



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, New Jersey 08038-0236

Nuclear Business Unit

AUG 22 1996

LR-N96270

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

Gentlemen:

LER 272/96-019-00
SALEM GENERATING STATION - UNIT 1
FACILITY OPERATING LICENSE NO. DPR-70
DOCKET NO. 50-272

This Licensee Event Report entitled "Misclassification of Blow Down Sample Valves" is being submitted pursuant to the requirements of the Code of Federal Regulations 10CFR50.73(a)(2)(ii)(A).

Sincerely,

A handwritten signature in cursive script that reads "David F. Garchow".

David F. Garchow
General Manager -
Salem Operations

Attachment

SORC Mtg. 96-114

JMO/tcp

C Distribution
LER File 3.7

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The power is in your hands.

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Attachment A

The following represents the commitments that Public Service Electric & Gas (PSE&G) made to the Nuclear Regulatory Commission (NRC) relative to this LER (272/96-019-00). The commitments are as follows:

1. A review of other Salem piping penetrations was performed by the Inservice Inspection Group and did not identify any similar occurrences of misclassification of valves.
2. The seismic Category II tubing will be upgraded to Seismic Category I requirements, or compliance with Appendix J Type C testing will be reinstated prior to mode 4.
3. Procedure NC.TQ-TC.ZZ-0905 (Z) rev, 10 (dated May 13 1996) Engineering Support Personnel Training Program is now in place to ensure that qualified personnel are preparing and reviewing work.

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS MANDATORY INFORMATION COLLECTION REQUEST: 50.0 HRS. REPORTED LESSONS LEARNED ARE INCORPORATED INTO THE LICENSING PROCESS AND FED BACK TO INDUSTRY. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (7-6 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) SALEM GENERATING STATION UNIT 1	DOCKET NUMBER (2) 05000272	PAGE (3) 1 OF 3
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TITLE (4)
Misclassification of Blow Down Sample Valves

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 NAME	DOCKET NUMBER
07	29	96	96	019	00	08	22	96	Salem Unit 2	05000311
									FACILITY NAME	DOCKET NUMBER

OPERATING MODE (9) N	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more) (11)									
POWER LEVEL (10) 000	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)						
	20.2203(a)(1)	20.2203(a)(3)(i)	X 50.73(a)(2)(ii)	50.73(a)(2)(x)						
	20.2203(a)(2)(i)	20.2203(a)(3)(ii)	50.73(a)(2)(iii)	73.71						
	20.2203(a)(2)(ii)	20.2203(a)(4)	50.73(a)(2)(iv)	OTHER						
	20.2203(a)(2)(iii)	50.36(c)(1)	50.73(a)(2)(v)	Specify in Abstract below or in NRC Form 366A						
	20.2203(a)(2)(iv)	50.36(c)(2)	50.73(a)(2)(vii)							

LICENSEE CONTACT FOR THIS LER (12)

NAME Dennis V. Hassler, LER Coordinator	TELEPHONE NUMBER (Include Area Code) 609-339-1989
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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 15 single-spaced typewritten lines) (16)

On July 29, 1996, while performing a review of 10 CFR 50 Appendix J valves, four valves were identified in the Steam Generator Sample Blow Down Sample System lines that were not being leak rate tested. These isolation valves 11-14SS93, 21-24SS93, 11-14SS94 and 21-24SS94 were not included in the Technical Specifications. In November 1985, PSE&G submitted a license change request (LCR) to remove these valves from Table 3.6.1. The LCR was approved and thus the valves were removed from testing programs. An engineering review being performed as a commitment to LER 272/96-004-00 determined that the previous removal of these valves from the testing program was inappropriate because the seismic qualification of the sample line tubing was not adequate to support the design requirements for a closed system. This event was caused by a flawed engineering evaluation. The requirements for a closed system were listed in the design basis but an incorrect conclusion identified the piping boundary as a closed loop.

Corrective actions include upgrading by analysis or modifying the seismic Category II tubing to Seismic Category I requirements, or compliance with Appendix J type C testing will be reinstated.

This event is reportable under 10 CFR 50.73 (a) (2) (ii) (A), any condition that resulted in the nuclear power plant being in an unanalyzed condition.

**LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION**

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)	
SALEM GENERATING STATION UNIT 1	05000272	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2	OF 3
		96 - 019 - 00				

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

PLANT AND SYSTEM IDENTIFICATION

Westinghouse-Pressurized Water Reactor

Main Steam System/Isolation Valve {SB/ISV}*

*Energy Industry Identification (EIIS) codes and component function identifier codes appear as (SS/CCC).

CONDITIONS PRIOR TO OCCURRENCE

At the time of identification, Salem Units 1 and 2 were shutdown and defueled.

DESCRIPTION OF CONDITION

On July 29, 1996 while performing a review of 10 CFR 50 Appendix J valves as a commitment made in LER 272/96-004-00, four valves were identified in the Steam Generator Sample Blow Down Sample System lines that were not being tested. These isolation valves 11-14SS93, 21-24SS93, 11-14SS94 and 21-24SS94 were not included in the Technical Specifications.

In November 1985, PSE&G submitted a License Change Request (LCR) for Salem Units 1 and 2 to make modifications to the containment isolation valve table (Table 3.6-1) of the Technical Specifications. One aspect of the LCR dealt with the steam generator blow down sample line isolation valves (11-14SS93, 21-24SS93, 11-14SS94, and 21-24SS94). One item requested removal of the SS93 valves from the table since the valves were part of a closed system inside containment and were therefore not required to function as active isolation valves. A second item removed the 10CFR50 Appendix J, type C local leak rate testing of the SS94 valves based on the fact that they were connected to the secondary side of the steam generator and were therefore not exposed to the containment atmosphere during a loss of coolant accident. These changes were approved by License Amendments No. 92 and 67 dated April 24, 1989 for Salem Units 1 and 2 respectively.

The review of 10 CFR 50 Appendix J valves determined that the basis for removal of the valves from the Technical Specification was in error. The pressure boundary does not qualify as a closed loop system inside containment as defined in the design basis because a portion of the boundary is comprised of seismic Category II tubing. A closed system inside containment is required to be seismic Category I.

CAUSE OF OCCURRENCE

This event was caused by a flawed engineering evaluation. The requirements for a closed system were listed in the design basis but the analysis did not address the seismic qualifications of the sample lines.

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		96	- 019	- 00		

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

PRIOR SIMILAR OCCURRENCES

A review of LERs for the past two years did not reveal any reportable occurrences of misclassification of valves or occurrences where the Technical Specifications were incorrectly revised.

SAFETY CONSEQUENCES AND IMPLICATIONS

Salem Units 1 and 2 are shutdown and defueled and therefore the current situation presents no risk of an uncontrolled release. Both the SS94 and SS93 valves are maintained open during operations, with SS93 providing isolation inside the containment and SS94 providing isolation outside of the containment. Both valves are air operated, fail close designs. The SS94 valve receives a Phase A isolation signal during accidents while the SS93 valve is operated from the Control Room. Isolation of the steam generator blowdown sampling is maintained with a normally closed valve at the main sample station. Therefore, a potential release path would require the failure to close of the SS94 valve coupled with a rupture of the seismic category II sample tubing and the opening of the sample valve at the main sample station. Given that SS93 could provide isolation and the normally closed main sample station valve, the risk of uncontrolled release for past operations was minimal. Thus, there was no impact on the health and safety of the public.

CORRECTIVE ACTIONS

1. A review of other Salem piping penetrations was performed by the Inservice Inspection Group and did not identify any similar occurrences of misclassification of valves.
2. The seismic Category II tubing will be upgraded to Seismic Category I requirements, or compliance with Appendix J Type C testing will be reinstated prior to mode 4.
3. Procedure NC.TQ-TC.ZZ-0905 (Z) rev, 10 (dated May 13 1996) Engineering Support Personnel Training Program is now in place to ensure that qualified personnel are preparing and reviewing work.