MAY 4 1999

LR-N990220

Regional Administrator
U.S. Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406-1415

Gentlemen:

LICENSEE EVENT REPORT 311/99-002-00
SALEM GENERATING STATION – UNIT 2
FACILITY OPERATING LICENSE NO DPR 75
DOCKET NO. 50-311

This Licensee Event Report entitled CONTAINMENT ISOLATION VALVE FAILS LLRT is being submitted in accordance with the requirements of 10CFR 50.73(a)(2)(ii) which states that Licensees shall report: "Any event or condition that resulted in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded;"

Sincerely,

David F. Garchow
General Manager-
Salem Operations

Attachment

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

/JCN
Distribution:
LER File 3.7

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NRC FORM 366 (6-1998) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

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

APPROVED BY OMB NO. 3150-0104 EXPIRES 06/30/2001

Estimated burden per response to comply with this mandatory information collection request: 50 hrs. Reported lessons learned are incorporated into the licensing process and fed back to industry. Forward comments regarding burden estimate to the 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. If an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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SALEM GENERATING STATION UNIT 2	05000311	1 OF 3

TITLE (4)

CONTAINMENT ISOLATION VALVE FAILS LLRT - DEGRADED CONTAINMENT INTEGRITY

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
										05000
04	05	99	99	002	00	05	03	99	FACILITY NAME	DOCKET NUMBER
										05000

		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)			
OPERATING MODE (9)	5	20.2201(b)	20.2203(a)(2)(v)	50.73(a)(2)(i)	50.73(a)(2)(viii)
POWER LEVEL (10)	0	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	TELEPHONE NUMBER (Include Area Code)
John C. Nagle Senior Licensing Engineer	609-339-3171

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
B	LF	ISV	V085	N					
B	LF	ISV	V085e	N					

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
X	YES (If yes, complete EXPECTED SUBMISSION DATE).	NO	06	30	99

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

During performance of Type C local leak rate testing on April 5, 1999 it was determined that 2SA118 (containment service air outboard manual isolation valve) failed the as found leakrate test. Because this failure was the second valve for this penetration to fail (2SA-119 inboard check had also failed) containment integrity was considered to be degraded. At the time of discovery the Unit was shut down for refueling and containment integrity was not required. A 4-hour report was made to the NRC as required by the plant's Emergency Classification Guide and 10CFR50.72(b)(2)(i). These valves are on the service air supply to the containment and are normally not open except during periods when maintenance activities are being performed within containment. The cause of the leakage appears to be foreign material blocking the valves from closing. The manual valve was cycled several times and the leakage returned to measurable levels. The check valve was mechanically agitated and returned to the normal closed position. Both valves will be opened and inspected in order to determine failure cause prior to entry into mode 4 during restart from the current refueling outage. Further corrective actions may be identified upon inspection. This report is being made pursuant to 10CFR50.73 (a)(2)(ii) Licensees shall report: "Any event or condition that resulted in the condition of the nuclear power plant, including its principal safety barriers, being seriously degraded;.."

FACILITY NAME (1)	DOCKET (2) NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Salem Generating Station Unit 2	05000311	99	- 0 02	00	2 OF 3

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

PLANT AND SYSTEM IDENTIFICATION

Westinghouse - Pressurized Water Reactor

Service air system/Isolation Valve {LF/ISV}*

* Energy Industry Identification System (EIIS) codes and component function identifier codes appear as {SS/CCC} in the text.

CONDITIONS PRIOR TO OCCURRENCE

The unit was in cold shutdown in preparation for refueling prior to the event.

DESCRIPTION OF OCCURRENCE

During performance of the local leak rate test, containment service air manual isolation valve 2SA118 failed. This valve is a three inch gate valve manufactured by Velan Corp. Personnel were unable to measure test pressure because of a leakrate which exceeded the capability of the available test equipment. Based upon the inability to establish test pressure the leakrate was estimated to be greater than 100,000 sccm. This failure constituted the second gross leakrate valve failure on the station air penetration. The three inch Velan swing check on this penetration also failed the as found (Type C)test. Therefore, the as-found Type C leakage for the valves on this penetration caused the total Type B and C Technical Specification leakage limit to be exceeded. T.S. Section 6.8.4.f, requires Type B and C leakage to be less than or equal to 0.6 La.

In addition, T.S Section 3.6.1.2 b. requires all Type B and C leakage rates to be in accordance with the containment leakage rate testing program in modes 1, 2, 3 and 4. This program requires that the leakage be below 0.6 La whenever containment integrity is required. At the time of discovery the plant was in a mode where containment integrity was not required.

A 4-hour report was made to the NRC as required by the plant's Emergency Classification Guide and 10CFR50.72(b)(2)(ii), which requires reporting when one of the primary barriers is seriously degraded. The leakage was indeterminate because the rate exceeded that capabilities of the test equipment therefore it must be assumed that the leakage exceeded requirements.

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

CAUSE OF OCCURRENCE

The event investigation can not be completed until the valve is opened and inspected. This work will be completed prior to entry into mode 4 upon return to service from the current refueling outage.

It is believed that foreign material, such as rust, may have been deposited in the seating area of the valve.

PRIOR SIMILAR OCCURRENCES

A review of 1997 and 1998 Licensee Event Reports and Inspection Reports for Salem Units 1 and 2 has identified no similar incidences on barrier degradation. The 2SA118 valve has had several failures over the last nine years.

SAFETY CONSEQUENCES AND IMPLICATIONS

Excess containment leakage results in an increase in the calculated post accident doses to the control room personnel and to the public. These dose calculations are performed assuming a leakage rate of 1.0La, which is greater than the Tech Spec acceptance criteria of 0.6 La. However, the leakage for this penetration exceeded the capabilities of the test equipment therefore it is not possible to determine if the total leakage was less than La. The last record of successful testing for this penetration was August of 1998. This date represents the maximum period of time that this condition may have existed. These valves were opened for subsequent in-containment activities and it is assumed that the condition occurred at that time. A review of the tagging database reveals that the date that this valve was operated since the successful test was in December 1998.

CORRECTIVE ACTIONS

The 2SA118 valve was cycled several times and the seat area was air blown in order to displace the foreign material. Re-testing determined that there was a measured leakage of approximately 6,500 sccm which satisfies the Tech Spec Limit.

A review is being conducted to determine the feasibility of revising the testing program in order to require as left testing any time the SA118 valve is operated.

The 2SA118/119 valves will be disassembled, inspected, cleaned, repaired and re-tested prior to entry into mode 4 at which time further corrective actions may be identified.