



MAY 27 2005

L-PI-05-005
10 CFR 50.73

U S Nuclear Regulatory Commission
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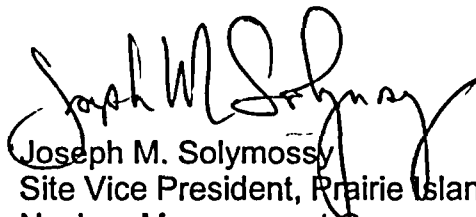
Prairie Island Nuclear Generating Plant Unit 2
Docket 50-306
License No. DPR-60

LER 2-05-01, Unit 2 Shutdown Required by Technical Specifications Due to Two Trains of Containment Cooling Inoperable

The Licensee Event Report for this occurrence is attached. Notification of this event as required by 10 CFR 50.72(b)(2)(i) was made on March 30, 2005. Please contact us if you require additional information related to this event.

Summary of Commitments

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



Joseph M. Solymosy
Site Vice President, Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC

Enclosure

cc: Administrator, Region III, USNRC
Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNRC
Glenn Wilson, State of Minnesota

JE22

ENCLOSURE

LICENSEE EVENT REPORT 2-05-01

4 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) Prairie Island Nuclear Generating Plant Unit 2	DOCKET NUMBER (2) 05000 306	PAGE (3) 1 of 4
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TITLE (4)
 Unit 2 Shutdown Required by Technical Specifications Due to Two Trains of Containment Cooling Inoperable

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
3	30	05	05	-- 01 --	0	5	31	05	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)			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 Jeff Kivi	TELEPHONE NUMBER (Include Area Code) 651.388.1121

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

ABSTRACT

On March 28, 2005 a Corrective Action Process (CAP) item identified potential non-code repairs had been made to 21, 22, and 23 Containment Fan Coil Units (CFCUs) since January 2005. The repair performed was an overlay described as filling a pinhole leak with brazing material in the copper tubing of the CFCU. This repair may not have removed the flaw and was not done in accordance with a code approved weld repair procedure.

An Operability Recommendation performed by Engineering examined the qualifications of the repair techniques utilized on previous Unit 2 CFCU leakage events and concluded that while the structural integrity could be assured the repair constituted a non-code repair. Temporary non-code repairs are not acceptable, per NRC Generic Letter 90-05, without prior NRC approval. This conclusion resulted in 3 of the 4 CFCUs, being declared inoperable and required Unit 2 to be shutdown per Technical Specifications until code repairs were completed.

Code repair of the 21, 22, and 23 CFCUs were completed on April 3, 2005.

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

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Prairie Island Nuclear Generating Plant Unit 2	05000306	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 4
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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

EVENT DESCRIPTION

On March 28, 2005 a Corrective Action Process (CAP) item identified potential non-code repairs had been made to 21, 22, and 23 Containment Fan Coil Units¹ (CFCUs) since January 2005. The repair performed was an overlay described as filling a pinhole leak with brazing material in the copper tubing of the CFCU. This repair may not have removed the flaw and was not done in accordance with a code approved weld repair procedure. The initial operability evaluation concluded that the CFCUs remained operable.

Further evaluation, in the form of an Operability Recommendation performed by Engineering examined the qualifications of the repair techniques utilized on previous Unit 2 CFCU leakage events and concluded on March 30 that while the structural integrity could be assured the repair constituted a non-code repair. The CFCU tubes are American Society of Mechanical Engineers (ASME) Code Class 2. Temporary non-code repairs are not acceptable, per Nuclear Regulatory Commission (NRC) Generic Letter 90-05, without prior NRC approval. This conclusion resulted in 3 of the 4 CFCUs, being declared inoperable and required Unit 2 to be shutdown per Technical Specifications (TS) until code repairs were completed.

Code repair of the 21, 22, and 23 CFCUs were completed on April 3, 2005.

EVENT ANALYSIS

The containment cooling system² is a closed system in containment. There are two trains with two CFCUs per train. Integrity of the tubes in the CFCUs is required for containment integrity. The CFCU tubes support two safety functions: (1) circulating cooling water for containment cooling in the event of a loss of coolant accident (LOCA) or main steam line break in containment, and (2) serving as a containment boundary during the first hours of a LOCA when containment pressure will exceed the pressure of the cooling water in the CFCUs.

TS 3.6.5, Containment Spray and Cooling Systems, allows one train of containment cooling to be inoperable. TS 3.6.1, Containment, requires that containment be operable. Containment and both trains of containment cooling were declared inoperable as a result of this condition and a Unit 2 shutdown was completed per TS 3.0.3 (since TS 3.6.5 does not have a condition for two trains of containment cooling inoperable) and TS 3.6.1. Thus, this shutdown is reportable per 10 CFR 50.73(a)(2)(i)(B).

¹ (EIS Component Identifier: FCU)

² (EIS System Identifier: BK)

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Impact on Safety System Functional Failure Performance Indicator

The CFCUs contain an air-to-water heat exchanger supplied with water from the cooling water system in order to remove containment heat. In this event, three of the CFCUs were determined to be inoperable due to non-code repairs of pinhole leaks that had not received prior approval from the NRC. There was no active leak at the time this condition was discovered and an engineering assessment concluded that structural integrity of the CFCUs was not lost. Therefore, this event did not result in loss of any safety function, thus, this event is not reportable per 10 CFR 50.73(a)(2)(v)(C) as a Unit 2 Safety System Functional Failure (SSFF).

SAFETY SIGNIFICANCE

There were no active leaks occurring when this condition was discovered and the engineering assessment concluded that the non-code repairs would have maintained structural integrity. Based on this assessment, the health and safety of the public was not affected.

CAUSE

Nuclear Management Company, LLC, (NMC) conducted a root cause evaluation of this condition. The root cause evaluation determined planners and technical reviewers lack of understanding led to the selection of a brazing procedure that was not qualified for the joint configuration that was used.

CORRECTIVE ACTION

Immediate:

1. Unit 2 was shutdown per Technical Specification 3.0.3.

Subsequent:

2. 21, 22, and 23 CFCUs were repaired per the ASME Code and returned to service. As noted in Licensee Event Report 2-04-01, Supplement 1, Unit 2 CFCU cooling coils have been replaced since this event occurred.

Planned:

3. The Root Cause Evaluation recommended a number of training actions to correct limitations of the knowledge of site personnel who would be involved in any potential future repairs.

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PREVIOUS SIMILAR EVENTS

Licensee Event Report 2-04-01 was submitted pursuant to 10 CFR 50.73(a)(2)(i)(B) for a Technical Specification required shutdown that was a result of CFCU leaks.