



December 15, 2006

10 CFR 50.73(a)(2)(i)(A)
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 06-006, Inoperable Containment Due to Containment Air Cooler Through-Wall Flaw

Licensee Event Report (LER) 06-006 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)(i)(A) and 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

ENCLOSURE 1

**LER 06-006, Inoperable Containment Due to
Containment Air Cooler Through-Wall Flaw**

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	01	2006	2006	-- 006	-- 00	12	15	2006	FACILITY NAME	DOCKET NUMBER
OPERATING MODE (9)		1		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR : (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)		X 50.73(a)(2)(v)(C)		
				20.2203(a)(2)(iv)	X	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	TELEPHONE NUMBER (Include Area Code)
Daniel G. Malone	(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)

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

ABSTRACT

On November 1, 2006, with the plant in Mode 1, a small service water leak (approximately 0.4 gallons per minute) was identified in VHX-4 containment air cooler (CAC). Although the specific location of the through-wall flaw could not be verified due to physical constraints, the leak is assumed to be from a pin-hole in a single cooling coil tube.

The CAC cooling coil tubing is part of the containment boundary and is required to be structurally sound to ensure that post accident containment leakage will not exceed allowable leakage. Therefore, Technical Specification (TS) Limiting Condition For Operation (LCO) 3.6.1, "Containment," is applicable for any through-wall defects noted in CAC cooling coil tubing. Since it was not possible to characterize the flaw and verify the structural integrity of the tube for post-accident conditions over the CAC's mission time, the plant was taken to Mode 3 in accordance with TS LCO 3.6.1.B.1.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(A) as the completion of a shutdown required by plant Technical Specifications and 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	-- 006	-- 00	

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

EVENT DESCRIPTION

On November 1, 2006, with the plant in Mode 1, a small service water [BI] leak (approximately 0.4 gallons per minute) was identified in VHX-4 containment air cooler (CAC) [CLR;BK]. The specific location of the through-wall flaw could not be physically verified, as the leak location was determined to be from the opposite side of the tube sheet. However, the leak is assumed to be from a pin-hole in a single cooling coil tube, similar to previous pin-hole leaks which have occurred in the cleanable-bend area of the cooling coil, on the visible side of the tube sheet.

Since VHX-4 has no safety-related cooling function, Technical Specification (TS) Limiting Condition For Operation (LCO) 3.6.6, "Containment Cooling Systems" was not affected. However, the CAC cooling coil tubing is also 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, TS LCO 3.6.1, "Containment," is applicable for any through-wall defects noted in CAC cooling coil tubing.

Although analysis showed that the identified leak size would not challenge L_a, it was not possible to characterize the flaw and verify the structural integrity of the tube for post-accident conditions over the CAC's mission time. Therefore, in accordance with TS LCO 3.6.1.B.1, the plant was taken to Mode 3.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(A) as the completion of a shutdown required by plant Technical Specifications and 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.

CAUSE OF THE EVENT

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

CORRECTIVE ACTIONS

The affected cooling coil was isolated by installing blanks on its inlet and outlet flanges. 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	
Palisades Nuclear Plant	05000-255	2006	-- 006	-- 00	3 of 3

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"