



July 7, 2006

10 CFR 50.73(a)(2)(i)(B)
10 CFR 50.73(a)(2)(iv)(A)

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 06-005, Uncoupled Control Rod

Licensee Event Report (LER) 06-005 is enclosed. The LER describes the discovery that a control rod had remained uncoupled following a scheduled refueling outage, which is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as operation which was prohibited by Technical Specifications. The LER also describes an associated manual actuation of the reactor protection system that occurred during the subsequent plant shutdown that had been initiated to correct the condition. The actuation is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).

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 06-005, Uncoupled Control Rod

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) 1 of 3
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TITLE (4)
Uncoupled Control Rod

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
05	10	2006	2006	-- 005 --	00	07	07	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)		022		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)			X 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)			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)	X	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).	X	NO					

ABSTRACT

On May 10, 2006, an unexpected quadrant power tilt was identified during reactor core startup physics testing. At the time of discovery, plant power was being maintained at approximately 22% following initial power ascension from a recently completed refueling outage. Subsequent analysis determined the most probable cause of the quadrant power tilt to be Control Rod 33 fully inserted into the core as opposed to being fully withdrawn as indicated. A shutdown was initiated to facilitate further troubleshooting. The reactor was manually tripped from approximately 11% power.

On May 13, 2006, investigation determined that Control Rod 33 was uncoupled from its drive assembly, having not been successfully coupled during the refueling outage. Consequently, Control Rod 33 had remained fully inserted into the core throughout plant startup from the refueling outage.

Prior to discovery, the upward mode changes into Mode 2 and Mode 1 that occurred on May 9 and May 10, 2006, respectively, were performed in violation of Technical Specification (TS) 3.0.4, since the intent of TS 3.1.4.D.1 is to prevent a reactor startup with an immovable control rod. Consequently, this event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as operation which was prohibited by Technical Specifications. In addition, the manual reactor protection system actuation is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).

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 May 10, 2006, an unexpected quadrant power tilt was identified during reactor [RCT;AB] core startup physics testing. At the time of discovery, plant power was being maintained at approximately 22% following initial power ascension from a recently completed refueling outage. On May 11, 2006, subsequent analysis of core power distribution data determined the most probable cause of the quadrant power tilt to be Control Rod 33 [ROD;AA] fully inserted into the core as opposed to being fully withdrawn as indicated.

Based on this conclusion, Off Normal Procedure ONP-5.1, "Control Rod Drop" was conservatively entered and a shutdown to Mode 5 was initiated to facilitate further troubleshooting. The reactor was manually tripped from approximately 11% power in accordance with procedural guidance.

On May 13, 2006, investigation determined that Control Rod 33 was uncoupled from its drive assembly, having not been successfully coupled during the refueling outage. Consequently, Control Rod 33 had remained fully inserted into the core throughout plant startup from the refueling outage.

Prior to discovery, the upward mode changes into Mode 2 and Mode 1 that occurred on May 9 and May 10, 2006, respectively, were performed in violation of Technical Specification (TS) 3.0.4, since the intent of TS 3.1.4.D.1 is to prevent a reactor startup with an immovable control rod. Consequently, this event is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as operation which was prohibited by Technical Specifications. In addition, the manual reactor protection system [JC] actuation is reportable in accordance with 10 CFR 50.73(a)(2)(iv)(A).

CAUSE OF THE EVENT

The failure to couple Control Rod 33 involved deficiencies in performance of the coupling procedure, as well as deficiencies in verification and oversight of the activity.

CORRECTIVE ACTIONS

Control Rod 33 was coupled to its drive assembly.

The activity of coupling control rods will be strengthened through a combination of procedural enhancements, personnel qualification improvements, and additional administrative controls.

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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 minimal. Since the inserted control rod was identified prior to exceeding 25% power, TS required actions for one misaligned and immovable control rod were already satisfied without further action.

For the manual reactor trip, the reactor protection system functioned as expected.

This event does not involve a safety system functional failure.

PREVIOUS SIMILAR EVENTS

None