

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) Salem Generating station - Unit 1						DOCKET NUMBER (2) 0 5 0 0 C 2 7 2			PAGE (3) 1 OF 0 4		
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TITLE (4)  
Tech. Spec. 3.0.3 Entry; 3 Groups of CFCUs Inoperable Due To Equipment Problems

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)
0	1	0 4	8 9 8 9	0 0 1	0 0 0	2	0 1	8 9			0 5 0 0 0

OPERATING MODE (9) 1

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

20.402(b)	20.406(c)	50.73(a)(2)(iv)	73.71(b)
20.406(a)(1)(ii)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
20.406(a)(1)(iii)	50.36(c)(2)	50.73(a)(2)(vi)	OTHER (Specify in Abstract below and in Text, NRC Form 386A)
20.406(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
20.406(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
20.406(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME M. J. Pollack - LER Coordinator	TELEPHONE NUMBER AREA CODE: 6 0 9 3 3 9 - 4 0 2 2
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)  NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

On January 4, 1989, Technical Specification Action Statement 3.0.3 was entered due to inoperability of three groups of Containment Fan Coil Units (CFCUs). Two groups, Nos. 14 and 15 CFCUs, were inoperable due to a No. 12 Service Water (SW) Header (BI) outage. The third group, No. 11 CFCU, became inoperable when it developed a SW leak. The root cause of this event has been attributed to equipment problems. The SW leak associated with No. 11 CFCU was located on a "T" on the cooler discharge line. The SW header outage was needed to support No. 12A Component Cooling Heat Exchanger (CCHX) SW inlet piping weld leakage repair. A blind flange was installed on the No. 12A CCHX SW inlet piping allowing the SW header to be released and making the Nos. 14 and 15 CFCUs operable. With the CFCUs operable Technical Specification Action Statement 3.0.3 was exited. The SW leak on the No. 11 CFCU piping repairs were completed on January 8, 1989 at 0613 hours. No. 11 CFCU was declared operable at that time resulting in full compliance with Technical Specification 3.6.2.3.

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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:

Entry Into Technical Specification 3.0.3 - Three Groups of Containment Fan Coil Units Inoperable Due To Equipment Problems

Event Date: 1/04/89

Report Date: 2/01/89

This report was initiated by Incident Report No. 89-014.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 1 Reactor Power 100% - Unit Load 1158 MWe

DESCRIPTION OF OCCURRENCE:

On January 4, 1989 at 1125 hours, Technical Specification Action Statement 3.0.3 was entered due to inoperability of three groups of Containment Fan Coil Units (CFCUs) {BK}. Two groups, Nos. 14 and 15 CFCUs, were inoperable due to a No. 12 Service Water (SW) Header {BI} outage. The third group, No. 11 CFCU, became inoperable when it developed a SW leak. The SW leak was first detected as a result of required calculations which indicated an increased leak rate to the Containment Sump of greater than 1 gpm. Subsequent investigation identified SW leakage from No. 11 CFCU as the source of the increased leak rate.

Technical Specification Action Statement 3.6.2.3.b was first entered on January 3, 1989 at 0029 hours in support of the SW Header outage.

Technical Specification 3.6.2.3 states:

"Three independent groups of containment cooling fans shall be OPERABLE with two fan systems to each of two groups and one fan system to the third group."

Technical Specification Action Statement 3.6.2.3 states:

"a. With one group of the above required containment cooling fans inoperable and both containment spray systems OPERABLE, restore the inoperable group of cooling fans to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

b. With two groups of the above required containment cooling

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DESCRIPTION OF OCCURRENCE: (cont'd)

fans inoperable and both containment spray systems OPERABLE, restore at least one group of cooling fans to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore both above required groups of cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

- c. With one group of the above required containment cooling fans inoperable and one containment spray system inoperable, restore the inoperable spray system to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours. Restore the inoperable group of containment cooling fans to OPERABLE status within 7 days of initial loss or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours."

Technical Specification Action Statement 3.0.3 states:

"When a Limiting Condition for Operation is not met except as provided in the associated ACTION requirements, within one hour action shall be initiated to place the unit in a MODE in which the specification does not apply by placing it, as applicable, in:

1. At least HOT STANDBY within the next 6 hours,
2. At least HOT SHUTDOWN within the following 6 hours, and
3. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the ACTION may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition of Operation. Exceptions to these requirements are stated in the individual specifications."

APPARENT CAUSE OF OCCURRENCE:

The root cause of this event has been attributed to equipment problems.

The SW leak associated with No. 11 CFCU was located on a "T" on the cooler discharge line. The SW header outage was needed to support No. 12A Component Cooling Heat Exchanger (CCHX) SW inlet piping weld leakage repair. The SW leakage from the CCHX inlet piping and the CFCU cooler discharge line have both been attributed to erosion/corrosion effects.

ANALYSIS OF OCCURRENCE:

The CFCUs are designed to ensure the containment air temperature will be maintained within limits (i.e., 120°F) during normal operation,

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ANALYSIS OF OCCURRENCE: (cont'd)

and adequate heat removal capacity is available when operated in conjunction with the Containment Spray System during post-LOCA conditions. The design is such that with all five CFCUs operable, the resulting temperature/pressure transient within Containment after a design base accident (e.g., LOCA) will be mitigated without support from the Containment Spray System.

There are five separate CFCUs which are broken up into three distinct groups. No. 11 CFCU is Group 1, Nos. 12 and 14 CFCUs are Group 2, and Nos. 13 and 15 CFCUs are Group 3. If either CFCU in Groups 2 or 3 become inoperable, that respective Group becomes inoperable. Therefore, with Nos. 11, 14, and 15 CFCUs inoperable, three groups of CFCUs were inoperable requiring entry into Technical Specification Action Statement 3.0.3.

During this event, the Containment Spray System was operable. Therefore, this event did not affect the public. However, this event is reportable in accordance with Code of Federal Regulations 10CFR 50.73(a)(2)(i)(B) since Technical Specification Action Statement 3.0.3 was required to be entered.

CORRECTIVE ACTION:

A blind flange was installed on the No. 12A CCHX SW inlet piping. This allowed the SW header to be released making the Nos. 14 and 15 CFCUs operable. With the CFCUs operable Technical Specification Action Statement 3.0.3 was exited at 1312 hours on January 4, 1989.

The SW leak on the No. 11 CFCU piping repairs (reference Action Request #890104141) were completed on January 8, 1988 at 0613 hours. No. 11 CFCU was declared operable at that time resulting in full compliance with Technical Specification 3.6.2.3.



General Manager -  
Salem Operations

MJP:pc

SORC Mtg. 89-005



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

Salem Generating Station

February 1, 1989

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 89-001-00

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,

A handwritten signature in cursive script, appearing to read "L. K. Miller".

L. K. Miller  
General Manager-  
Salem Operations

MJP:pc  
Distribution

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