



Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

August 15, 2017

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

SUBJECT: Licensee Event Report 2017-011- 00, Simultaneously Opened Reactor Building
Airlock Doors Caused Loss of Secondary Containment

Pilgrim Nuclear Power Station
Docket No. 50-293
Renewed License No. DPR-35

LETTER NUMBER: 2.17.057

Dear Sir or Madam:

The enclosed Licensee Event Report 2017-011-00, Simultaneously Opened Reactor Building
Airlock Doors Caused Loss of Secondary Containment, is submitted in accordance with Title 10
Code of Federal Regulations 50.73.

If you have any questions or require additional information, please contact me at (508) 830-8323.

There are no regulatory commitments contained in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Everett P. Perkins, Jr." with a stylized flourish at the end.

Everett P. Perkins, Jr.
Manager, Regulatory Assurance

EPP/sc

Attachment: Licensee Event Report 2017-011-00, Simultaneously Opened Reactor Building
Airlock Doors Caused Loss of Secondary Containment (3 Pages)

TEZZ
NR

cc: Mr. Daniel H. Dorman
Regional Administrator, Region I
U.S. Nuclear Regulatory Commission
2100 Renaissance Blvd., Suite 100
King of Prussia, PA 19406-2713

Mr. John Lamb, Senior Project Manager
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Mail Stop O-8C2A
Washington, DC 20555

USNRC Senior Resident Inspector
Pilgrim Nuclear Power Station

Attachment

Letter Number 2.17.057

Licensee Event Report 2017-011-00

Simultaneously Opened Reactor Building Airlock Doors Caused Loss of Secondary Containment

(3 Pages)



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 Information Services Branch (T-2 F43), 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 Pilgrim Nuclear Power Station	2. DOCKET NUMBER 05000-293	3. PAGE 1 OF 3
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4. TITLE Simultaneously Opened Reactor Building Airlock Doors Caused Loss of Secondary Containment

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
06	20	2017	2017	- 011	00	08	15	2017	N/A	N/A
									FACILITY NAME	DOCKET NUMBER
									N/A	N/A

9. OPERATING MODE N	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)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
10. POWER LEVEL 100	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(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)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input checked="" type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> 73.77(a)(1)
	<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)(D)	<input type="checkbox"/> 73.77(a)(2)(i)
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> 73.77(a)(2)(ii)
<input type="checkbox"/> 50.73(a)(2)(i)(C)				<input type="checkbox"/> OTHER Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

LICENSEE CONTACT Mr. Everett P. Perkins, Jr. - Regulatory Assurance Manager	TELEPHONE NUMBER (Include Area Code) 508-830-8323
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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
B	NG	DR	N/A	Y					

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 June 20, 2017, at 1444 hours [EDT], with the reactor at 100% core thermal power and steady state conditions, plant personnel notified the Main Control Room that both doors in the secondary containment airlock at the 23 foot elevation on the East Side Reactor Building (RB) Entrance were opened simultaneously. The failure of this interlock (to prevent both doors from being opened) caused a loss of secondary containment per Technical Specification (TS) 3.7.C.1. The doors were immediately closed, and the secondary containment boundary was reestablished.

An 8-hour non-emergency notification was made in accordance with 10 CFR 50.72(b)(3)(v)(C), any event or condition that at the time discovery could have prevented the fulfillment of the safety function of structures or systems that are needed to control the release of radioactive material. The safety significance of this event was minimal given the impact on the secondary containment.

Secondary containment remained available and functional during the event since secondary containment was immediately restored by closing the doors.



**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 Information Services Branch (T-2 F43), 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.

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1. FACILITY NAME	2. DOCKET NUMBER	3. LER NUMBER		
		YEAR	SEQUENTIAL NUMBER	REV NO.
Pilgrim Nuclear Power Station	05000-293	2017	- 011	- 00

BACKGROUND

The secondary containment is designed to minimize any ground level release of radioactive materials that might result from a serious accident. The reactor building provides secondary containment during reactor operation, when the drywell is sealed and in service. Because the secondary containment is an integral part of the complete containment system, secondary containment is required at all times that primary containment is required as well as during movement of recently irradiated fuel and during operations with the potential to drain the reactor vessel.

EVENT DESCRIPTION

On June 20, 2017, at 1444 [EDT] plant personnel notified the Main Control Room that both doors in the secondary containment airlock at the 23 foot elevation on the East Side Reactor Building (RB) Entrance were opened simultaneously. They noted that when they exited through Door 58 that Door 85 opened momentarily and then closed within seconds but did not latch. The failure of this interlock caused a loss of secondary containment per Technical Specification (TS) 3.7.C.1. The doors were immediately reclosed, and the secondary containment boundary was reestablished. A repeat of the event, which was considered testing of the airlock, was performed a short time later to verify and confirm the condition. Although it was verified that both doors did open, Operators could not get the door to repeat the condition upon arrival.

CAUSE OF THE EVENT

The direct cause of the event was that the Door 85 latch did not engage to keep the door from opening when the other door in the airlock (Door 58) was opened. The closer magnets did engage for the interlock to show that the door was closed and allow entry through the opposite door.

CORRECTIVE ACTIONS

The Door 85 closer was adjusted to add additional tension to ensure it latched without manual action.

SAFETY CONSEQUENCES

The secondary containment performs no active function; however, its leak tightness is required to ensure that the release of radioactive materials from primary containment is restricted to those leakage paths and associated leakage rates assumed in the accident analysis and that fission products entrapped within the secondary containment structure will be treated by the Standby Gas Treatment System (SGTS) prior to discharge to the environment.



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Secondary containment remained available and functional during the event since the secondary containment interlock was immediately restored by closing the doors.

The engineering evaluation that was performed concluded that this event did not constitute a Safety System Functional Failure. (Reference NEI 99-02, Revision 7, Regulatory Assessment Performance Indicator Guideline, Section 2.2, Mitigating Systems Cornerstone, Safety System Functional Failures, Clarifying Notes, Engineering Analyses.) As such, this event will not be reported in the NRC Performance Indicator for Safety System Functional Failures since an engineering evaluation was performed which determined that the system was capable of performing its safety function during this event when both doors of the secondary containment interlock were momentarily opened simultaneously.

There are no consequences to the general safety of the public, nuclear safety, industrial safety or radiological safety from this event.

No actions to reduce the frequency or consequence are necessary.

REPORTABILITY

Given the impact on the secondary containment, this report is submitted in accordance with the requirements of 10 CFR 50.73 (a)(2)(v)(C), any 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.

PREVIOUS EVENTS

A review of LERs for the past five years did not identify any additional submittals of Secondary Containment being declared inoperable due to simultaneous opening of airlock doors.

REFERENCES

CR-PNP-2017-06380