



January 26, 2007

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

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 06-008, Inoperable Containment Due to Containment Air Cooler Through-Wall Flaw

Licensee Event Report (LER) 06-008 is enclosed. The LER describes the discovery of a through-wall flaw in a containment air cooler tube and the resultant effect on the containment boundary. This event is reportable in accordance with 10 CFR 50.73(a)(2)(v)(C).

Summary of Commitments

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

Paul A. Harden
Site Vice President, Palisades Nuclear Plant
Nuclear Management Company, LLC

Enclosure (1)

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

IE22

ENCLOSURE 1

**LER 06-008, Inoperable Containment Due to
Containment Air Cooler Through-Wall Flaw**

•
3 Pages Follow

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION (6-2004)	APPROVED BY OMB NO. 3150-0104	EXPIRES 6-30-2007
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) 1 of 3
--	--	----------------------------------

TITLE (4)
Inoperable Containment Due to Containment Air Cooler Through-Wall Flaw

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	
11	29	2006	2006	-- 008 --	00	01	26	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)			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)		<input checked="" type="checkbox"/>	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	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)				EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE).	<input checked="" type="checkbox"/>	NO					

ABSTRACT

On November 29, 2006, with the plant in Mode 1, a small service water leak (approximately 0.1 gallons per minute) was identified in VHX-4 containment air cooler (CAC). The leak was subsequently determined to be from a pin-hole in a single cooling coil tube at the H-bend fitting.

The CAC cooling coil is a part of the containment boundary, and is required to be structurally sound to ensure that post accident containment leakage will not exceed allowable leakage (L_a). Therefore, Technical Specification Limiting Condition For Operation 3.6.1, "Containment," is initially applicable for any through-wall defect noted in a CAC cooling coil.

Although the size of the identified pin-hole would not have challenged L_a , it was not possible to characterize the flaw to verify the operability of the cooling coil for post-accident conditions over the CAC's mission time.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(v)(C) as a 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.

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Palisades Nuclear Plant	05000-255	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 3
		2006	-- 008	-- 00	

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

EVENT DESCRIPTION

On November 29, 2006, with the plant in Mode 1, a small service water [BI] leak (approximately 0.1 gallons per minute) was identified in VHX-4 containment air cooler (CAC) [CLR;BK]. The leak was subsequently determined to be from a pin-hole in a single cooling coil tube at the H-bend fitting.

The CAC cooling coil is a part of the containment [NH] boundary, and is required to be structurally sound to ensure that post accident containment leakage will not exceed allowable leakage (L_a). Therefore, Technical Specification (TS) Limiting Condition For Operation (LCO) 3.6.1, "Containment," is initially applicable for any through-wall defect noted in a CAC cooling coil.

Although the size of the identified pin-hole would not have challenged L_a , it was not possible to characterize the flaw using the criteria prescribed in American Society of Mechanical Engineers (ASME) Code Case N-513-1 to verify the operability of the cooling coil for post-accident conditions over the CAC's mission time.

Therefore, this event is reportable in accordance with 10 CFR 50.73(a)(2)(v)(C) as a 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.

Since VHX-4 has no safety-related cooling function, TS LCO 3.6.6, "Containment Cooling Systems" was not affected.

CAUSE OF THE EVENT

The probable cause of the through-wall flaw is loss of wall thickness due to flow induced erosion.

CORRECTIVE ACTIONS

VHX-4 was repaired using an ASME accepted method by plugging tubes to isolate the H-bend flaw.

The VHX-4 CAC cooling coils are currently scheduled to be replaced during the Fall 2007 refueling outage.

SAFETY SIGNIFICANCE

The safety significance of this occurrence is considered to be minimal. For a worst case failure of a single CAC cooling coil tube, analysis has determined that all on-site and off-site dose limits would continue to be met for the bounding postulated post-accident scenario.

LICENSEE EVENT REPORT (LER)

TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	3 of 3
Palisades Nuclear Plant	05000-255	2006	-- 008	-- 00	

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

PREVIOUS SIMILAR EVENTS

Licensee Event Report 05-006, "Inoperable Containment Due to Containment Air Cooler Through-Wall Flaw"

Licensee Event Report 06-006, "Inoperable Containment Due to Containment Air Cooler Through-Wall Flaw"