



Public Service Electric and Gas Company P.O. Box E Hancocks Bridge, New Jersey 08038

Salem Generating Station

December 8, 1982

Mr. R. C. Haynes
Regional Administrator
USNRC
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Haynes:

LICENSE NO. DPR-75
DOCKET NO. 50-311
REPORTABLE OCCURRENCE 82-053/03X-1
SUPPLEMENTAL REPORT

Pursuant to the requirements of Salem Generating Station Unit No. 2 Technical Specifications, Section 6.9.1.9.b, we are submitting supplemental Licensee Event Report for Reportable Occurrence 82-053/03X-1.

Sincerely yours,

H. J. Midura
General Manager -
Salem Operations

RH:ks *J42*

CC: Distribution

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PDR ADOCK 05000311
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The Energy People

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Report Number: 82-053/03X-1
Report Date: 12-08-82
Occurrence Date: 06-16-82
Facility: Salem Generating Station, Unit 2
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Emergency Core Cooling System Heat Tracing - Inoperable.

This report was initiated by Incident Report 82-149.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 100% - Unit Load 1130 MWe.

DESCRIPTION OF OCCURRENCE:

At 2012 hours, June 16, 1982, during routine surveillance, an operator found four Emergency Core Cooling System (ECCS) heat tracing circuits reading less than the minimum of 0.5 amps required by the Technical Specification. Involved were Circuits 2606A, 2608A, 2610A and 2614A, in the heat tracing for the Boron Injection Tank (BIT) and the associated boron flow path. All circuits were in the primary ECCS channel. The channel was declared inoperable, and Action Statement 3.5.4.2 was entered retroactive to the time of discovery. The secondary circuits all tested satisfactorily, and all boron flow path temperatures were observed to be in specification.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

An investigation into the heat tracing failures revealed that the supply breaker had tripped. The breaker was reset and closed, and the circuits were returned to service. Circuit currents were measured with a clamp-on ammeter and found to be normal. Surveillance Procedure SP(O)4.5.4.2A was satisfactorily completed on Circuits 2606A, 2610A and 2614A; however, Circuit 2608A still failed to meet surveillance requirements. Further investigation showed that the thermocouple had been damaged by personnel standing on boron flow path piping and lagging. No other problems which could be related to the breaker trip were discovered.

ANALYSIS OF OCCURRENCE:

Redundant ECCS heat tracing ensures that the boron injection flow path temperature will be greater than 137°F, which is required to maintain a 22,500 ppm boron solution. This concentration, together with the BIT minimum contained volume, is necessary to keep the reactor shutdown in the event of a steam line rupture. Since only one channel was inoperable, however, no risk to the health or safety of the public was involved. As such, the occurrence constituted operation in a degraded mode permitted by a limiting condition for operation, and is reportable in accordance with Technical Specification 6.9.1.9.b.

Action Statement 3.5.4.2 requires:

With only one channel of heat tracing on the BIT or 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 flow path and BIT temperatures were verified to be in specification every 8 hours in compliance with the action statement. As noted, the supply breaker was reset, and the heat tracing circuits were reenergized. The damaged thermocouple junction was repaired, and a work order to install new insulation was issued. At 1725 hours, June 22, 1982, surveillance of the primary heat tracing channel was completed, the channel was declared operable, and Action Statement 3.5.4.2 was terminated. No further problems have been observed with the supply breaker. A check on July 9, 1982 showed it was in the closed position, and no further action was deemed necessary to prevent recurrence. Discussion of the incident has been incorporated into the station training program as an example of the possible safety significance of damage caused by personnel standing on piping and conduit.

FAILURE DATA:

Not Applicable.

Prepared By R. Heller

 H. J. Michurs
General Manager -
Salem Operations

SORC Meeting No. 82-109