



Entergy Nuclear Operations, Inc.  
Palisades Nuclear Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043

April 25, 2007

10 CFR 50.73(a)(2)(v)(B)

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

Palisades Nuclear Plant  
Docket 50-255  
License No. DPR-20

Licensee Event Report 07-003, Potential For Reduced Component Cooling Water  
Cooling Capability

Dear Sir or Madam:

Licensee Event Report (LER) 07-003 is enclosed. The LER describes the potential effects on the component cooling water system from radiant heat damage to associated equipment cable jackets. This event is reportable in accordance with 10 CFR 50.73(a)(2)(v)(B).

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments.

A handwritten signature in black ink, appearing to read "C. Schwarz", with a long horizontal flourish extending to the right.

Christopher J. Schwarz  
Site Vice President  
Palisades Nuclear Plant

Enclosure (1)

CC Administrator, Region III, USNRC  
Project Manager, Palisades, USNRC  
Resident Inspector, Palisades, USNRC

JE22

## **ENCLOSURE 1**

**LER 07-003, Potential For Reduced  
Component Cooling Water Cooling Capability**

**3 Pages Follow**

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

Estimated burden per response to comply with this mandatory collection request: 50 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0066), 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.

FACILITY NAME (1)

Palisades Nuclear Plant

DOCKET NUMBER (2)

05000-255

PAGE (3)

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TITLE (4)

**Potential for Reduced Component Cooling Water Cooling Capability**

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MO	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO	MO	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
02	25	2007	2007	-- 003	-- 00	04	25	2007	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		1	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 3: (Check all that apply) (11)							
POWER LEVEL (10)		100	20.2201(b)			20.2203(a)(3)(ii)			50.73(a)(2)(ii)(B)	50.73(a)(2)(ix)(A)
			20.2201(d)			20.2203(a)(4)			50.73(a)(2)(iii)	50.73(a)(2)(x)
			20.2203(a)(1)			50.36(c)(1)(i)(A)			50.73(a)(2)(iv)(A)	73.71(a)(4)
			20.2203(a)(2)(i)			50.36(c)(1)(ii)(A)			50.73(a)(2)(v)(A)	73.71(a)(5)
			20.2203(a)(2)(ii)			50.36(c)(2)		X	50.73(a)(2)(v)(B)	OTHER Specify in Abstract below or in NRC Form 366A
			20.2203(a)(2)(iii)			50.46(a)(3)(ii)			50.73(a)(2)(v)(C)	
			20.2203(a)(2)(iv)			50.73(a)(2)(i)(A)			50.73(a)(2)(v)(D)	
			20.2203(a)(2)(v)			50.73(a)(2)(i)(B)			50.73(a)(2)(vii)	
			20.2203(a)(2)(vi)			50.73(a)(2)(i)(C)			50.73(a)(2)(viii)(A)	
			20.2203(a)(3)(i)			50.73(a)(2)(ii)(A)			50.73(a)(2)(viii)(B)	

**LICENSEE CONTACT FOR THIS LER (12)**

NAME

Daniel G. Malone

TELEPHONE NUMBER (Include Area Code)

(269) 764-2463

**COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)**

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX

**SUPPLEMENTAL REPORT EXPECTED (14)**

YES (If yes, complete EXPECTED SUBMISSION DATE).	X	NO	EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

**ABSTRACT**

On February 17, 2007, it was discovered that cables in a cable tray that are primarily associated with Component Cooling Water (CCW) and Service Water system components had sustained damage to their cable jackets from the radiant heat effects of an un-insulated hot pipe that was in close proximity to the cable tray.

On February 25, 2007, it was conservatively determined that all of the cables in the cable tray that were potentially affected by the radiant heat damage were inoperable due to loss of qualification life and the potential for cable-to-cable interaction from degradation of the cable insulation.

Subsequently, on February 25, 2007, it was recognized that a specific combination of two postulated cable faults could result in a condition in which there would be less than 100% of the required post accident CCW cooling. For this condition, Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.7.C was entered along with the specified action to enter TS LCO 3.0.3.

This occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(v)(B) as a condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat.

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

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

**EVENT DESCRIPTION**

On February 17, 2007, it was discovered that cables in a cable tray that are primarily associated with Component Cooling Water (CCW) [CC] and Service Water [BI] system components had sustained damage to their cable jackets from the radiant heat effects of an un-insulated hot pipe that was in close proximity to the cable tray.

On February 25, 2007, at 1100 hrs, as a result of continued evaluation of the cables and the discovery of a cable with unacceptable damage, it was conservatively determined that all of the cables in the cable tray that were potentially affected by the radiant heat damage were inoperable due to loss of qualification life and the potential for cable-to-cable interaction from degradation of the cable insulation.

Subsequently, on February 25, 2007, at 1300 hrs, it was recognized that a specific combination of two postulated cable faults (resulting in the inoperability of CV-0823, CCW Heat Exchanger Service Water Outlet Valve [V;BI], and P-52B, CCW Pump [P;CC]) could result in a condition in which there would be less than 100% of the required post accident CCW cooling. For this condition, Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.7.C was entered along with the specified action to enter TS LCO 3.0.3. At 1322 hrs, following cable isolation to restore P-52B to operable, TS LCO 3.0.3 was exited.

This occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(v)(B) as a condition that could have prevented the fulfillment of the safety function of structures or systems that are needed to remove residual heat.

**CAUSE OF THE EVENT**

The original plant piping and insulation specifications did not require this pipe (steam generator blowdown [WI] line in the CCW room, downstream of the containment isolation valves) to be insulated. Therefore, this line has never been insulated. Over time, the hot pipe damaged the cables due to radiant heat. The proximity of the heat source to the cable tray had been previously identified in 1998. However, due in part to incorrect assumptions, the design life of the cables was not expected to be challenged.

**CORRECTIVE ACTIONS**

The damaged cable sections were replaced. The steam generator blow down line was insulated to reduce heat exposure to the newly installed cable.

To address extent of condition, a systematic walkdown of other cable tray systems was completed. No additional cable repairs were necessary.

# LICENSEE EVENT REPORT (LER)

## TEXT CONTINUATION

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

### SAFETY SIGNIFICANCE

The safety significance of this occurrence is considered to be minimal. No actual cable faults occurred. Postulated cable faults that result in loss of control power (e.g. blown fuse) would cause affected components to fail to their safety position. Evaluation of the potential for cable-to-cable and intra-cable conductor interactions that could position an affected component in other than its safety position is continuing.

### PREVIOUS SIMILAR EVENTS

None