

Report Number: 78-64/03L
Report Date: 10/3/78
Occurrence Date: 9/12/78
Facility: Salem Generating Station
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Pressurizer Pressure High Reactor Trip Above Technical Specification Limit.

CONDITIONS PRIOR TO OCCURRENCE:

Reactor Power 100%, Operational Mode 1

DESCRIPTION OF OCCURRENCE:

During a channel functional test of Pressurizer Pressure Channel 2, the reactor trip setpoint was found to be above the limit allowed by Technical Specifications. The channel was declared inoperable. At 1115 hours, the bistables were placed in the tripped condition. The Action Statement for Technical Specification 3.3.1.1, Table 3.3-1, Action Statement 6 was implemented. Performance Department commenced troubleshooting and repair of the channel. At 1415 hours, Pressurizer Pressure Protection Channel 2 was declared operable and the Action Statement was terminated. Pressure Protection Channels 1, 3 and 4 were operable during this incident.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

The cause of this occurrence was an unstable output from the comparator which provides input to the trip bistable.

ANALYSIS OF OCCURRENCE:

Action Statement 6 for Technical Specification 3.3.1.1, Table 3.3-1 states that with the number of operable channels one less than the total number of channels, startup and/or power operation may proceed provided the following conditions are satisfied: 1) the inoperable channel is placed in the tripped condition within 1 hour, 2) the minimum channels operable requirement is met; however, one additional channel may be bypassed for up to 2 hours for surveillance testing per specification 4.3.1.1.

The inoperable channel was placed in the tripped condition within the 1 hour time limit and all redundant channels were operable during the entire occurrence.

781φ1φφ89

CORRECTIVE ACTION:

The unstable comparator was replaced with a unit from spares. The spare was bench tested satisfactorily prior to installation. The channel functional test was completed and showed the channel to be operating properly. The failed comparator will be followed on Deficiency Report No. PD-0607.

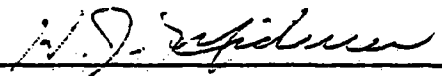
FAILURE DATA:

Comparator Model 118

Manufacturer: Westinghouse Electric Corporation
Hagan Controls Division

Prepared by A. W. Kapple

SORC Meeting No. 58-78


Manager - Salem Generating Station

LICENSEE EVENT REPORT

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

01 NJSGS1 000-00000-000 41111 5

CON'T REPORT SOURCE L 05000272 7091278 81100378 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES 10
02 During normal operation, while performing a surveillance functional check of pressure
03 protection channel 2, it was found that the reactor trip setpoint was greater than
04 T/S limit. The channel bistables were tripped and Action Statement 6 for T/S 3.3.1.1,
05 Table 3.3-1 was implemented. The channel was inoperable for 3 hours. After repairs,
06 the channel functional test confirmed operability. Three redundant channels were
07 operable during this occurrence. This is the seventh occurrence of this type caused
08 by Hagan module failure.

09 I A E E I N S T R U Y Z
17 LER/RO REPORT NUMBER 78
18 ACTION TAKEN A Z
19 FUTURE ACTION Z
20 EFFECT ON PLANT Z
21 SHUTDOWN METHOD Z
22 HOURS 0000
23 ATTACHMENT SUBMITTED Y
24 NPRO-4 FORM SUB. Y
25 PRIME COMP. SUPPLIER N
26 COMPONENT MANUFACTURER H020

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS 27
10 The cause of this occurrence was an unstable output from a comparator which feeds
11 the trip bistable. The comparator was replaced with a unit from spares which was
12 bench tested prior to installation. The channel function test was performed to
13 confirm operability. The failed comparator was written up on Deficiency Report #PD-607.

15 E 100 N/A b Surveillance Testing

16 Z Z N/A N/A

17 000 Z N/A

18 000 N/A

19 Z N/A

20 Z N/A