

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

Salem Generating Station

March 21, 1986

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

Dear Sir:

SALEM GENERATING STATION LICENSE NO. DPR-70 DOCKET NO. 50-272 UNIT NO. 1 REPORT NO. 86-1 SPECIAL REPORT

This Special Report, describing the circumstances surrounding a degraded fire barrier due to an inoperable fire door, is being submitted pursuant to the requirements of Technical Specification Action Statement 3.7.11.a. This report is required within thirty (30) days following the inoperability of a fire barrier penetration for any seven (7) day period.

Sincerely yours,

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

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The Energy People

SPECIAL REPORT NUMBER 86-1

PLANT IDENTIFICATION:

Salem Generating Station ~ Unit 1 Public Service Electric & Gas Company Hancock's Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Fire Barrier Penetration (Door 121-1) Inoperable

Event Date: 02/15/86

Report Date: 03/21/86

This report was initiated by Incident Report No. 86-045

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 - Rx Power 100 % - Unit Load 1120 MWe

This special report describes the circumstances surrounding the degradation of a fire barrier penetration, caused by the inoperability of a fire door. This report is submitted for informational purposes in accordance with the requirements of Technical Specification Action Statement 3.7.11.a, which states:

With one (1) or more of the required fire barrier penetrations non-functional, 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 non-functional fire barrier and establish an hourly fire watch patrol. Restore the non-functional fire barrier penetration(s) to functional status within seven (7) days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next thirty (30) days outlining the action taken, the cause of the non-functional penetration(s) and plans and schedule for restoring the fire barrier penetration(s) to functional status.

DESCRIPTION OF OCCURRENCE:

At 2200 hours, February 15, 1986, Technical Specification Action Statement 3.7.11.a was entered and Fire Door No. 121-1 was declared inoperable due to a broken latch mechanism. This door is located on the 100' elevation of the Unit 1 Auxiliary Building, and is the access to the solid radioactive waste area. Investigation revealed that, in addition to the damage sustained to the latch mechanism, the fire door itself was damaged and requires replacement. In accordance with the action requirements, a fire patrol watch is being maintained until the door is restored to an operable status.

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* APPARENT CAUSE OF OCCURRENCE:

Fire Door NG. 121-1 has exhibited a chronic propensity for failure; i.e., Technical Specification Action Statement 3.7.11.2 has been entered six (6) times (approximately every 2 weeks) since November 1985 due to damage sustained to the latch mechanism. Although corrective maintenance has been effective in restoring the door to an operable status, repairs have been only temporary in nature. The "root" cause of the problem is an excessive differential pressure which is being developed across the door by the ventilation system, possibly associated with operation of the large overhead door in the solid radioactive waste area.

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 rapidly involving several areas of the facility prior to detection and extinguishment. The penetration fire barriers are a passive element in the facility fire protection program and are subject to periodic inspections. The inoperable fire door constitutes a breach of the associated fire barrier. However, appropriate actions were taken in accordance with the requirements of Technical Specification 3.7.11 to establish of a fire watch at the inoperable door. This action provides adequate assurance that a fire will be readily detected and extinguished; thus, alleviating the possibility of a fire affecting adjacent portions of the facility. This occurrence therefore involves no undue risk to the health or safety of the public. However, because the fire door was not returned to an operable status within the seven (7) days specified by Technical Specification 3.7.11, this special report is being submitted pursuant to the requirements of Technical Specification 6.9.2.

CORRECTIVE ACTION:

A new door has been ordered, and the damaged door will be replaced upon receipt. However, due to the recurring nature of the problem associated with Fire Door 121-1, it is apparent that further action is required. The Engineering and Plant Betterment Department is reviewing this matter and, based upon the results of that review, appropriate actions will be taken to increase the reliability of this fire barrier penetration.

General Manager-

General Manager-Salem Operations

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