



Nuclear Management Company, LLC
Prairie Island Nuclear Generating Plant
1717 Wakonade Dr. East • Welch MN 55089

May 14, 2001

10 CFR Part 50
Section 50.73

U S Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

PRAIRIE ISLAND NUCLEAR GENERATING PLANT
Docket Nos. 50-282 License Nos. DPR-42
50-306 DPR-60

**LER 1-01-01: Failure to Physically Lock Valves Associated with
Technical Specification Required Safety Injection Flow Path**

The Licensee Event Report for this occurrence is attached. In the report, we made no new NRC commitments. Please contact us if you require additional information related to this event.

Joel P. Sorensen
Site Vice President
Prairie Island Nuclear Generating Plant

c: Regional Administrator - Region III, NRC
NRR Project Manager, NRC
Senior Resident Inspector, NRC
James Bernstein, State of Minnesota

Attachment

IEDA

NRC FORM 366 (1-2001)	U.S. NUCLEAR REGULATORY COMMISSION	APPROVED BY OMB NO. 3150-0104 EXPIRES 6-30-2001 Estimated burden per response to comply with this mandatory information 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 Management Branch (T-6 E6), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to bj1@nrc.gov , and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose 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.
LICENSEE EVENT REPORT (LER) (See reverse for required number of digits/characters for each block)		

FACILITY NAME (1) Prairie Island Nuclear Generating Plant Unit 1	DOCKET NUMBER (2) 05000 282	PAGE (3) 1 OF 4
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TITLE (4)
 Failure to Physically Lock Valves Associated with Technical Specification Required Safety Injection Flow Path

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
03	14	01	01	01	00	05	14	01	Prairie Island Unit 2	05000 306
									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					
		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)	✓ 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	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).	✓	NO					

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines) (16)

On March 14, 2001, with the reactor at 100% power, the duty Reactor Operator was giving a license trainee a check-off on the procedure for alternating the in-service Boric Acid Storage Tank (BAST). At this time it was noted that the procedure did not address re-locking the manual outlet isolation valve in position as required by Technical Specification 3.2.B.7. The 121 BAST was lined up for safety injection on Unit 1 due to a problem with level indication on the 11 BAST.

An operator was dispatched to determine the status of manual valve SI-8-2 (121 BAST SUPPLY TO SI PUMPS). The operator reported to the control room that the valve was open (in the correct position), but not locked as required by Technical Specifications. A chain and lock was delivered to the operator and the valve was locked into position.

Upon further investigation, valve SI-8-1 (11 BAST SUPPLY TO SI PUMPS), which was in the correct position, was also locked.

On April 16, 2001, the NRC issued to Prairie Island, License Amendment No. 156 to Facility Operating License No. DPR-42 and Amendment No. 147 to Facility Operating License No. DPR-60, which removed the affected requirement from the Prairie Island Technical Specifications. Implementation of the amendment will preclude any future violations of the affected Technical Specification.

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

EVENT DESCRIPTION

On February 21, 2001, during preparation to bring the Unit 1 Reactor Coolant System¹ (RCS) above 200 degrees F, valves² SI-8-1 and SI-8-2 were verified locked in the proper position to support the 11 Boric Acid Storage Tank³ (BAST) as the suction source to the safety injection (SI) pumps⁴. Due to problems with the level indication on the 11 BAST, the 121 BAST was lined up for safety injection on Unit 1. SI-8-1 and SI-8-2 were aligned and tagged with Hold Cards per Operating Procedure C12.6, but were not locked.

On February 22, 2001, the Unit 1 RCS temperature exceeded 200 degrees F. At this point, Technical Specification 3.2.B.7 requires that these valves be locked in the proper position.

On March 14, 2001, with the reactor at 100% power, the duty Reactor Operator was giving a license trainee a check-off on the procedure C12.6. At this time it was noted that the procedure did not address re-locking the manual outlet isolation valve in position as required by Technical Specification 3.2.B.7.

An operator was dispatched to determine the status of manual valve SI-8-2 (121 BAST SUPPLY TO SI PUMPS). The operator reported to the control room that the valve was open (in the correct position), but not locked as required by Technical Specifications. A chain and lock was delivered to the operator and the valve was locked into position.

On March 21, 2001, upon further investigation site personnel determined that valve SI-8-1 (11 BAST SUPPLY TO SI PUMPS), which was in the correct position, but not locked, should also be locked. SI-8-1 was subsequently locked.

CAUSE OF THE EVENT

Prairie Island personnel performed an investigation to determine the root cause for failing to lock valves SI-8-2 and SI-8-1 as required by Technical Specifications. The evaluation concluded that the primary cause of the event was the failure of the system lineup procedure to specify locking of the valves.

Secondary causes of the event include:

1. Reviews during procedure change process did not catch the omission of Technical Specification requirements in the procedure.
2. Periodic reviews of the procedure did not catch the omission of Technical Specification requirements in the procedure.
3. Operations personnel were unable to devise a method using the Safeguards Hold Tag process to control a valve that has differing required positions based on which tank is in service. Valve SI-8-2 has two different safeguards positions, depending on which BAST is in service.

¹ (EIS System Identifier: AB)

² (EIS Component Identifier: V)

³ (EIS Component Identifier: TK)

⁴ (EIS Component Identifier: P)

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

ANALYSIS OF THE EVENT

Valve SI-8-2 was found in the correct position to support safety injection, but not locked in position as required by Prairie Island Technical Specifications. There were Hold Cards on the valves, which is another form of administrative control. Since the valve was in the proper position and had a level of administrative control on its position, the safety injection function was not affected and, thus, there was no impact on the health and safety of the public.

This event involved manual valves found in the correct position, but not locked in place as required by Prairie Island Technical Specification 3.2.B.7. Therefore, this event is reportable per 10CFR 50.73(a)(2)(i)(B).

On April 16, 2001, the NRC issued License Amendment No. 156 to Facility Operating License No. DPR-42 (Unit 1) and Amendment No. 147 to Facility Operating License No. DPR-60 (Unit 2), which removed the affected section from the Prairie Island Technical Specifications.

Loss of Safety Function and other Performance Indicator Impact

Safety function was not lost because the manual valves were found in the correct position (and administratively controlled) to support Safety Injection. No equipment was declared either inoperable or unavailable. None of the other performance indicators will be affected by this event.

Significance Determination

The affected valves were found unlocked, however, they were not mispositioned. This event is limited to the failure to apply an administrative control (locking valves in position). As such, this is viewed as an event of low risk significance.

CORRECTIVE ACTION

1. The valves that were found unlocked, SI-8-2 and SI-8-1, were locked.
2. A level 1 Condition Report (GEN 20012503) to assess this event was entered into the Prairie Island Corrective Action Process on March 14, 2001. The Condition Report was closed out on April 27, 2001. Corrective Actions generated as a result of this Condition Report include:
 - Correct the procedure and associated checklists to provide two options for locking and tagging SI-8-1 and SI-8-2, depending on which BAST is in service.
 - Provide operations training to stress the importance of Safeguards Hold Cards and locks and what they are protecting.
 - Have all operations crews review the condition report associated with this event.
 The procedure and checklist actions are complete and the other actions are in progress and will be tracked to completion in the Prairie Island Corrective Action Process.

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

- License Amendment No. 156 to Facility Operating License No. DPR-42 and Amendment No. 147 to Facility Operating License No. DPR-60, remove the BAST as a credited suction source to the Safety Injection system. Implementation of the Amendment will preclude recurrence with respect to the valves SI-8-2 and SI-8-1 because the Technical Specification section that was violated as a result of this event is deleted by the amendment.

FAILED COMPONENT IDENTIFICATION

None.

PREVIOUS SIMILAR EVENTS

No other events that involve failing to provide Technical Specification-required controls on equipment have been reported in the past three years.