



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 2017-003-00, Suppression Pool Declared Inoperable Due to High Water Level

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

LETTER NUMBER: 2.17.035

Dear Sir or Madam:

The enclosed Licensee Event Report 2017-003-00, Suppression Pool Inoperable Due to High Water Level, 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/pm

Attachment:

Licensee Event Report 2017-003-00, Suppression Pool Declared Inoperable Due to High Water Level

IER2
NRR

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 2.17.035

Licensee Event Report 2017-003-00

Suppression Pool Declared Inoperable Due to High Water Level



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, NEOF-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
Pressure Suppression Pool Declared Inoperable Due to High Water Level

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	31	2017	2017	003	00	05	25	2017	N/A	05000 N/A
									FACILITY NAME	DOCKET NUMBER
									N/A	05000 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)
	<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 97	<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 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 checked="" 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) 5088308323

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

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 31, 2017, at 1155 [EDT], with the reactor at 97 percent core thermal power and steady state conditions, operators caused water level to rise in the Pressure Suppression Pool. Operators were restoring a valve lineup after performing planned operations when a pathway was created through valve manipulation that allowed water in the Condensate Storage Tank to be diverted to the Suppression Pool. The rise in water level exceeded the maximum water level specified in Technical Specifications. The Differential Pressure limit between the Drywell and Pressure Suppression Pressure was also not met.

With Suppression Pool water level and differential pressure both outside of Technical Specification limits, Limiting Condition for Operation Action Statement 3.7.A.5 was entered and investigation into the cause of diverting water to the Suppression Pool was initiated. Water level was restored to within Technical Specification limits at 1540 [EDT]. This event is reportable under 10 CFR 50.73(a)(2)(i)(B), operation or condition prohibited by Technical Specifications.

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 Pilgrim Nuclear Power Station	2. DOCKET NUMBER 05000- 293	3. LER NUMBER		
		YEAR 2017	SEQUENTIAL NUMBER 003	REV NO. 00

NARRATIVE

BACKGROUND

The Pressure Suppression Pool water provides the heat sink for the reactor primary system energy release following a postulated rupture of the system. The Pressure Suppression Pool water volume must absorb the associated decay and structural sensible heat released during primary system blow-down. The design volume of the Pressure Suppression Pool (water and air) was obtained by considering that the total volume of reactor coolant to be condensed is discharged to the Suppression Pool and that the Drywell volume is purged to the Suppression Pool.

The Suppression Pool is designed to absorb the sudden input of heat from the primary system. In the long term, the pool continues to absorb residual heat generated by fuel in the reactor core.

EVENT DESCRIPTION

On March 31, 2017, at 1155 [EDT], with the reactor at 97 percent core thermal power and steady state conditions, operators caused water level to rise in the Pressure Suppression Pool. Operators were restoring a valve lineup after performing planned operations when a pathway was created through valve manipulation that allowed water in the Condensate Storage Tank to be diverted to the Suppression Pool. The rise in water level to (+) 6.25 inches exceeded the maximum water level specified in Technical Specification Limiting Condition for Operation (LCO) 3.7.A.1.m. The Differential Pressure between the Drywell and Pressure Suppression Pool specified in LCO 3.7.A.8 as equal to or greater than 1.17 psid was also not met.

With Suppression Pool water level and differential pressure outside of Technical Specification limits, LCO Action Statement (AS) 3.7.A.5 was entered. EOP-3, Primary Containment Control, was also entered due to high water level. Investigation into the cause of diverting water to the Suppression Pool was initiated. Appropriate procedural guidance was followed to begin lowering Pressure Suppression Pool water level below the limit specified in the Technical Specifications. The LCO AS was exited at 1540 [EDT] when Pressure Suppression Pool water level was restored to the limits specified in Technical Specification LCO 3.7.A.1.m. Differential pressure had previously been restored at 1515 [EDT].

CAUSE OF THE EVENT

The direct cause of the condition was that the control room operator opened the Core Spray Pump A Torus Suction Valve prior to verifying closed the Core Spray Pump Suction Valve from the Condensate Storage Tank and the Condensate Supply to Core Spray System Valve.

CORRECTIVE ACTIONS

Upon discovery of the Suppression Pool high water level condition, Operations promptly returned the Suppression Pool water level to the required level using appropriate procedural guidance.

The Control Room Supervisor and the Reactor Operator were disqualified.

SAFETY CONSEQUENCES

The Safety Function of the Primary Containment System was not adversely affected due to the high water level condition in the Pressure Suppression Pool. A preliminary assessment has demonstrated that the Pressure Suppression Pool Water Level was within a volume range that will accommodate all normal, transient, emergency, and accident events within the design capabilities of the Primary Containment System. As such, there are no consequences to general safety of the public, nuclear safety, industrial safety and radiological safety from this condition.



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		YEAR 2017	SEQUENTIAL NUMBER 003	REV NO. 00

NARRATIVE

REPORTABILITY

This report is submitted in accordance with 10 CFR 50.73(a)(2)(i)(B), operation or condition prohibited by Technical Specifications.

PREVIOUS EVENTS

A review of PNPS Licensee Event Reports for the past five years did not identify any similar occurrences of declaring the Suppression Pool inoperable due to a high water level condition.

REFERENCE:

CR-PNP-2017-2785