



Northern States Power Company

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April 27, 1992

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

Auto-Start of Motor-Driven Auxiliary Feedwater Pump  
Due to Personnel Error During Surveillance Test

The Licensee Event Report for this occurrence is attached.

This event was reported via the Emergency Notification System in accordance with 10 CFR Part 50, Section 50.72, on March 26, 1992. Please contact us if you require additional information related to this event.

Thomas M Parker  
Manager - Nuclear Support Services

c: Regional Administrator - Region III, NRC  
NRR Project Manager, NRC  
Senior Resident Inspector, NRC  
State of Minnesota  
Attn: Kris Sanda

Attachment

9205010094 920427  
PDR ADOCK 03000305  
S PDR

*JE22*

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNIT 2						DOCKET NUMBER (2) 0 5 0 0 0 3 1 0 1 6			PAGE (3) 1 OF 0 3		
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TITLE (4)  
Auto-Start of Motor-Driven Auxiliary Feedwater Pump Due to Personnel Error During Surveillance Test

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)			
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES			DOCKET NUMBER(S)
03	26	92	92	003	00	04	27	92				0 5 0 0 0 3
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 50. (Check one or more of the following) (11)												

OPERATING MODE (9) N	20.402(b)	20.405(c)	<input checked="" type="checkbox"/> 30.73(a)(2)(i)	73.71(b)
POWER LEVEL (10) 11010	20.405(a)(1)(i)	30.36(c)(1)	30.73(a)(2)(iv)	73.71(c)
	20.405(a)(1)(ii)	30.36(c)(2)	30.73(a)(2)(v)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	30.73(a)(2)(ii)	30.73(a)(2)(vi)(A)	
	20.405(a)(1)(iv)	30.73(a)(2)(iii)	30.73(a)(2)(vi)(B)	
	20.405(a)(1)(v)	30.73(a)(2)(iv)	30.73(a)(2)(v)	

LICENSEE CONTACT (8)(X) TWO, LAST (12)  
NAME: Arne Hunstad, Senior Production Engineer  
TELEPHONE NUMBER: 611 231 8181-111211

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NRCDS

SUPPLEMENTAL REPORT EXPECTED (14)  
 YES (If yes, complete EXPECTED SUBMISSION DATE)  NO  
 EXPECTED SUBMISSION DATE (15): MONTH:    DAY:    YEAR:   

ABSTRACT (Limit to 1400 spaces, i.e. approximately fifteen single-space typewritten lines) (18)

On March 26, 1992, Unit 2 was at 100% power. At about 0802, surveillance procedure SP2035A, Reactor Protection Logic Test, was begun. To test steam generator level bistables without starting auxiliary feedwater pumps, the pump control switches are placed in MANUAL, one train at a time. Though the procedure had directed that the Motor-Driven Auxiliary Feedwater Pump be placed MANUAL, at about 0830 the control room operator placed the Turbine-Driven Auxiliary Feedwater Pump in MANUAL. Shortly thereafter, the Motor-driven Auxiliary Feedwater Pump was incorrectly independently verified to be in MANUAL. At about 0832, an Instruments and Controls Technician actuated the Train A Lo-Lo Steam Generator Level bistables per the test procedure. A few minutes later, control room operators noticed a slight change in reactor power and temperature. The test was halted while an investigation was done. Control room operators noticed a change in feedwater flow and determined that steam generator blowdown flow had stopped and No. 21 Motor-Driven Auxiliary Feedwater Pump was running (start of the pump is not annunciated in the control room). At about 0849 the running pump was stopped, the error was corrected, and SP2035A was resumed and completed.

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-330), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Lycette Island Nuc Power Plt, Unit 2	DOCKET NUMBER (2) 0500030692	LER NUMBER (6)			PAGE (3)	
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
						02 OF 03

TEXT (If more space is required, use additional NRC Form 355A's) (17)

EVENT DESCRIPTION

On March 26, 1992, Unit 2 was at 100% power. At about 0802, surveillance procedure SP2035A, Reactor Protection Logic Test, was begun. To test steam generator level bistables without starting auxiliary feedwater pumps, the pump control switches are placed in MANUAL, one train at a time. Though the procedure had directed that the Motor-Driven Auxiliary Feedwater Pump be placed in MANUAL, at about 0830 the control room operator placed the Turbine-Driven Auxiliary Feedwater Pump in MANUAL. Shortly thereafter, the Motor-driven Auxiliary Feedwater Pump was incorrectly independently verified to be in MANUAL. At about 0832, an Instruments and Controls Technician actuated the Train A Lo-Lo Steam Generator Level bistables per the test procedure. A few minutes later, control room operators noticed a slight change in reactor power and temperature. The test was halted while an investigation was done. Control room operators noticed a change in feedwater flow and determined that steam generator blowdown flow had stopped and No. 21 Motor-Driven Auxiliary Feedwater Pump was running (start of the pump is not annunciated in the control room). At about 0849, the running pump was stopped, the error was corrected, and SP2035A was resumed and completed.

CAUSE OF THE EVENT

Cause of the event was personnel error in that the control room operators failed to self-check.

Contributing causes were:

- The switch number given in the procedure is physically hard to read on the control panel.
- The pump number is not given in the procedure.

ANALYSIS OF THE EVENT

Auxiliary feedwater pumps are routinely used during startup and shutdown operations. Since No. 21 Motor-Driven Auxiliary Feedwater Pump responded as designed during this event, there was no effect on the health and safety of the public.

Since this event resulted in an unplanned automatic start of an ESF component, it is reportable pursuant to 10CFR50.73(a)(2)(iv).

LICENSEE EVENT REPORT (LER)  
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 600 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20585, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)  Prairie Island Nuc Pwr Plt, Unit 2	DOCKET NUMBER (2)  0   5   0   0   0   3   0   6   9   2   -   0   0   3   -   0   0   0   3   OF   0   3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

TEXT (if max. space is required, use additional NRC Form 366A's) (17)

CORRECTIVE ACTION

When the error was found, the procedure was suspended, the running pump was stopped, the error was corrected and the test rerun successfully. The operators involved were counseled regarding the need for self-checking and independent verification.

Procedure changes have been submitted that will specify pump numbers.

Other corrective actions are being considered:

Procedure changes which will implement independent verification using an independent method.

- Relabel the control board components affected by this event.

FAILED COMPONENT IDENTIFICATION

None.

PREVIOUS SIMILAR EVENTS

Previous unplanned auto-starts of auxiliary feedwater pumps have been reported as Unit 1 LER's 87-006 and 89-005, and Unit 2 LER's 86-004, 90-004, 90-005 and 92-001. These events were from causes different from the event reported in this LER.