

NOV 2 0 2001 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

TE22

#### APPROVED BY OMB NO. 3150-0104 EXPIRES 7-31-2004 MRC FORM 366 **U.S. NUCLEAR REGULATORY** Estimated burden per response to comply with this mandatory information collection request: COMMISSION (7-2001)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-LICENSEE EVENT REPORT (LER) 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 (See reverse for required number of digits/characters for each block) 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. 3. PAGE 1. FACILITY NAME 2. DOCKET NUMBER 1 of 4 Salem Unit 2 05000311 4. TITLE Inadequate Verification Results in Technical Specification 3.6.3 Not Being Met 8. OTHER FACILITIES INVOLVED 6. LER NUMBER 7. REPORT DATE 5. EVENT DATE FACILITY NAME DOCKET NUMBER SEQUENTIAL NUMBER 05000 DAY YEAR YEAR MO DAY YEAR MO FACILITY NAME DOCKET NUMBER 09 23 01 -007 - 0011 21 01 05000 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) 9. OPERATING 1 MODE 20.2203(a)(3)(ii) 50.73(a)(2)(ix)(A) 20.2201(b) 50.73(a)(2)(ii)(B) 50.73(a)(2)(iii) 50.73(a)(2)(x) 20.2201(d) 20.2203(a)(4) 10. POWER 100% 50.73(a)(2)(iv)(A) LEVEL 73.71(a)(4) 20.2203(a)(1) 50.36(c)(1)(i)(A) 73.71(a)(5) 20.2203(a)(2)(i) 50.36(c)(1)(ii)(A) 50.73(a)(2)(v)(A) OTHER 20.2203(a)(2)(ii) 50.36(c)(2) 50.73(a)(2)(v)(B) Specify in Abstract below or in 20.2203(a)(2)(iii) 50.46(a)(3)(ii) 50.73(a)(2)(v)(C) NRC Form 366A 50.73(a)(2)(i)(A) 50.73(a)(2)(v)(D) 20.2203(a)(2)(iv) 20.2203(a)(2)(v) 50.73(a)(2)(i)(B) 50.73(a)(2)(vii) 50.73(a)(2)(i)(C) 50.73(a)(2)(viii)(A) 20.2203(a)(2)(vi) 50.73(a)(2)(viii)(B) 20.2203(a)(3)(i) 50.73(a)(2)(ii)(A) 12. LICENSEE CONTACT FOR THIS LER TELEPHONE NUMBER (Include Area Code)

YES (If yes, complete EXPECTED SUBMISSION DATE). X NO 16. ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

14. SUPPLEMENTAL REPORT EXPECTED

MANU-FACTURER

Howard G. Berrick

COMPONENT

SYSTEM

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.

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

CAUSE

SYSTEM

15. EXPECTED

SUBMISSION

DATE

REPORTABLE TO EPIX

(856) 339 - 1862

MONTH

COMPONENT

MANU-FACTURER

DAY

REPORTABLE TO EPIX

YEAR

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..."

NAME

CAUSE

NRC FORM 366AU.S. NUCLEAR REGULATORY COMMISSION

(1-2001)

## LICENSEE EVENT REPORT (LER)

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

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 (EIIS) 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.

NRC FORM 366AU.S. NUCLEAR REGULATORY COMMISSION

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## 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.

NRC	<b>FORM</b>	366AU.S.	<b>NUCLEAR</b>	REGULA	ATORY	COMMISS	ION

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#### **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.