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LRN - 01 - 0387

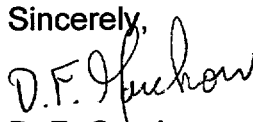
U. S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Gentlemen:

**LER 311/01-007-00**  
**SALEM GENERATING STATION - UNIT 2**  
**FACILITY OPERATING LICENSE NO. DPR-70**  
**DOCKET NO. 50-311**

Licensee Event Report, "Inadequate Verification Results in Technical Specification 3.6.3  
Not Being Met ", is being submitted pursuant to the requirements of the Code of Federal  
Regulations 10CFR50.73(a)(2)(i)(B).

The attached LER contains no commitments.

Sincerely,  
  
D. F. Garchow  
Vice President - Operations

Attachment

/HGB

C     Distribution  
      LER File 3.7

IE22

Estimated burden per response to comply with this mandatory information collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bjs1@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.

**LICENSEE EVENT REPORT (LER)**

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

**1. FACILITY NAME**

Salem Unit 2

**2. DOCKET NUMBER**

05000311

**3. PAGE**

1 OF 4

**4. TITLE**

Inadequate Verification Results in Technical Specification 3.6.3 Not Being Met

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	23	01	01	-007	-00	11	21	01		05000
9. OPERATING MODE			11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)							
1			20.2201(b)		20.2203(a)(3)(ii)		50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)	
10. POWER LEVEL			20.2201(d)		20.2203(a)(4)		50.73(a)(2)(iii)		50.73(a)(2)(x)	
100%			20.2203(a)(1)		50.36(c)(1)(i)(A)		50.73(a)(2)(iv)(A)		73.71(a)(4)	
			20.2203(a)(2)(i)		50.36(c)(1)(ii)(A)		50.73(a)(2)(v)(A)		73.71(a)(5)	
			20.2203(a)(2)(ii)		50.36(c)(2)		50.73(a)(2)(v)(B)		OTHER	
			20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)		Specify in Abstract below or in	
			20.2203(a)(2)(iv)		50.73(a)(2)(i)(A)		50.73(a)(2)(v)(D)		NRC Form 366A	
			20.2203(a)(2)(v)		50.73(a)(2)(i)(B)		50.73(a)(2)(vii)			
			20.2203(a)(2)(vi)		50.73(a)(2)(i)(C)		50.73(a)(2)(viii)(A)			
			20.2203(a)(3)(i)		50.73(a)(2)(ii)(A)		50.73(a)(2)(viii)(B)			

**12. LICENSEE CONTACT FOR THIS LER****NAME**

Howard G. Berrick

**TELEPHONE NUMBER (Include Area Code)**

(856) 339 - 1862

**13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT**

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

**14. SUPPLEMENTAL REPORT EXPECTED**

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

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

The containment isolation valves for No. 22 Containment Fan Coil Units (CFCU) {BI/ISV} are 22SW58 and 22SW72. On September 24, 2001 at 0600 it was identified that valves 22SW58 and 22SW72 had been inoperable since September 23, 2001 at 1610. This inoperability was caused by the tagging of 125 VDC breaker 2BDC2AX27 open in preparation for scheduled work to support an 85-hour maintenance window. At 0645 hours on September 24, 2001, operators closed valves 22SW54 and 22SW646, 14 hours and 35 minutes after Containment Isolation valves were rendered inoperable, isolating the penetration and exiting TS 3.6.3. This event was attributed to human error; failure to properly evaluate the impact of tagging the 125-volt breaker after changes had modified the extent of maintenance window work scope. Corrective actions include properly isolating the Containment Fan Coil Units (CFCU) and adding further clarification to plant documents rolling lessons-learned out to those organizations involved with tagging of equipment.

There were no actual safety consequences associated with this event. At the time of event, the service water system was in operation, with system pressure higher than any potential high pressure within the containment. There would have been no impact on the radiological consequences of an accident, even with the containment isolation valves being open.

This condition is being reported in accordance with the requirements of 10CFR50.73(a)(2)(i)(B) as "Any operation or condition that was prohibited by the plant's Technical Specifications..."

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
SALEM UNIT 2	05000311	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
		01	- 007	- 00	

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

**PLANT AND SYSTEM IDENTIFICATION**

Westinghouse - Pressurized Water Reactor  
Service Water System {BI/ISV}\*

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

**IDENTIFICATION OF OCCURRENCE**

Event Date: This event was discovered on September 24, 2001

**CONDITIONS PRIOR TO OCCURRENCE**

Mode 1 – 100%

**DESCRIPTION OF OCCURRENCE**

The Service Water system containment isolation valves {BI/ISV} for No. 22 CFCU are 22SW58 and 22SW72. On September 23, 2001 at 1610, in preparation for scheduled work, 125 VDC breaker 2BDC2AX27 was tagged open. At 0600 on September 24, 2001 it was identified that tagging this breaker 'open' had rendered these containment isolation valves inoperable and Technical Specification (TS) 3.6.3 was entered. TS 3.6.3 requires that an inoperable containment isolation valve be restored to operable status or the penetration isolated within 4 hours or the plant placed in Hot Standby within the next 6 hours and Cold Shutdown within the following 30 hours. At 0645 hours on September 24, 2001, operators closed valves 22SW54 and 22SW646, 14 hours and 35 minutes after Containment Isolation was rendered inoperable, isolating the penetration and TS 3.6.3 was exited.

A review of this event determined that a Safety System Functional Failure (SSFF) as defined in NEI 99-02 did not occur. No structures, systems or components were inoperable at the time of this event that contributed to this event.

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)	DOCKET (2)	LER NUMBER (6)			PAGE (3)
SALEM UNIT 2	05000311	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 OF 4
		01	- 007	- 00	

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

**CAUSE OF OCCURRENCE**

The apparent cause of this event was human error. The Work Week Tagging Nuclear Control Operator (NCO) and Operations Coordinator did not adequately review a change to a previously planned maintenance activity for impact to CFCU operation. Specifically, the work control procedures requires 1) a review of orders and system drawings and 2) independently verify that the planned Work Clearance Document (WCD) adequately isolates the equipment to be worked and that it does not adversely affect other plant equipment not directly involved in the work scope. A more thorough review of the drawings associated with this work would have identified that tagging the 125 VDC breaker would impact the operation of containment isolation valves 22SW58 and 22SW72.

**PRIOR SIMILAR OCCURRENCES**

A review of LERs from 1999 through the present date for both Salem and Hope Creek was performed. While several LER's were attributed to various human errors, the corrective actions associated with these events would not have prevented this event from occurring.

**SAFETY CONSEQUENCES AND IMPLICATIONS**

There were no actual safety consequences associated with this event. Service Water flow through the CFCU was at a higher pressure than a potential maximum containment pressure situation. The service water system containment isolation valves for the 22 CFCU were in their normal and accident positions, i.e., open. In the event of a Loss of Coolant Accident (LOCA) or Safety Injection, the valves would remain open, and would only be isolated if a breach of the Service Water system piping occurred. Prior to the event, the service water system pipe was intact with no existing leakage identified on the affected 22 CFCU loop. Therefore, the consequences of having the isolation valves in the open position would have had no impact on the radiological consequences of an accident.

Based on the above, this event did not affect the health and safety of the public.

**LICENSEE EVENT REPORT (LER)**

FACILITY NAME (1)		DOCKET (2)	LER NUMBER (6)			PAGE (3)
SALEM UNIT 2		05000311	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	4 OF 4
			01	- 007	- 00	

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

**CORRECTIVE ACTIONS**

1. Manual isolation valves associated with 22 CFCU were closed, satisfying the requirements of TS 3.6.3.
2. The work control document for the 22 CFCU was modified and the system was properly tagged to support the maintenance activity.
3. All individuals involved were held accountable in accordance with company policy and procedures.
4. Future Preventive Maintenance (PM) orders for solenoid replacement on CFCUs will be revised to accurately reflect the scope of work and components affected.
5. The descriptions for the 125 VDC breakers associated with the five Unit 1 and five Unit 2 CFCUs will be revised to provide clarification that the 125 VDC breakers for a particular CFCU affect the controls of the service water valves.

**COMMITMENTS**

The corrective actions cited in this LER are voluntary enhancements and do not constitute commitments.