PSEG

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

Salem Generating Station

September 6, 1988

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
LICENSEE EVENT REPORT 88-013-00

This Licensee Event Report is being submitted pursuant to the requirements of the Code of Federal Regulations 10CFR 50.73(a)(2)(i)(B). This report is required within thirty (30) days of discovery.

Sincerely yours,

L. K. Miller
General Manager-
Salem Operations

MJP:pc

Distribution

IE22
1/1

NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Salem Generating Station Unit 1	0 5 0 0 0 2 7 2	1 OF 0 4

TITLE (4)

T. S. Non-Compliance; Fire Barrier Pene. Inoperable Due To Inad. Procedural Guidance

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
									Salem Unit 2	0 5 0 0 0 3 1 1
0 8	1 2	8 8	8 8	0 1 3	0 0	0 9	0 6	8 8		0 5 0 0 0

OPERATING MODE (9): 1

POWER LEVEL (10): 1 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check one or more of the following)* (11)

20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER *(Specify in Abstract below and in Text, NRC Form 366A)*
20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
M. J. Pollack - LER Coordinator	6 0 9 3 3 9 - 4 0 2 2

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES *(If yes, complete EXPECTED SUBMISSION DATE)*	X NO				

ABSTRACT *(Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines)* (16)

On 8/12/88 it was identified that several penetration seals did not conform to the correct color or cell structure as recommended by the silicone foam manufacturer. The color/cell structure indicate the ability of a seal to provide the necessary fire protection as per the manufacturer. The color/cell structure is set approximately 24 hours after foam installation. Therefore, it can be assumed that those penetrations without the appropriate color/cell structure have been impaired since installation. The inadequate seals were identified by Penetration Seal Review Program (PSRP) inspectors in the course of penetration inspections in the Unit 1 Relay Room. The apparent cause of this event has been attributed to inadequate procedural guidance for the installation of fire barrier penetration foam seals. An hourly fire watch was previously established for the subject fire areas due to other fire protection concerns and will continue until all such concerns are resolved. The appropriate procedure has been revised to address the foam manufacturer recommendations. The repair of these penetrations was not accomplished within 7 days due to the additional review being conducted by the PSRP personnel. Upon completion of this review the penetrations will be sealed. The NRC resident will be apprised of those fire barrier penetrations affected by the seal color/cell structure concerns as additional unsatisfactory seals are identified.

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PLANT AND SYSTEM IDENTIFICATION:

Westinghouse - Pressurized Water Reactor

Energy Industry Identification System (EIIS) codes are identified in the text as {xx}

IDENTIFICATION OF OCCURRENCE:

Fire Barrier Penetrations Inoperable - Technical Specification 3.7.11 Non-Compliance Due To Inadequate Procedural Guidance

Event Date: 8/12/88

Report Date: 9/06/88

This report was initiated by Incident Report No. 88-335.

CONDITIONS PRIOR TO OCCURRENCE:

N/A

DESCRIPTION OF OCCURRENCE:

On August 12, 1988, it was identified that several penetration seals did not conform to the correct color or cell structure as recommended by the silicone foam manufacturer. The color/cell structure indicate the ability of a seal to provide the necessary fire protection as per the manufacturer. The color/cell structure is set approximately twenty-four hours after foam installation. Therefore, it can be assumed that those penetrations without the appropriate color or cell structure have been impaired since installation.

The inadequate seals were identified by Penetration Seal Review Program inspectors in the course of penetration inspections in the Unit 1 Relay Room.

APPARENT CAUSE OF OCCURRENCE:

The apparent cause of this event has been attributed to inadequate procedural guidance for the installation of fire barrier penetration foam seals.

A review of the installation procedure for fire barrier penetration foam seals (M3Y) revealed that it did not historically "require" installers to account for a manufacturer recommended "cure" time prior to checking the installed seal color or cell structure. Training on fire barrier penetration seal installation does address the need for cure time and color/cell structure checks.

ANALYSIS OF OCCURRENCE:

The functional integrity of the penetration fire barriers ensures that fires will be confined or prevented from spreading to adjacent

ANALYSIS OF OCCURRENCE: (cont'd)

portions of the facility. This design feature minimizes the possibility of a single fire involving several areas of the facility. The fire barrier penetration seals 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 3.7.11.a pursuant to Technical Specification 6.9.2 since the time between discovery and eventual repair of the fire barrier impairments is greater than seven (7) days. Appropriate actions were already in place in accordance with the requirements of Technical Specification Action Statement 3.7.11.a to establish an hourly roving fire watch for the impaired fire barriers once the impairments were identified.

Technical Specification 3.7.11 states:

> "All fire barrier penetrations (including cable penetration barriers, firedoors and fire dampers), in fire zone boundaries, protecting safety related areas shall be functional."

This event is reportable to the Nuclear Regulatory Commission in accordance with Code of Federal Regulations 10CFR 50.73(a)(2)(i)(B) since it appears that the subject fire barrier penetrations have been impaired since installation.

The subject fire area(s) contain detection in addition to the roving fire watch patrol. Therefore, it is reasonable to assume that a fire in the area(s) would be detected before it could involve an adjacent area. This occurrence therefore involved no undue risk to the health or safety of the public.

Additional penetrations impaired due to color or cell structure concerns will be controlled in accordance with Technical Specification Action Statement 3.7.11.a requirements. Some Salem Unit 2 penetration seals are expected to exhibit the same problem, however, a separate LER for Salem Unit 2 will not be issued.

CORRECTIVE ACTION:

The hourly fire watch, as addressed in the Analysis of Occurrence section, will continue until all fire protection concerns associated with these area(s) are resolved.

The M3Y procedure has been revised to address the foam sealant manufacturer recommendations associated with cure time and color/cell structure post installation inspection.

The repair of the penetrations was not accomplished within seven (7) days due to the additional review being conducted by the Penetration Seal Task Force. Upon completion of this review the penetrations will be sealed.

All fire areas potentially affected by the concern associated with

CORRECTIVE ACTION: (cont'd)

the color/cell structure have been verified to be under fire watch for other fire protection concerns. The fire watch for these areas will be maintained until all penetrations within those areas have been verified to meet color/cell structure criteria as well as any other applicable criteria.

The NRC resident will be apprised of those fire barriers affected by the penetration seal color/cell structure concerns and what type fire watch has been established. The fire watch will be posted in accordance with Technical Specification Action Statement 3.7.11.a. "Special Reports", as required by Technical Specification Action Statement 3.7.11.a, will be issued for penetration seal color/cell structure concerns as applicable.

The continuing Penetration Seal Review Program review and corrective action(s) will be completed in accordance with PSE&G letter NLR-N88037, dated March 4, 1988.

J. K. Miller

General Manager -
Salem Operations

MJP:pc

SORC Mtg. 88-073