PSEG Nuclear LLC
P.O. Box 236, Hancocks Bridge, NJ 08038-0236

PSEG
Nuclear LLC

LR-N17-0206

10 CFR 50.73

January 8, 2018

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Salem Nuclear Generating Station Unit 1
Renewed Facility Operating License No. DPR-70
NRC Docket No. 50-272

SUBJECT: LER 272/2017-001-000
Containment Integrity Inoperable for Longer than Allowed by Technical Specifications

Licensee Event Report, "Containment Integrity Inoperable for Longer than Allowed by Technical Specifications" is submitted pursuant to 10 CFR 50.73 (a)(2)(i)(B), "Any operation or condition which was prohibited by the plant's Technical Specifications....."

Should you have any questions or comments regarding the submittal, please contact Mr. Harry Balian of Regulatory Affairs at 856 – 339 – 2173.

There are no regulatory commitments contained in this letter.

Sincerely,

Charles V. McFeaters
Site Vice President
Salem Generating Station

Enclosure – LER 272/2017-001-000

cc D. Dorman, Administrator – Region 1
C. Parker, Licensing Project Manager – Salem
P. Finney, USNRC Senior Resident Inspector – Salem
P. Mulligan, Manager, IV, Bureau of Nuclear Engineering
T. Cachaza, Salem Commitment Coordinator
L. Marabella, Corporate Commitment Coordinator

NRC FORM 366 (04-2017) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 03/31/2020

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Privacy and Information Collections Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to Infocollects.Resource@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.

LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/)

1. FACILITY NAME	2. DOCKET NUMBER	3. PAGE
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4. TITLE

Containment Integrity Inoperable for Longer than Allowed by Technical Specifications

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
										05000
11	09	2017	2017 – 001 – 00			01	08	2018	FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: *(Check all that apply)*			
3	☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)
	☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)
	☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)
	☐ 20.2203(a)(2)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)
10. POWER LEVEL	☐ 20.2203(a)(2)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(v)(A)	☐ 73.71(a)(4)
	☐ 20.2203(a)(2)(iii)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(v)(B)	☐ 73.71(a)(5)
000	☐ 20.2203(a)(2)(iv)	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(C)	☐ 73.77(a)(1)
	☐ 20.2203(a)(2)(v)	☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(i)
	☐ 20.2203(a)(2)(vi)	☑ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(vii)	☐ 73.77(a)(2)(ii)
		☐ 50.73(a)(2)(i)(C)	☐ OTHER Specify in Abstract below or in NRC Form 366A	

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT	TELEPHONE NUMBER *(Include Area Code)*
Harry Balian, Senior Regulatory Compliance Engineer	856 – 339 – 2173

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
A	BD								

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
☐ YES (If yes, complete 15. EXPECTED SUBMISSION DATE) ☑ NO				

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

On November 9, 2017 at approximately 2300, Salem Unit 1 was operating in MODE 3 when operators found steam leaking into the mechanical penetration area outside containment. Operators entered S1.OP-AB.STM-0001, Excessive Steam Flow, and dispatched operators to locate and isolate the leak. Operators determined the steam was from the 14 steam generator through normally closed valves 14GB47 and 14GB48 steam generator blowdown {WI} line nitrogen supply valves. The steam leak was isolated at 2314 when operators closed normally open manual valve 14GB3.

This report is made per 10CFR50.73(a)(2)(i)(B), Any operation or condition which was prohibited by the plant's Technical Specifications.

This was caused by human performance. Procedures will be revised to assure containment integrity exceptions are tracked and open valves are closed while sampling during the sparging process.

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NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

Westinghouse-Pressurized Water Reactor {PWR/4}
Containment Leakage Control System {BD}

IDENTIFICATION OF OCCURRENCE

Discovery and Event Date: 11/09/2017

CONDITIONS PRIOR TO OCCURRENCE

Salem Unit 1 was in Mode 5, Cold Shutdown, at 000 percent rated thermal power (RTP).

DESCRIPTION OF OCCURRRENCE

On November 9, 2017 at approximately 2300, Salem Unit 1 was operating in MODE 3 when operators found steam leaking into the auxiliary building outside containment. Operators entered S1.OP-AB.STM-0001, Excessive Steam Flow, and dispatched operators to locate and isolate the leak. Operators determined the steam was from the 14 steam generator through normally closed valves 14GB47 and 14GB48 steam generator blowdown {WI} line nitrogen supply valves. The steam leak was isolated at 2314 when operators closed normally open manual valve 14GB3. The following chronology explains how the event occurred:

Salem Unit 1 established containment integrity while in Mode 5, Cold Shutdown. While in Mode 5, operators opened 14GB47 and 14GB48 to sparge the 14 steam generator. The procedure was not completed and the open valves were not tracked as exceptions to containment integrity. Salem Unit 1 entered Mode 4, Hot Shutdown, on 11/07/17 at 2238. Reactor coolant system (RCS) temperature was 200 degrees Fahrenheit. RCS pressure was 1580 psig. Salem Unit 1 entered Mode 3, Hot Standby, on 11/09/2017 at 1918. RCS temperature was 350 degrees Fahrenheit. RCS pressure was 1580 psig.

Contrary to limiting condition for operation (LCO) 3.6.1.1 requirements, Salem Unit 1 operated in MODE 4 and MODE 3 for 24.6 hours with containment integrity not established because normally closed valves 14GB47 and 14GB48 were open.

In addition, Unit 1 failed to comply with LCO 3.0.4 on two discrete occasions because entries into applicable MODEs were made while LCO 3.6.1.1 was not met. The first occasion occurred when Unit 1 entered MODE 4 on 11/08/17. The second occasion occurred when Unit 1 entered MODE 3 on 11/09/17. On 11/09/17 at 2316, the condition was corrected by closing 14GB3, and then closing normally closed valves 14GB47 and 14GB48. RCS temperature was 475 degrees Fahrenheit. RCS pressure was 1980 psig.

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CAUSE OF EVENT

The cause for leaving the 14GB47 and 14GB48 open is human performance. Operators did not implement LCO tracking as required by OP-SA-108-115-1001, Operability Assessment and Equipment Control Program, when exceptions to containment integrity were taken to sparge the 14 steam generator. Procedures will be revised to assure containment integrity exceptions are tracked.

SAFETY CONSEQUENCES AND IMPLICATIONS

There were no safety consequences as a result of this event.

The operating crew responded correctly to the event. The applicable abnormal operating procedure was properly entered and documentation met expectations.

All SSCs needed to shut down the reactor and maintain safe shutdown conditions, remove residual heat, control the release of radioactive material, or mitigate the consequences of an accident were available. The 14 steam generator blowdown manual isolation valve, 14GB3, was available and could be closed if required to isolate the 14 steam generator from atmosphere.

SAFETY SYSTEM FUNCTIONAL FAILURE

A review of this event determined that a safety system functional failure (SSFF) as defined in NEI 99-02, Regulatory Assessment Performance Indicator Guidelines, did not occur. This event did not prevent the ability of a system to fulfill its safety function to either shutdown the reactor, remove residual heat, control the release of radioactive material, or mitigate the consequences of an accident.

PREVIOUS EVENTS

A review of Salem licensee event reports for the previous three years identified no other similar events.

CORRECTIVE ACTIONS

This was a human performance error for which performance management actions have been taken to correct the behavior. The performance management actions include reinforcement of standards and expectations with the individuals involved, training to disseminate the experiential learning through the licensed operator requalification training program, and a department level clock reset.

COMMITMENTS

There are no regulatory commitments contained in this LER.