



OCT 19 2015

LR-N15-0208

10 CFR 50.73

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

LER 272/2015-001-002
Salem Nuclear Generating Station Unit 1
Renewed Facility Operating License No. DPR-75
NRC Docket No. 50-272

Subject: Fuel Movement in Progress With Fuel Handling Building Ventilation Inoperable

References: PSEG Letter LR-N15-0054, Dated March 16, 2015
Licensee Event Report 272/2015-001-000

PSEG Letter LR-N15-0091, Dated April 28, 2015
Licensee Event Report 272/2015-001-001

PSEG Nuclear LLC is submitting the attached Licensee Event Report (LER), "Fuel Movement in Progress with Fuel Handling Building Ventilation Inoperable" to revise the original reporting criteria identified in referenced LERs 272/2015-001-000 and 272/2015-001-001. LER 272/2015-001-002 wholly and completely replaces the previous submittals.

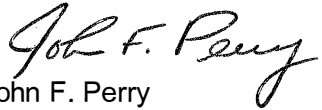
This event was originally reported pursuant to 10 CFR 50.73(a)(2)(i)(B), "a condition prohibited by technical specifications," and 10 CFR 50.73(a)(2)(v)(C), "an event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material." A subsequent review of the event by PSEG confirmed that even though the Fuel Handling Building (FHB) Ventilation is in Technical Specifications, it is not credited in the safety analysis as a system needed to mitigate the consequences of an accident. Specifically, FHB Ventilation is not needed to mitigate a fuel handling accident in the fuel handling building. Therefore, FHB Ventilation does not provide a safety function, and PSEG is removing the 10 CFR 50.73(a)(2)(v)(C) reporting criterion from the LER. As per accepted practice for a supplement to an LER, all changes are marked with revision bars in the margin.

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If you have any questions or require additional information, please contact Mr. Timothy Sexsmith at 856-339-1611.

There are no regulatory commitments contained in this letter.

Sincerely,

A handwritten signature in black ink that reads "John F. Perry". The signature is written in a cursive style with a large, stylized initial "J".

John F. Perry
Site Vice President
Salem Generating Station

Attachment

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cc Mr. D. Dorman, Administrator – Region 1, NRC
 Mr. T. Wengert, Licensing Project Manager – Salem, NRC
 Mr. P. Finney, USNRC Senior Resident Inspector, Salem (X24)
 Mr. P. Mulligan, Manager IV, NJBNE
 Mr. R. Braun, President and Chief Nuclear Officer – Nuclear
 Mr. T. Cachaza, Salem Commitment Tracking Coordinator
 Mr. L. Marabella, Corporate Commitment Tracking Coordinator
 Mr. D. Lafleur, Salem Regulatory Assurance



LICENSEE EVENT REPORT (LER)
(See Page 2 for required number of digits/characters for each block)

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.

1. FACILITY NAME Salem Generating Station – Unit 1	2. DOCKET NUMBER 05000272	3. PAGE 1 OF 4
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4. TITLE Fuel Movement in Progress With Fuel Handling Building Ventilation Inoperable

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
01	16	2015	2015	- 001	- 002	10	19	2015	FACILITY NAME	DOCKET NUMBER 05000
									FACILITY NAME	DOCKET NUMBER 05000

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
	<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)(viii)(A)
10. POWER LEVEL 100%	<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	TELEPHONE NUMBER (Include Area Code)
Timothy Sexsmith, Compliance Engineer, Salem Regulatory Assurance	(856) 339-1611

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	-	-	-	-					

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

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

On 1/16/15, irradiated fuel was being moved in the Salem Unit 1 Fuel Handling Building (FHB) in support of fuel sipping activities. Fuel Handling Building Ventilation system operability was being monitored via a camera focused on the local indication which was displayed in the Control Room as permitted by station procedures. While fuel was being moved, the local differential pressure indicator oscillated between negative and slightly positive. Fuel movement was not secured as required by Technical Specification 3.9.12 when negative building differential pressure (D/P) was not maintained

A causal evaluation determined that FHB equipment issues led to the FHB D/P alarm being locked in. A separate causal evaluation determined that Operations control room crew members failed to apply fundamentals of control board awareness and effective crew teamwork. Operating crew expectations were reinforced with respect to the assignment of personnel for continuous monitoring of equipment, and the underlying equipment deficiencies were corrected.

This event is reportable under 10 CFR 50.73 (a)(2)(i)(B) as an operation or condition which was prohibited by the plant's Technical Specifications.



**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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.

1. FACILITY NAME	2. DOCKET	6. LER NUMBER			3. PAGE
Salem Generating Station – Unit 1	05000272	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 OF 4
		2015	- 001	- 002	

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

Westinghouse - Pressurized Water Reactor {PWR/4}
 Fuel Handling Building Ventilation- {VG/AHU}
 Fuel Handling Building Differential Pressure Indicator- {VG/PDI}

Energy Industry Identification System (EIS) codes and component function identifier codes appear as {SS/CCC}.

IDENTIFICATION OF OCCURRENCE

Event Date: January 16, 2015
 Discovery Date: January 16, 2015

CONDITIONS PRIOR TO OCCURRENCE

Salem Unit 1 was in Operational Mode 1, operating at approximately 100 percent power. The Fuel Handling Building (FHB) differential pressure (D/P) LO Alarm in the control room was locked in, necessitating the use of local indication to support fuel movement. No additional structures, systems or components were inoperable at the time of discovery that contributed to this event.

DESCRIPTION OF OCCURRENCE

On 1/16/2015, at approximately 0807, Reactor Engineering, and Outage Services commenced fuel sipping in accordance with procedures. Conditions to perform fuel movements in the fuel handling building were verified to be in accordance with the Salem Unit 1 Spent Fuel Pool Manipulations procedure.

Salem Unit 1 Technical Specification (TS) 3.9.12 requires two exhaust fans and one supply fan shall be OPERABLE and operating, and capable of maintaining slightly negative pressure in the Fuel Handling Building (FHB) during movement of irradiated fuel in the FHB. The Control Room alarm which would provide audible indication of low FHB differential pressure (D/P) {VG/PDI} was locked in. Procedures allow fuel movement to continue with dedicated personnel monitoring a local D/P gauge. A camera was focused on the gauge, with the display in the Control Room. FHB D/P was observed oscillating slightly positive with fuel movement continuing. At approximately 1004 on 01/16/15, movement of irradiated fuel was secured due to the oscillations of the FHB D/P.

This event is reportable under 10 CFR 50.73 (a)(2)(i)(B) as an operation or condition which was prohibited by the plant's Technical Specifications.

**LICENSEE EVENT REPORT (LER)
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NARRATIVE

CAUSE OF EVENT

A causal evaluation determined that FHB equipment issues led to the FHB D/P alarm being locked in. A separate causal evaluation determined that Operations control room crew members failed to apply fundamentals of control board awareness and effective crew teamwork. A dedicated individual was not assigned by the Control Room Supervisor (CRS) to continuously monitor FHB air D/P indication as required by procedure. The operating crew chose to monitor the local FHB air D/P indicator using a camera with a display on the CRS's monitor. The CRS elected to assume monitoring of the FHB D/P indication when the responsibilities of his position did not allow him to provide continuous monitoring to ensure the requirements to move fuel were satisfied at all times.

SAFETY CONSEQUENCES AND IMPLICATIONS

There were no safety consequences associated with this event. The fueling handling accident (FHA) in the fuel handling building is a Condition IV (Limiting Fault) accident as defined in the Salem UFSAR. The potential radiological consequences of a fuel handling accident in the FHB were reevaluated pursuant to 10 CFR 50.67, Accident Source Term, in 2002. The fuel handling accident in the FHB does not credit the charcoal filtration which is part of the FHB ventilation (FHV) system. The FHV System consists of one supply fan and two exhaust fans. TS 3.9.12 requires all these fans to be running to maintain negative pressure in the FHB during movement of irradiated fuel. The charcoal filtration system was removed from TS by sequential implementation of Alternative Source Term via Amendments 251 and 263 for Salem Unit 1.

An engineering evaluation concluded that the momentary FHB D/P excursions seen on 01/16/15 were bounded by the maximum release flows in the accident analysis. The events of 1/16/15 did not result in a loss of safety function, and any consequences from a postulated fuel handling accident on 01/16/15 would have been bounded by the existing FHA analysis.

SAFETY SYSTEM FUNCTIONAL FAILURE

This event does not constitute a Safety System Functional Failure (SSFF) as defined in Nuclear Energy Institute (NEI) 99-02, Regulatory Assessment Performance Indicator Guideline.

PREVIOUS OCCURRENCES

A review of Salem Unit 1 and 2 Licensee Event Reports for the previous three years identified no other similar events.



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NARRATIVE

CORRECTIVE ACTIONS

1. Operating crew expectations were reinforced with respect to the assignment of personnel for continuous monitoring of equipment.
2. The control room FHB D/P LO Alarm response procedure was revised to provide operators with additional guidance for responding to FHB D/P LO Alarms during fuel movement.
3. The underlying equipment issues were mitigated in accordance with the station's work management process.

COMMITMENTS

This LER contains no regulatory commitments.