A. W. Kapple

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