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PSEG
Nuclear LLC

10CFR50.73

LR-N17-0112

JUL 07 2017

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-001

Hope Creek Generating Station Unit 1
Renewed Facility Operating License No. NPF-57
Docket No. 50-354

Subject: Licensee Event Report 2017-001-00, Secondary Containment Inoperable.

In accordance with the requirements of 10 CFR 50.73(a)(2)(v)(C), and 10 CFR 50.73 (a)(2)(i)(B), PSEG Nuclear LLC is submitting the enclosed Licensee Event Report (LER) Number 2017-001-00, Secondary Containment Inoperable.

If you have any questions or require additional information, please contact Mr. Thomas MacEwen at (856) 339-1097.

There are no regulatory commitments contained in this letter.

Sincerely,

Edward T Casulli
Plant Manager
Hope Creek Generating Station

ttm

Attachment: Licensee Event Report 2017-001-00

cc: Mr. Daniel Dorman, Regional Administrator – Region I, NRC
Ms. Carleen Parker, Project Manager - US NRC
Mr. Justin Hawkins, NRC Senior Resident Inspector – Hope Creek (X24)
Mr. Patrick Mulligan, Manager IV, NJBNE
Mr. Thomas MacEwen, Hope Creek Commitment Tracking Coordinator (H02)
Mr. Lee Marabella - Corporate Commitment Tracking Coordinator (N21)

NRC FORM 366 (06-2016) U.S. NUCLEAR REGULATORY COMMISSION

APPROVED BY OMB: NO. 3150-0104 EXPIRES: 10/31/2018

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/)

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 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 NUMBER	3. PAGE
Hope Creek Generating Station	05000354	1 OF 3

4. TITLE

Secondary Containment Door Not Latched in Closed Position

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
05	08	2017	2017	- 001	- 00	07	07	2017	FACILITY NAME	DOCKET NUMBER 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)(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)
100%	☐ 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)*
Thomas MacEwen, Principal Nuclear Engineer	856-339-1097

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	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 May 10, 2017, a Hope Creek secondary containment door was observed to be unlatched in the closed position. The door was being held closed by the negative pressure within the reactor building (secondary containment). The door was determined to have been opened for equipment passage on, May 8, 2017, at 1323. It was concluded that the door was most likely unlatched for passage at that time and not re-latched following the passage. A review of Hope Creek design basis accident (DBA) conditions determined that the secondary containment pressure would become slightly positive for a short period of time, under certain DBA events. Based on the area of the door, and the expected pressure rise within secondary containment, the door could not be assured to remain closed. Hope Creek Technical Specifications require that secondary containment integrity be maintained while in Operational Condition 1. Secondary Containment Integrity is defined as having all doors in the closed position except for normal passage. Since the closed door position could not be assured under all postulated accident conditions, the event is being reported under 10 CFR 50.73 (a)(2)(i)(B) as a condition prohibited by Technical Specifications, and under 10 CFR 50.73 (a)(2)(v)(C) as a condition that could have prevented the fulfillment of a safety function needed to control the release of radioactive material.

1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Hope Creek Generating Station	05000-354	2017	- 001	- 00

NARRATIVE

PLANT AND SYSTEM IDENTIFICATION

General Electric - Boiling Water Reactor (BWR/4)
Reactor Building - EIIS Identifier {NG}

IDENTIFICATION OF OCCURRENCE

Event Date: May 8, 2017
Discovery Date: May 10, 2017

CONDITIONS PRIOR TO OCCURRENCE

Hope Creek was in Operational Condition 1 at 100 percent rated thermal power (RTP).

DESCRIPTION OF OCCURRENCE

During a walk down of the Reactor Building at Hope Creek on May 10, 2017, at approximately 10:00, door 4302 was found to be closed but the hand wheel not rotated to engage the latches. The door was being held in the closed position by the negative pressure in the Reactor Building. This condition was reported immediately to the control room, and the door handle was repositioned to engage the latches. The door position is indicated in the control room, and the door was verified to indicate closed at the time it was found to be not latched.

Door 4302 is a secondary containment boundary door, and is a single door arrangement. Hope Creek Technical Specifications require that for single door arrangements, the door remain closed except for routine entry and exit. Technical Specifications require that the Secondary Containment Integrity be re-established within 4 hours, or the reactor be in Hot Shutdown within the following 12 hours.

A review of the door alarm history for door 4302 indicates that the door was last opened on May 8, 2017 at 1323. The door opening indication lasted approximately one minute, which corresponds to a routine entry or exit, as permitted by the Technical Specifications. There was no indication of the door being left open for an extended period of time and there were no door openings indicated after this transit until the time that the door was re-latched in the closed position on May 10, 2017. During the transit on May 8, 2017, the Reactor Building differential pressure lowered to approximately 0.16 inches of vacuum water gauge and quickly recovered to its normal control point of approximately 0.48 inches of vacuum water gauge, also indicating that the door remained closed following the transit.

Based on the review of door alarm history, the door was not latched for a period exceeding the Technical Specification allowable time period of 4 hours, and therefore this represents a condition prohibited by Technical Specifications.

CAUSE OF EVENT

The cause is a failure to properly use human performance tools such as self-check or a peer check to ensure the proper configuration of the door is maintained. Proper use of human performance tools when closing the door and engaging the latches would have identified that the latches on the door were not made up.

SAFETY CONSEQUENCES AND IMPLICATIONS

There were no adverse safety consequences as a result of this event. The Secondary Containment is designed to minimize any ground level release of radioactive material which may result from an accident. In the as found condition, the secondary containment door was in the closed position, supporting the function of the secondary containment. However, in reviewing the postulated design basis accidents, the door could not be assured to remain closed under all accident conditions during the time when it was unlatched. Based on this, the secondary containment is considered to

have been inoperable from the time of the last transit, May 8, 2017 at 1323, until the discovery and engagement of the door latches on May 10, 2017 at approximately 1000.

The secondary containment functions to control the release of radioactive materials by ensuring that any releases from the reactor building are elevated and monitored; therefore the condition could have prevented the fulfillment of a safety function to control the release of radioactive materials in the event that the door were to open in response to accident conditions. The conditions under which the door could open were determined to be a seismic event, and a design basis LOCA coincident with a Loss of Offsite Power (LOOP).

Any condition in which the door were to open, including accident conditions, would result in a control room alarm. Control room alarm response procedures direct investigation and subsequent closure of the door, restoring the secondary containment function.

SAFETY SYSTEM FUNCTIONAL FAILURE

This condition is a safety system functional failure as defined in NEI 99-02, Revision 7, Regulatory Assessment Performance Indicator Guideline.

PREVIOUS EVENTS

A review of events for the past three years at Hope Creek was performed to determine if similar events had occurred. No events were identified that involved secondary containment being breached due to mis-positioned doors or hatches. Extent of condition was performed to determine if there are other Reactor Building secondary containment doors that could inadvertently be left unsecured such as door 4302. All other secondary containment doors have interlocks with a second door that prevent both from being open at the same time. This door is stand alone in this design.

CORRECTIVE ACTIONS

The individuals that did not properly engage the door latches following transit were identified based on reactor building security access records. The individuals' behaviors were addressed in accordance with the station performance management process.

The station operations department has established additional administrative controls for passage through door 4302 to ensure that door latches are engaged following each transit.

COMMITMENTS

There are no regulatory commitments contained in this LER.