

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

Salem Generating Station

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October 13, 1987

U. S. Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

Dear Sir:

SALEM GENERATING STATION LICENSE NO. DPR-75 DOCKET NO. 50-311 UNIT NO. 2 SPECIAL REPORT 87-5

This Special Report addresses a fire barrier penetration impairment which has not been restored to functional status within seven (7) days for Unit 2 and Unit 1 (Docket No. 50-272). This report satisfies the reporting requirements of Technical Specification Action Statement 3.7.11.a pursuant to Technical Specification 6.9.2. It is being submitted within thirty (30) days of identification of the impairments.

Sincerely yours,

J. M. Zupko, Jr. General Manager-Salem Operations

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Distribution

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SPECIAL REPORT NUMBER 87-5

PLANT IDENTIFICATION:

Salem Generating Station - Unit 2 Public Service Electric & Gas Company Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Technical Specification 3.7.11 - Identification of Fire Barrier Impairments; Repair > 7 Days

Discovery Date: 09/17/87

Report Date: 10/13/87

This report was initiated by Incident Report No. 87-360.

CONDITIONS PRIOR TO OCCURRENCE:

N/A

DESCRIPTION OF OCCURRENCE:

On September 17, 1987 at 1830 hours, a PSE&G task force, established to review and evaluate Salem Stations compliance with the requirements of 10CFR 50 Appendix R, identified a Unit 2 fire barrier to be inadequate. The Control Room horseshoe console is located over a penetration in the Control Room slab. A metal trough is provided in this penetration through which electrical cabling passes. This trough does not provide the required three hour fire rating between the Control Room and Relay Room fire areas. Since the Control Room is manned 100% of the time and a continuous fire watch is stationed in the Relay Room below the Control Room (due to other fire protection concerns) the requirements of Technical Specification Action Statement 3.7.11.a, are met.

Subsequent investigation of the comparable Unit 1 fire area penetration revealed it to also be inadequate. Technical Specification 3.7.11.a is met due to similar reasons as stated for the Unit 2 area.

Unit 2 Technical Specification 3.7.11 states:

"All fire penetrations (including cable penetration barriers, fire doors and fire dampers), in fire zone boundaries, protecting safety related areas shall be OPERABLE."

Action Statement 3.7.11.a states:

"With one (1) or more of the above required fire barrier penetrations inoperable, within one (1) hour either establish a continuous fire watch on at least one (1) side of the affected penetration, or verify the OPERABILITY of fire detectors on at least one (1) side of the inoperable fire barrier and establish an hourly fire watch patrol. Restore the inoperable fire barrier penetration(s) to OPERABLE status within 7 days or, in lieu of any other report required by Specification 6.9.1,

DESCRIPTION OF OCCURRENCE: (cont'd)

prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next (30) days outlining the action taken, the cause of the inoperable penetration and plans and schedule for restoring the fire barrier penetration(s) to OPERABLE status."

Note the Unit 1 Technical Specifications are identical with the Unit 2 Technical Specifications except that the term "functional" is substituted with "OPERABLE".

APPARENT CAUSE OF OCCURRENCE:

The cause of the inadequately sealed fire barrier penetration for both Units is inadequate design review. The configuration of the electrical troughs and floor plates have existed since their installation which occurred prior to 1976 when Branch Technical Position (BTP) 9.5.1, "Guidelines for Fire Protection for Nuclear Power Plants Docketed Prior to July 1, 1976", was issued. When PSE&G reviewed BTP 9.5.1, to ensure compliance, these penetrations were not identified.

ANALYSIS OF OCCURRENCE:

The functional integrity of the penetration fire barriers ensures that fires will be confined or adequately retarded from spreading to adjacent portions of the facility. This design feature minimizes the possibility of a single fire involving two or more fire areas of the facility. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspections. This report satisfies the reporting requirements of Technical Specification Action Statement 3.7.11.a pursuant to Technical Specification 6.9.2 (both Units) since the time between discovery and eventual repair of the fire barrier impairment is greater than seven (7) days. The fire watch requirements of Technical Specification Action Statement 3.7.11.a for the inadequate fire barrier are sufficient as discussed in the "Description of Occurrence" section.

Since the fire barrier for both Units is inadequate, it cannot be assured a fire in one area would not affect the adjacent fire area. Both areas contain detection and an independent suppression system in addition to the continuous fire watch. Therefore, it is reasonable to assume that a fire in either area would be detected and extinguished before it could involve the adjacent area. This occurrence therefore involved no undue risk to the health or safety of the public.

CORRECTIVE ACTION:

Due to the nature of the design change, the repair of the Unit 1 and Unit 2 penetrations could not be accomplished within seven (7) days. The penetrations will be evaluated by PSE&G and sealed as required.

CORRECTIVE ACTION: (cont'd)

Long term corrective action includes continuance of the PSE&G Appendix R Task Force review of fire barrier penetrations.

General Manager -Salem Operations

MJP:pc

SORC Mtg. 87-082