



Public Service Electric and Gas Company 80 Park Plaza Newark, N.J. 07101 Phone 201/430-7000

August 19, 1981

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

Dear Mr. Grier:

LICENSE NO. DPR-75
DOCKET NO. 5C ...1
REPORTABLE OCCURRENCE 81-66/03L

Pursuant to the requirements of Salem Generating Station Unit No. 2 Technical Specifications, Section 6.9.1.9.b, we are submitting Licensee Event Report for Reportable Occurrence 81-66/03L. This report is required within thirty (30) days of the occurrence.

Sincerely yours,

R. A. Uderitz
General Manager Nuclear Production

CC: Director, Office of Inspection and Enforcement (30 copies) Director, Office of Management Information and Program Control (3 copies)

1/1 IES. Report Number:

81-66/03L

Report Date:

August 19, 1981

Occurrence Date: 7-20-81

Facility:

Salem Generating Station, Unit 2

Public Service Electric & Gas Company Hancocks Bridge, New Jersey 08038

#### IDENTIFICATION OF OCCURRENCE:

Vital Heat Trace - Loss Of Two Independent Heat Tracing Channels. This report was initiated by Incident Report 81-263.

### CONDITIIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 44% - Unit Load 530 MWe

# DESCRIPTION OF OCCURRENCE:

On July 20, 1981, upon reviewing a vital heat tracing surveillance procedure, it was determined that two controllers, 2607A and 2610B, had failed due to low amperage reading on the heat trace. The tape from controller 2607A was reading 0.5 amps and the tape from controller 2610B was reading 0.25 amps. Both tapes should have read greater than 0.5 amps. The proper temperatures were maintained by redundant channels 2607B and 2610A; however, technical specification 3.5.4.2 requires two independent channels of heat tracing shall be operable for the boron injection tank and for the heat traced portions of the associated flow paths. Action statement 3.5.4.2 was entered and the temperatures of the boron injection tank and associated flow paths were verified to be greater than or equal to 145°F every eight hours until the two failed controllers were restored to service.

This occurrence constituted operation in a degraded mode in accordance with technical specification 6.9.1.9.b.

#### DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

An investigation of the failed channels revealed that for controller 2610B a splice in the heat trace tape was defective, causing the low amperage reading. For controller 2607A however, it was found that the readings were taken when the tape was hot and for short pieces of tape, the readings will be low when the tape is hot. The tape was allowed to cool and when restarted the tape was reading 1.2 amps.

## ANALYSIS OF OCCURRENCE:

Action statement 3.5.4.2 requires:

With only one channel of heat tracing on either the boron injection tank or on the heat traced portion of an associated flow path operable, operation may continue for up to 30 days provided the tank and flow path temperatures are verified to be greater than or equal to 145°F at least once per 8 hours; otherwise, be in hot shutdown within 12 hours.

## CORRECTIVE ACTION:

The lengtive splice on the tape from controller 2610B was repaired and when tested read 2.8 amps. A change to the vital heat trace surveillance procedure has been made informing the operators of the possibility of low readings on short tapes and actions necessary to determine reading validity.

In addition, the Engineering Department will review the acceptance criteria for short tapes. A supplemental report will be issued at the completion of the review.

#### FAILURE DATA:

Chemelix Heat Trace Tape Manufacturer No. 10PTV

Prepared By J. Varga	H.g. whilm
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SORC Meeting No. 81-77	