



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

May 25, 2017

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

SUBJECT: Licensee Event Report 2017-002-00, Isolation of HPCI

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

LETTER NUMBER: 2.17.034

Dear Sir or Madam:

The enclosed Licensee Event Report 2017-002-00, Isolation of HPCI, 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 2017-002-00, Isolation of HPCI (3 pages)

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

NRC Senior Resident Inspector
Pilgrim Nuclear Power Station

Attachment

Letter Number 2.17.034

Licensee Event Report 2017-002-00

Isolation of HPCI

(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 Isolation of HPCI

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
03	27	2017	2017	002	00	05	25	2017	N/A	05000N/A
									N/A	05000N/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)						
	<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)						
10. POWER LEVEL 100	<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 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 checked="" 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	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
A	BJ	TS		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 March 27, 2017, at 1825 [EDT], with the reactor at 100 percent core thermal power and steady state conditions, plant personnel caused a High Pressure Coolant Injection (HPCI) System isolation. Pilgrim Nuclear Power Station was performing planned testing on the Reactor Core Isolation Cooling (RCIC) when the HPCI System isolated. Accordingly, the HPCI System was declared inoperable.

The Technical Specifications Limiting Condition for Operation Action Statement 3.5.C.2 was entered and planned troubleshooting into the cause of the HPCI isolation was started. This event is reportable under 10 CFR 50.73(a)(2)(v)(D), any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

There was no impact to public health and safety from this condition.



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

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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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	- 002	- 00

NARRATIVE

BACKGROUND

The High Pressure Coolant Injection (HPCI) System is provided to ensure that the reactor core is adequately cooled to limit fuel clad temperature in the event of a small break in the nuclear system and loss of coolant which does not result in rapid depressurization of the reactor vessel. The HPCI System permits the reactor to be shut down while maintaining sufficient reactor vessel water inventory until the reactor vessel is depressurized. HPCI continues to operate until reactor vessel pressure is below the pressure at which Low Pressure Coolant Injection or Core Spray systems would maintain core cooling.

EVENT DESCRIPTION

On March 27, 2017, at 1825 [EDT], with the reactor at 100 percent core thermal power and steady state conditions, the HPCI System was declared inoperable and Technical Specifications (TS) Limiting Condition for Operation (LCO) Action Statement (AS) 3.5.C.2 was entered. Pilgrim Nuclear Power Station (PNPS) personnel were performing planned testing of the Reactor Core Isolation Cooling (RCIC) System per TS Table 4.2.B. During the test, it has been determined that plant personnel heated the wrong temperature switch causing the HPCI system to isolate.

CAUSE OF THE EVENT

The Direct Cause of the event was the application of heat to a HPCI temperature switch. The system responded as designed and the HPCI primary containment isolation valves closed making HPCI unavailable.

The Root Cause of this event is two Nuclear Controls Technicians decided to deviate from procedure requirements while performing procedure 8.M.2-2.6.3 Attachment 1, RCIC Steam Line High Temperature Instrument Functional Test.

CORRECTIVE ACTIONS

The corrective action to preclude repetition documents that both individuals' qualifications have been removed and their site access restricted.

Specific disciplinary actions have been taken with the individuals involved pursuant to the requirements of 10 CFR 73.56(c).



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CONTINUATION SHEET**

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SAFETY CONSEQUENCES

There are no consequences to the general safety of the public, nuclear safety, industrial safety and radiological safety from this event. The isolation of HPCI has been evaluated and it has been determined that the individuals involved were not following procedure requirements for performing testing. The loss of safety function created by isolating the HPCI System lasted for only thirty three minutes during this evolution.

No additional actions to reduce the consequence are necessary.

REPORTABILITY

This report is submitted in accordance with 10 CFR 50.73(a)(2)(v)(D), any event or condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.

PREVIOUS EVENTS

A review of Pilgrim Station License Event Reports (LERs) for the past 10 years was performed. The focus of the review was LERs that involved loss of HPCI system function. The following LERs were reviewed:

- LER 2008-004 - HPCI System Inoperable Due to Undervoltage Relay Failure in Power Supply Circuit
- LER 2011-006 - HPCI System Inoperable Due to Governor Control Valve Mechanical Binding
- LER 2013-006 - HPCI Flow Controller Failure to Achieve Rated Flow while in Auto Mode
- LER 2016-009 - HPCI Declared Inoperable Due to Failed Inservice Testing

These LER events do not identify any similar failure mechanisms to that described in this LER.

REFERENCES:

CR-PNP-2017-2622