



October 26, 2007

L-PI-07-073  
10 CFR 50.73

U S Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant Unit 1  
Docket 50-282  
License No. DPR-42

LER 1-07-01, Supplement 1, Unit 1 Train B Emergency Core Cooling System (ECCS)  
Inoperable Longer Than Allowed by Technical Specifications Due to Inoperable Breaker

Supplement 1 to Licensee Event Report (LER) 1-07-01 is enclosed. The LER describes Unit 1 operation with 12 Safety Injection pump being inoperable longer than allowed by TS 3.5.2 Condition A. This event was reported in accordance with 10 CFR 50.73(a)(2)(i)(B) as a condition prohibited by Technical Specifications on June 4, 2007. This supplement is provided as committed to in the original LER submittal.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments. This letter completes the commitment to supplement this LER after the cause evaluation is completed.

Michael D. Wadley  
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  
State of Minnesota

**ENCLOSURE**

**LICENSEE EVENT REPORT 1-07-01  
SUPPLEMENT 1**

**3 Pages Follow**

<b>NRC FORM 366 U.S. NUCLEAR REGULATORY COMMISSION</b> (6-2004)	<b>APPROVED BY OMB NO. 3150-0104</b> <span style="float: right;"><b>EXPIRES 6-30-2007</b></span> 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.
<b>LICENSEE EVENT REPORT (LER)</b> (See reverse for required number of digits/characters for each block)	

<b>FACILITY NAME (1)</b> Prairie Island Nuclear Generating Plant Unit 1	<b>DOCKET NUMBER (2)</b> 05000 282	<b>PAGE (3)</b> 1 of 3
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**TITLE (4)**  
 Unit 1 Train B ECCS Inoperable Longer Than Allowed by Technical Specifications Due to Inoperable Breaker

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
4	3	07	07	-- 01	-- 1	10	26	07	FACILITY NAME	DOCKET NUMBER

<b>OPERATING MODE (9)</b>	1	<b>THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50.73(a)(2)(i)-(viii) (11)</b>								
		20.2201(b)		20.2203(a)(3)(ii)		50.73(a)(2)(ii)(B)		50.73(a)(2)(ix)(A)		
<b>POWER LEVEL (10)</b>	100	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
		20.2203(a)(2)(iii)		50.46(a)(3)(ii)		50.73(a)(2)(v)(C)				Specify in Abstract below or in NRC Form 366A
		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)**

<b>NAME</b> Jeff Kivi	<b>TELEPHONE NUMBER (Include Area Code)</b> 651.388.1121
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**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

<b>SUPPLEMENTAL REPORT EXPECTED (14)</b>				<b>EXPECTED SUBMISSION DATE (15)</b>		
<b>YES</b> (If yes, complete EXPECTED SUBMISSION DATE).	X	<b>NO</b>				

**ABSTRACT**

On April 3, 2007, Prairie Island Nuclear Generating Plant (PINGP) operators discovered the closing springs on the breaker for the 12 safety injection (SI) pump were discharged with the breaker open. NMC believes the charging motor failed the last time the breaker was closed to run the pump, which was March 15, 2007. Thus, the 12 SI pump was inoperable longer than the Completion Time of Technical Specification (TS) 3.5.2, Condition A, allows and this event is being reported in accordance with 10 CFR 50.73.(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

The breaker was replaced with a spare and on April 4, 2007, TS 3.5.2, Condition A, was exited after successful testing of the breaker. The cause of the charging motor failure was determined to be the motor brushes having exceeded their useful life. The planned corrective actions to prevent recurrence are to inspect all safeguards switchgear charging motors and to establish a maintenance procedure for charging motor inspection and replacement.

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

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
Prairie Island Nuclear Generating Plant Unit 1	05000 282	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	2 of 3
		07	-- 01 --	1	

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

**EVENT DESCRIPTION**

On April 3, 2007, Prairie Island Nuclear Generating Plant (PINGP) operators discovered the closing springs on the breaker<sup>1</sup> for the 12 safety injection (SI) pump<sup>2</sup> were discharged with the breaker open. NMC believes the charging motor<sup>3</sup> failed the last time the breaker was closed to run the pump, which was March 15, 2007. The breaker was replaced with a spare and on April 4, 2007, the 12 SI pump was declared operable after successful testing of the breaker.

**EVENT ANALYSIS**

The breaker for the 12 SI pump was discovered to be inoperable on April 3, 2007. Indications are that the breaker had been inoperable since the last time the pump was run on March 15, 2007. Technical Specification (TS) 3.5.2, Condition A, allows 72 hours to restore operability of an inoperable emergency core cooling system<sup>4</sup> (ECCS) train. If the Required Action and Completion Time of TS 3.5.2, Condition A, is not met, Condition B requires the affected unit be in Mode 3 in 6 hours and Mode 4 in 12 hours. In this case one train of ECCS (12 SI pump) was inoperable for longer than allowed by TS 3.5.2, Condition A, without taking Unit 1 to Mode 3 in 6 hours or Mode 4 in 12 hours. Thus, this event is being reported in accordance with 10 CFR 50.73.(a)(2)(i)(B) as a condition prohibited by Technical Specifications.

**Impact on Safety System Functional Failure Performance Indicator**

The redundant 11 SI pump was operable during the time the 12 SI pump was inoperable. Therefore, this event does not represent a loss of safety function. Consequently, this event is not reportable per 10CFR 50.73(a)(2)(v).

**SAFETY SIGNIFICANCE**

This event did not result in a loss of the emergency core cooling system function, since the 11 SI pump remained operable. Thus, this event did not affect the health and safety of the public and the safety significance of this event is considered minimal.

<sup>1</sup> EIS Component Code: BKR

<sup>2</sup> EIS Component Code: P

<sup>3</sup> EIS Component Code: MO

<sup>4</sup> EIS System Code: BQ

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

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

CAUSE

Failure of 12 Safety Injection Pump closing spring motor brushes was due to exceeding the end of the useful life for the brushes. The closing spring charging motor brushes were wore down (past its useful length), resulting in arcing across the gap between the brush and commutator. This would have resulted in inconsistent operation of the closing spring charging motor and the brush wear and charring observed.

CORRECTIVE ACTION

1. The 12 SI pump was restored to operability by replacing the breaker.
2. As an interim measure, operators have been performing additional inspections on 4kV safeguards breakers to verify the closing springs are charged.
3. Establish the appropriate maintenance procedures for switchgear closing spring charging motor inspection and replacement.
4. Inspect and replace (as necessary) all Safeguards Switchgear breaker closing spring charging motors.

PREVIOUS SIMILAR EVENTS

Review of Licensee Event Reports for Unit 1 and Unit 2 since 2004 found no previous similar events.