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October 5, 1990

10 CFR Part 50
Section 50.73

Director of Nuclear Reactor Regulation
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

Automatic Start of Both Unit 2 Auxiliary Feedwater Pumps
Caused by Use of Inadequately Reviewed Procedure

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 September 5, 1990. 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
MPCA
Attn: Dr J W Ferman

Attachment

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LICENSEE EVENT REPORT (LER)

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 (F-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 0 6 1** PAGE (3) **1 OF 0 3**

TITLE (4) **Automatic Start of Both Unit 2 Auxiliary Feedwater Pumps Caused by Use of Inadequately Reviewed Procedure**

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
09	05	90	90	004	001	10	05	90	
									DOCKET NUMBER(S): 0 5 0 0 0
									0 5 0 0 0

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

OPERATING MODE (9) N	<input type="checkbox"/> 20.402(a)	<input type="checkbox"/> 20.405(a)	<input checked="" type="checkbox"/> 50.73(a)(2)(iv)	<input type="checkbox"/> 73.71(b)
POWER LEVEL (10) 0, 7, 7	<input type="checkbox"/> 20.406(a)(1)(ii)	<input type="checkbox"/> 50.36(a)(1)	<input type="checkbox"/> 50.73(a)(2)(v)	<input type="checkbox"/> 73.71(a)
	<input type="checkbox"/> 20.406(a)(1)(iii)	<input type="checkbox"/> 50.36(a)(2)	<input type="checkbox"/> 50.73(a)(2)(vii)	<input type="checkbox"/> OTHER (Specify in Abstract box and in Text, NRC Form 267-A)
	<input type="checkbox"/> 20.406(a)(1)(iv)	<input type="checkbox"/> 50.73(a)(2)(i)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)	
	<input type="checkbox"/> 20.406(a)(1)(v)	<input type="checkbox"/> 50.73(a)(2)(ii)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)	
	<input type="checkbox"/> 20.406(a)(1)(vi)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)	

LICENSEE CONTACT FOR THIS LER (12)

NAME **Arne A Hunstad, Staff Engineer** TELEPHONE NUMBER **6 1 2 3 8 8 - 1 1 2 1**

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPROS

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) (16)

On September 5, 1990 Unit 2 was at 77% power coasting down to a refueling outage planned for the following week. Installation of replacement ATWS Mitigating System Actuating Circuitry (AMSAC) equipment was in progress on Unit 2. During the performance of the work, at 1508, an AMSAC actuation signal was generated, which started both auxiliary feedwater pumps automatically. A turbine trip signal was also generated, but leads connecting AMSAC to turbine trip circuitry had been lifted earlier in the work process, so no turbine trip occurred. The auxiliary feedwater pumps' actuation was determined to be spurious, and the pumps were shut down at 1523. This was a non-ESF actuation of ESF equipment.

Cause of the event was inadequate review of work procedures.

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-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 Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 0 6	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	0 0 4	0 0	0 2	OF	0 3

TEXT (if more space is required, use back of NRC Form 305A-1) (17)

EVENT DESCRIPTION

On September 5, 1990 Unit 2 was at 77% power coasting down to a refueling outage planned for the following week. Installation of replacement ATWS Mitigating System Actuating Circuitry (AMSAC) equipment was in progress on Unit 2. During the performance of the work, at 1508, an AMSAC actuation signal was generated, which started both auxiliary feedwater pumps (EII System Identifier BA)(EII Component Identifier P) automatically. A turbine trip signal was also generated, but leads connecting AMSAC to turbine trip circuitry had been lifted earlier in the work process, so no turbine trip occurred. The auxiliary feedwater pumps' actuation was determined to be unnecessary, and the pumps were shut down at 1523. This was a non-ESF actuation of ESF equipment.

CAUSE OF THE EVENT

Cause of the event was inadequate review of work procedures. A Work Request was written and reviewed for AMSAC installation, but the work package was held up while awaiting arrival of vendor-supplied installation instructions. When the vendor-supplied instructions arrived, they were attached to the Work Request and work was begun. It was not immediately recognized that the instructions attached to the Work Request provided for both installation and testing. When the testing portion of the instructions was performed, an actuation signal was sent to the auxiliary feedwater pumps, which started automatically.

ANALYSIS OF THE EVENT

Since the auxiliary feedwater system 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 engineered safeguards components, it is reportable pursuant to 10CFR50.73(a)(2)(iv).

CORRECTIVE ACTION

Review of the work control process was done and it was determined that existing controls should be adequate to prevent this event. The individuals involved have been counseled in the requirements of the work control process. This event report will be routed to others who are responsible for reviewing work packages.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 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 Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 0 6 9 0	LER NUMBER (6)			PAGE (3)		
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		9 0	0 0 4	0 0	0 3	OF	0 3

TEXT (if more space is required, use additional NRC Form 305A (1/17))

FAILED COMPONENT IDENTIFICATION

None.

PREVIOUS SIMILAR EVENTS

There have been previous auto-starts of auxiliary feedwater pumps, but none caused by work on the AMSAC system.