

Entergy Nuclear Operations, Inc. Palisades Nuclear Plant 27780 Blue Star Memorial Highway Covert, MI 49043 Tel 269 764 2000

August 24, 2007

10 CFR 50.73(a)(2)(i)(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 07-006, Emergency Diesel Generator Inoperable In Excess Of Technical Specification Requirements

Dear Sir or Madam:

Licensee Event Report (LER) 07-006 is enclosed. The LER describes the inoperability of emergency diesel generator 1-2 for a period of time longer than allowed by Technical Specifications. The occurrence is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).

Summary of Commitments

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

Christopher J. Schwarz Site Vice President Palisades Nuclear Plant

Enclosure (1)

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

ENCLOSURE 1

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1. 19¹ - 1 LER 07-006, Emergency Diesel Generator Inoperable In Excess Of Technical Specification Requirements

NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION					APPRO	VED BY ON	DMB NO. 3150-0104 EXPIRES 6-30-2007					6-30-2007						
LICENSEE EVENT REPORT (LER)							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 E52) U.S. Nuclear Regulatory Commission, Washington, DC 20555.											
(See reverse for required number of								0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of										
digits/characters for each block)								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										
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On July 25, 2007, a past operability evaluation was completed which concluded that during the 23 days between October 28, 2005, and November 20, 2005, emergency diesel generator (EDG) 1-2 would have been unable to operate satisfactorily for the EDG's required 30-day mission time, and therefore, was inoperable. This period corresponds to the time during which defective snubber valves on cylinders 5R and 5L were installed in EDG 1-2. While a failure of one snubber valve would not make EDG 1-2 inoperable, EDG 1-2 would not be able to meet design loading requirements with two failed snubber valves.

Consequently, EDG 1-2 was inoperable for a period of time longer than the 7 days allowed by Palisades Technical Specification (TS) 3.8.1.B.4. Additionally, during the period EDG 1-2 was inoperable, EDG 1-1 was made inoperable for approximately 8 hours for the performance of its monthly surveillance. Therefore, both EDGs were simultaneously inoperable for a period of time longer than the 2 hours allowed by TS 3.8.1.E.1.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

NRC FORM 366A (1-2001) U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1)	DOCKET NUMBER (2)		PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 3
Palisades Nuclear Plant	05000-255	2007	006	00	

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

EVENT DESCRIPTION

On February 22, 2007, during testing of emergency diesel generator (EDG) 1-2 [DG;EK], a fuel oil leak was identified from a cracked snubber valve in the fuel oil injection system at the discharge of the cylinder 5L fuel pump. The snubber valve functions to dampen pulsations created by the fuel injection system and also serves as the fuel oil pressure boundary. This occurrence was determined to be similar to a previous snubber valve leak that had been identified on cylinder 5R of EDG 1-2, on November 20, 2005. An evaluation determined that the failed 5R and 5L snubber valves had been installed in EDG 1-2 during the same maintenance activity in October 2005.

On July 25, 2007, a past operability evaluation was completed which concluded that during the 23 days between October 28, 2005, and November 20, 2005, EDG 1-2 would have been unable to operate satisfactorily for the EDG's required 30-day mission time, and therefore, was inoperable. This period corresponds to the time during which defective snubber valves on cylinders 5R and 5L were installed in EDG 1-2. While a failure of one snubber valve would not make EDG 1-2 inoperable, EDG 1-2 would not be able to meet design loading requirements with two failed snubber valves.

Consequently, EDG 1-2 was inoperable for a period of time longer than the 7 days allowed by Palisades Technical Specification (TS) 3.8.1.B.4. Additionally, during the period EDG 1-2 was inoperable, EDG 1-1 was made inoperable for approximately 8 hours for the performance of its monthly surveillance. Therefore, both EDGs were simultaneously inoperable for a period of time longer than the 2 hours allowed by TS 3.8.1.E.1.

This event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

CAUSE OF THE EVENT

The failure of snubber valves 5R and 5L was due to improper heat treatment of the material used in their construction, causing the snubber valves to crack during engine operation.

The 5R snubber valve failure occurred after approximately 10 hours of EDG operation since the 5R snubber valve was installed in the EDG. Following the 5R snubber valve failure and subsequent replacement, a 24-hour test run of the EDG was satisfactorily completed. Vendor input was obtained indicating that snubber valves failing from improper material heat treating would be expected to exhibit this condition within the initial 24 hours of operation. Since all installed snubber valves (including snubber valve 5L and others installed in October 2005) had experienced more than 24 hours of EDG run time with no indication of cracking, it was determined to be unnecessary to replace additional snubber valves at that time. Subsequently, the 5L snubber

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valve exhibited its failure on February 22, 2007, after approximately 135 hours of run time since November 20, 2005.

Palisades' experience with snubber valve cracking from improper heat treating of the snubber valve material is associated with snubber valves constructed from AISI ES52100 alloy only.

CORRECTIVE ACTIONS

Snubber valve 5L and the remaining snubber valves on EDG 1-2 that were originally installed in October 2005 have been replaced.

All snubber valves for EDG 1-1 have been replaced with snubber valves verified to be other than AISI ES52100 alloy.

All stock snubber valves have been verified to be an alloy other than AISI ES52100. Additionally, snubber valves constructed from this alloy will no longer be procured.

SAFETY SIGNIFICANCE

The event is considered to be of very low safety significance.

When considering the 30-day mission time for the EDG, if the limiting postulated scenario requiring the EDG safety function had occurred, EDG 1-2 would have been able to acceptably carry loads for the initial 135 hours (approximately 5.5 days) from the onset of the occurrence until the failure of the second snubber valve (5L). This extended period provides ample time for implementing other recovery/mitigating strategies, including restoration of offsite power, restoration of the opposite train EDG (EDG 1-1), or repair of EDG 1-2.

PREVIOUS SIMILAR EVENTS

Licensee Event Report 05-007, Inoperable Emergency Diesel Generator For A Time Longer Than Permitted By Technical Specifications, dated January 19, 2006

Cancellation of Licensee Event Report 05-007, dated July 7, 2006