



**PSEG**

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

**Nuclear Business Unit**

APR 08 1997

LR-N97213

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

**LER 272/97-006-00**  
**SALEM GENERATING STATION - UNIT 1**  
**FACILITY OPERATING LICENSE NO. DPR-70**  
**DOCKET NO. 50-272**

Gentlemen:

This Licensee Event Report (LER) entitled "Inadequate Technical Specification Required Surveillance Test for Pressurizer Overpressure Protection System" is being submitted pursuant to the requirements of the Code of Federal Regulations 10CFR50.73(a)(2)(i).

Sincerely,

David F. Garchow  
General Manager  
Salem Operations

Attachment

150007

DVH

C      Distribution  
LER File 3.7

IE22/1

9704150046 970408  
PDR ADOCK 05000272  
S                      PDR

The power is in your hands.



## 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 (T-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

## TITLE (4)

Inadequate Technical Specification Required Surveillance Test for  
Pressurizer Overpressure Protection System

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
03	12	97	97	006	00	04	08	97	Salem, Unit 2	05000311
									FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		NA	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
POWER LEVEL (10)		000	20.2201(b)			20.2203(a)(2)(v)		x	50.73(a)(2)(i)	50.73(a)(2)(viii)
			20.2203(a)(1)			20.2203(a)(3)(i)			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 388A
			20.2203(a)(2)(iv)			50.36(c)(2)			50.73(a)(2)(vii)	

## LICENSEE CONTACT FOR THIS LER (12)

## NAME

Brian J. Thomas, Licensing Engineer

## TELEPHONE NUMBER (Include Area Code)

609-339-2022

## 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)

YES  
(If yes, complete EXPECTED SUBMISSION DATE).

x NO

EXPECTED  
SUBMISSION  
DATE (15)

MONTH

DAY

YEAR

## ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On March 12, 1997, a review of the Salem Unit 2 Pressurizer Overpressure Protection System (POPS) logic determined that relays that are part of the logic for opening the Power Operated Relief Valves (PORV) were not tested and calibrated as required by Technical Specifications (TS) 4.4.10.3.1.a and 4.4.10.3.1.b. The POPS Channel Functional Test and Channel Calibration have been inadequate since at least 1985. A new procedure has been written and successfully completed to verify that the omitted relays actuate the PORV for Salem Unit 2. Testing is not required on Salem Unit 1 in the present defueled condition. Salem Unit 1 POPS will be adequately tested prior to being required.

The cause of this occurrence is attributed to a lack of adequate controls for the development and maintenance of Technical Specification surveillance procedures. Corrective actions include revision of procedures, initiation of new procedures and continuation of the TSSIP project.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B), any condition prohibited by the plant's Technical Specifications.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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SALEM GENERATING STATION UNIT 1	05000272	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 3
		97	- 006	- 00	

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

## PLANT AND SYSTEM IDENTIFICATION

Westinghouse - Pressurized Water Reactor

Pressurizer Overpressure Protection System {--/RV}

\* Energy Industry Identification System (EIIS) codes and component function identifier codes appear as {SS/CC}

## CONDITIONS PRIOR TO OCCURRENCE

At the time of occurrence, Salem Unit 2 was in Mode 5 and POPS was required to be operable (Reactor Coolant System less than or equal to 312 degree F and reactor vessel head in place and tensioned). Salem Unit 1 was defueled and POPS was not required to be operable.

## DESCRIPTION OF OCCURRENCE

On March 12, 1997, a review of the Salem Unit 2 Pressurizer Overpressure Protection System (POPS) logic determined that the surveillance procedures did not include relays that are part of the logic for opening the Power Operated Relief Valves (PORV). Technical Specification (TS) 4.4.10.3.1.a requires the performance of a channel functional test on each POPS (Channel I and Channel II) 31 days prior to entering a condition in which POPS is required to be operable and at least once per 31 days thereafter when POPS is required to be operable. Technical Specification 4.4.10.3.1.b requires the performance of a channel calibration on each POPS (Channel I and Channel II) at least once per 18 months. The POPS logic is designed to actuate the PORV when the reactor pressure exceeds 375 psig when the reactor coolant temperature is below 312 degrees F.

The channel functional and calibration procedures do not check the complete POPS logic. Two relays, which are the last relays in the logic train to actuate the PORV, were omitted from the Channel Calibration procedure and one relay was omitted from the Channel Functional Test procedure. After the omission was identified, both channels of POPS were declared inoperable. A new procedure was written to test these relays and the test was successfully performed. The testing was performed within the 24 hours allowed by TS Section 4.0.3 for a missed surveillance test.

## CAUSE OF OCCURRENCE

The cause of this occurrence is attributed to a lack of adequate controls for the development and maintenance of Technical Specification surveillance procedures. This resulted in the failure to identify and correct the procedures for testing of the POPS functions.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

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SALEM GENERATING STATION UNIT 1	05000272	97	006	00	3 OF 3

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

## PRIOR SIMILAR OCCURRENCES

A review of LERs for Salem Units 1 and 2 over the last two years identified twenty-six LERs (272/95-004, 272/95-013, 272/95-015, 272/95-019, 272/95-024, 272/95-028, 272/96-003, 272/96-004, 272/96-005, 272/96-008, 272/96-016, 272/96-023, 272/96-024, 272/96-026, 311/94-012, 311/95-006, 311/95-008, 311/96-003, 311/96-007, 311/96-010, 311/96-011, 311/96-013, 311/96-016, 311/96-039, 311/96-40 and 311/97-002) that were due to inadequate implementation of Technical Specification requirements. The corrective actions were specific to the missed surveillance issues addressed in each LER.

The identification of programmatic issues related to the Technical Specification requirement implementation resulted in the initiation of the Technical Specifications Surveillance Improvement Program (TSSIP) described in LER 311/95-008. The TSSIP should ensure that Technical Specification surveillance requirements are adequately proceduralized and will also identify potentially deficient Technical Specification Limiting Conditions for Operation.

## SAFETY CONSEQUENCES AND IMPLICATIONS

There were no safety consequences associated with this occurrence. Although the potential existed for a POPS channel to be in-operable without being identified, the tests verified that the relays were operable and there is no evidence that the relays had been inoperable in the past. The health and safety of the public was not affected.

## CORRECTIVE ACTIONS

1. A new procedure was written and successfully completed to verify that the omitted relays in the POPS circuitry actuate the PORV for Salem Unit 2.
2. A new procedure will be written for the Salem Unit 1 POPS to verify operation of the omitted relays prior to entry into Mode 6. POPS is not required to be operable for Salem Unit 1 in the present defueled condition.
3. A Technical Specification Surveillance Improvement Program (TSSIP) has been initiated for Salem Units 1 and 2. The scope and content of the TSSIP program was described previously in LER 311/96-008-00. The TSSIP review is expected to be completed December 31, 1997.