



DEC 30 2005

LR-N05-0598

U. S. Nuclear Regulatory Commission
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Washington, DC 20555

LER 311/05-005-00
SALEM - UNIT 1
FACILITY OPERATING LICENSE NO. DPR-70
DOCKET NO. 50-272

This Licensee Event Report, "11 Safety Injection Pump Discharge Valve Found Shut," 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,

A handwritten signature in black ink, appearing to read "C. Fricker", written over a printed name.

Carl J. Fricker
Plant Manager
Salem Generating Station

Attachment (1)

IE22

DEC 30 2005

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C: Mr. S. Collins, Administrator – Region I
U. S. Nuclear Regulatory Commission
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King of Prussia, PA 19406

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U. S. Nuclear Regulatory Commission
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USNRC Senior Resident Inspector – Salem (X24)

Mr. K. Tosch, Manager IV
Bureau of Nuclear Engineering
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LICENSEE EVENT REPORT (LER)

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

Estimated burden per response to comply with this mandatory 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 and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to infocollects@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 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.

1. FACILITY NAME Salem Generating Station – Unit 1	2. DOCKET NUMBER 05000272	3. PAGE 1 OF 4
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4. TITLE
11 Safety Injection Pump Discharge Valve Found Shut

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
11	03	05	2005	05	00	12	30	2005	FACILITY NAME	DOCKET NUMBER

9. OPERATING MODE 4	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR§: (Check all that apply)									
10. POWER LEVEL 0	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)						
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(vii)(A)						
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)						
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)						
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)						
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)						
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)						
<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER							
<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A							

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME Justin Wearne, Senior Licensing Engineer	TELEPHONE NUMBER (Include Area Code) 856-339-5081
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
A	BQ	ISV	-	No					

14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
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ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

On November 8, 2005, at 2100 hours, the 11 Safety Injection (SI) pump discharge valve (11SJ35) was found closed. The normally locked open valve was discovered closed by operators performing a pretest valve lineup for a normally scheduled SI pump surveillance test. The valve had been unlocked and closed on November 3, 2005 for check valve leak rate testing during refueling outage 1R17. Following discovery of the closed discharge valve, Technical Specification Action Statement (TSAS) 3.5.2 b was entered and the valve placed in its proper position (locked open) and the TSAS exited. The SI pump discharge valve being inappropriately left shut effectively disabled one of the redundant trains of Safety Injection.

The direct cause was procedure non-compliance. The root cause was attributed to less than adequate application and enforcement of operator fundamentals. Corrective action was taken to revise the procedures and corrective actions are taking place to improve operator fundamentals.

This event is reportable under 10CFR 50.73(a)(2)(i)(B) "Any operation or condition which was prohibited by the Plants Technical Specifications"

LICENSEE EVENT REPORT (LER)

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		2005	- 05	00	

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

PLANT AND SYSTEM IDENTIFICATION

Westinghouse - Pressurized Water Reactor
High Head Safety Injection {BQ/ISV}*

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

IDENTIFICATION OF OCCURRENCE

Event Date: 11/03/2005

Discovery Date: 11/08/2005

CONDITIONS PRIOR TO OCCURRENCE

Salem Unit 1 was in Mode 4 (Hot Shutdown), 0% power, returning from the seventeenth refueling outage at the time of the event.

DESCRIPTION OF OCCURRENCE

On November 8, 2005, at 2100 hours with the plant in Mode 1 at 100% power, following a refueling outage, the 11 Safety Injection pump discharge isolation valve (11SJ35) {BQ/ISV} was found closed. A Nuclear Equipment Operator (NEO) discovered the valve closed while performing a pretest valve lineup for a scheduled SI pump surveillance test. Personnel interviews and a review of previously implemented procedures indicate the discharge valve had been left closed since testing on November 3, 2005. In addition, operator rounds did not identify this condition over the five-day period following the completion of the surveillance test.

On November 3, 2005, when in Mode 4 during the Salem 1 refueling outage (1R17), the Operations Implementation Team commenced the RCS pressure isolation check valve leak rate surveillance test in accordance with S1.OP-ST.SJ-0020(Q).

The surveillance test was coordinated from the main Control Room by an Implementation Team Test Reactor Operator (RO) and an Implementation Team Test Senior Reactor Operator (SRO). During the performance of this test, field operators were dispatched to manipulate valves and read test flow meters in the Auxiliary Building and Containment Building in order for any leak rate past the check valves to be calculated. The procedure continued over multiple shifts and upon satisfactory completion the surveillance test procedure was reviewed.

This event is reportable under 10CFR 50.73(a)(2)(i)(B) "Any operation or condition which was prohibited by the Plants Technical Specifications". The plant made a mode change with one train of SI inoperable contrary to Technical Specification 3.0.4 and exceeded Technical Specification 3.5.2 allowed outage time for an inoperable SI pump.

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

CAUSE OF OCCURRENCE

The cause was determined to be less than adequate application and enforcement of basic operator fundamentals and standards.

A procedure step was signed-off inappropriately. When operators completed the Mode 4 ECCS check valve test, the procedure instructed returning the valves to the pre-test position. This step was signed off when the action was initiated, as opposed to when it was completed. As a result of poor communication, a field operator was not directed to reposition the closed isolation valve.

PREVIOUS OCCURRENCES

Salem Generating Station LERs and internal Operating Experience for years 2002-2005 were reviewed for similar occurrences of less than adequate application of and enforcement of operator fundamentals. The following were noted:

LER 311/2005-04 refers to an event where control room operators moved the plant to mode 4 with automatic safety injection blocked. The cause of this event was the lack of formal independent verification to ensure TS requirements are met prior to changing plant modes. A contributing cause was the SRO who signed off the step of the procedure misread the step and initialed for Automatic SI Block being ACTIVE, contrary to procedure requirements. Corrective actions were taken to improve supervisory oversight of Mode change requirements and would not have prevented the current event from occurring.

LER 272/2005-03 is an event where excessive leakage ECCS leakage was caused by inadequate isolation of the seal injection filter. Other factors contributing to this event were related to human performance deficiencies, specifically inadequate teamwork and job briefs. Corrective action was taken to improve crew teamwork skills and would not have prevented the current event from occurring.

NCV 272/2005-003-01 refers to an event where a CFCU was inoperable for a period of six days due to the charging spring motor toggle switch being in the off position. Routine operator rounds failed to identify the toggle switch being in the off position. Corrective actions were specific to this event and would not have prevented this event from occurring.

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

PREVIOUS OCCURRENCES (continued)

LER 311/2004-001 is an event where a sampling procedure directed valves to be verified open, contrary to the procedure sampling valves were not verified to be open and a Technical Specification required containment sample was not performed for thirty six hours. Corrective actions were specific to this event and would not have prevented this event from occurring.

SAFETY CONSEQUENCES AND IMPLICATIONS

There was no actual safety consequences associated with this event. The redundant train of ECCS was available during this event and a recirculation flowpath existed to protect the pump if a demand for system operation would have been initiated. Once the 11SJ35 valve was discovered closed, actions were immediately taken to restore the system to operable status.

A review of this event determined that a Safety System Functional Failure (SSFF) IAW NEI 99-02 did not occur because this event would not have prevented the fulfillment of a safety function.

CORRECTIVE ACTIONS

1. Salem reviewed the extent of condition and revised ninety Operations and Chemistry procedures to correct the inadequate procedure guidance that directly lead to this event.
2. Station management has focused efforts on improving operator effectiveness. Management has placed a priority on allowing operators to focus on their primary functions. Operations department is in the process of implementing an Operator Fundamentals Program, consisting of weekly observations of non-licensed operators by Control Room Supervisors and weekly paired observations by Shift Managers. This will allow supervisors to focus on enforcement of operator fundamentals. These observations will be trended for crew and individual opportunities for improvement.

COMMITMENTS

This LER contains no commitments.