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December 5, 1990

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

Failure to Establish a Continuous Fire Watch When Removing a Sprinkler System from Service Caused by Inadequate Procedure

The Licensee Event Report for this occurrence is attached

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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1/1

NRC FORM 366 (6-89) | U.S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT (LER)

APPROVED OMB NO. 3150-0104
EXPIRES: 4/30/92

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)	DOCKET NUMBER (2)	PAGE (3)
Prairie Island Nuclear Generating Plant Unit 1	0 5 0 0 0 2 8 2	1 OF 0 3

TITLE (4) Failure to Establish a Continuous Fire Watch When Removing a Sprinkler System from Service Caused by Inadequate 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	DOCKET NUMBER(S)
									Prairie Island Unit 2	0 5 0 0 0 3 0 6
1 1	0 6	9 0	9 0	— 0 1 6 —	0 0	1 2	0 5	9 0		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
N		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
1 0 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	XX 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Arne A Hunstad	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 NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

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

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

On November 6, 1990, a routine sprinkler system test was in progress. This test checks operation of deluge valves, so fire suppression water must be isolated to prevent the wetting of equipment. Since the procedure requires the sprinkler system in the emergency diesel generator rooms to be isolated, test personnel asked the Shift Supervisor to establish a continuous fire watch in the rooms. The Shift Supervisor reviewed Technical Specifications and at 0914 ordered the isolation of the zone and established an hourly fire watch and backup fire suppression equipment. When the personnel performing the test entered the zone at 1020 and found no continuous fire watch present, they called the Shift Supervisor and asked why no continuous fire watch had been established. The Shift Supervisor made a further review of Technical Specifications, realized his error, and at 1025 established a continuous fire watch.

Cause of the event was inadequate procedure. The surveillance procedure does not specifically require establishment of a continuous fire watch with backup fire suppression equipment. The Shift Supervisor reviewed Technical Specification 3.14.C.2 and misread the fire watch requirement; instead of establishing a continuous fire watch within one hour, he established an hourly fire watch.

EVENT DESCRIPTION

On November 6, 1990, both units were at 100% power. Surveillance procedure SP1196, Fire Protection Safety-Related Sprinkler System Test, was in progress. This test, which is performed every 18 months, checks operation of deluge valves, so fire suppression water must be isolated to prevent the wetting of equipment. Since the procedure would require the sprinkler system in the emergency diesel generator rooms to be isolated, personnel performing the test asked the Shift Supervisor to establish a continuous fire watch in the rooms. The Shift Supervisor reviewed Technical Specification 3.14.C.2, and at 0914 ordered the isolation of the zone and started an hourly fire watch. Backup fire suppression equipment had also been made available to compensate for isolation of the sprinkler system. When the personnel performing the test entered the zone at 1020 and found no continuous fire watch present, they called the Shift Supervisor and asked why no continuous fire watch had been established. The Shift Supervisor made a further review of Technical Specification 3.14.C.2, realized his error, and at 1025 established a continuous fire watch.

CAUSE OF THE EVENT

The cause of the event was an inadequate procedure. The surveillance procedure references Technical Specification 3.14, Fire Detection and Protection Systems, but does not specifically require establishment of a continuous fire watch with backup fire suppression equipment. The procedure contains only a note that warns that a continuous fire watch is required if the sprinkler system is out of service for more than an hour. The Shift Supervisor reviewed Technical Specification 3.14.C.2 and misread the fire watch requirement; instead of establishing a continuous fire watch within one hour, he established an hourly fire watch.

ANALYSIS OF THE EVENT

Technical Specification 3.14.C.2 requires a continuous fire watch with backup fire suppression equipment to be established within one hour whenever the spray and sprinkler system is inoperable. Backup fire suppression equipment had been established, but a continuous fire watch was not established within one hour. An hourly fire watch had been established. This event is reportable under 10CFR50.73(a)(2)(i)(B).

During the event the fire detection system was operable. Also, several people working in and near the affected zone were performing fire watch functions. These included painters in the diesel generator rooms, who were performing a fire watch function in connection with their work under a Hot Work Permit, and the operator performing the hourly fire watch established by the Shift Supervisor for this test. In the event of a fire, the Control Room would have been alerted immediately and nearby personnel could have responded with the backup fire suppression equipment. This event had no effect on public health and safety.

CORRECTIVE ACTION

As noted in the event description, a continuous fire watch was established upon discovery.

The surveillance procedure will be revised to require a continuous fire watch and backup fire suppression equipment to be established in the affected area when the water supply is to be isolated. A sign-off verifying that these requirements have been met will be required prior to isolation of the water supply.

The Shift Supervisor involved was counseled by management on application of the Technical Specifications.

Operations personnel will review the event during routine training.

FAILED COMPONENT IDENTIFICATION

None.

PREVIOUS SIMILAR EVENTS

There have been no previous similar events reported at Prairie Island.