U.S. NUCLEAR REGULATORY COMMISSION APPROVED OMB NO. 2180-0104 EXPIRES: S/31/86 LICENSEE EVENT REPORT (LER) DOCKET NUMBER (2) FACILITY NAME (1) OFIO 0 | 5 | 0 | 0 | 0 | 2 | 5 | 5 PALISADES NUCLEAR PLANT FAILURE TO ESTABLISH A FIRE WATCH ASSOCIATED WITH INOPERABLE SPRINKLERS OTHER FACILITIES INVOLVED (8) LER MUMBER IS EVENT DATE (8) REPORT DATE (7) EQUENTIAL NUMBER FACILITY NAMES DOCKET NUMBER(S) YEAR DAY DAY YEAR MONTH 0 | 5 | 0 | 0 | 0 | 8 17 0 16 8 0 4 8 7 0 1 ol 0 01 5 5 0 | 5 | 0 | 0 | 0 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR &: (Check one or more of the following) (11) N 73.71(b) 60.73(a)(2)(lv) 20.406(a) 72.71(a) 20.405(a)(1)(i) 30.73(a)(2)(v) BO 38(a)(1) 0 : 919 OTHER (Specify in Abstract below and in Text, NRC Form 300A) 20.406(a)(1)(ii) 50.73(a)(2)(vii) 50.36(c)(2) 20.405(a)(1)(III) 80.73(a)(2)(viii)(A) 80.73(a)(2)(i) 20.405(a)(1)(iv) 50.73(a)(2)(ii) BO.73(a)(2)(viii)(B) 20.405(a)(1)(v) E0.73(a)(2)(iii) 80.73(a)(2)(x) LICENSEE CONTACT FOR THIS LER (12) NAME TELEPHONE NUMBER AREA CODE C S Kozup, Technical Engineer, Palisades 116 COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) MANUFAC REPORTABLE MANUFAC-TURER REPORTABLE TO NPRDS SYSTEM COMPONENT CAUSE CAUSE SYSTEM COMPONENT SUPPLEMENTAL REPORT EXPECTED (14) MONTH YEAR EXPECTED

Abstract

YES (If yes, complete EXPECTED SUBMISSION DATE)

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

On May 4, 1987 at 0629, the Cable Spreading Room sprinkler shutoff valve, MV-FP127 [KP;SHV] was closed to allow isolation and replacement of water flow switch fire detector WFS-2B [KP;FIS]. Per Technical Specification (TS) 3.23.3.1, a continuous fire watch with backup fire suppression equipment was immediately established in the Cable Spreading Room. However, Operations personnel on-shift did not identify that the Switchgear Room 1-C sprinkler system would also be isolated when MV-FP127 was closed. The additional isolation was identified and reported by Plant Maintenance personnel and at approximately 0830, an additional continuous fire watch was established. The reactor was critical with the Plant at 99% of rated power at the time of the event.

The failure to establish a continuous fire watch with backup fire fighting equipment within one hour in Switchgear Room 1-C, was caused by the on-shift Shift Supervisor failing to fully identify all potential effects and consequences of closing MV-FP127.

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Form	366A

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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

Description

On May 4, 1987 at 0629, the Cable Spreading Room sprinkler shutoff valve, MV-FP127 [KP;SHV] was closed to allow isolation and replacement of water flow switch fire detector WFS-2B [KP;FIS]. Per Technical Specification (TS) 3.23.3.1, a continuous fire watch with backup fire suppression equipment was immediately established in the Cable Spreading Room. However, Operations personnel on-shift did not identify that the Switchgear Room 1-C sprinkler system would also be isolated when MV-FP127 was closed. The additional isolation was identified and reported by Plant Maintenance personnel and at approximately 0830, an additional continuous fire watch was established. The reactor was critical with the Plant at 99% of rated power at the time of the event.

Isolation of the sprinkler system for Switchgear Room 1-C was identified by a Plant Maintenance Repair worker who was assisting in the replacement of water flow switch fire detector WFS-2B. Due to the Maintenance Repair worker's knowledge of the Technical Specification requirement to establish a continuous fire watch when sprinkler systems are inoperable, he reported the isolation to assure the additional watch was being performed.

The affected portion of the Fire Protection System (FPS) detailed above is one in which sprinkler heads with fusible links cover designated areas. The fusible links would melt with exposure to heat permitting water to be sprayed in the area covered by the particular head and an alarm to be received at a local fire alarm panel.

Cause Of The Event

The failure to establish a continuous fire watch with backup fire fighting equipment within one hour in Switchgear Room 1-C, was caused by the on-shift Shift Supervisor failing to fully identify all potential effects and consequences of closing MV-FP127.

The requirements invoked by Action Statements associated with TS 3.23.3.1 were recognized by the Shift Supervisor prior to closing MV-FP127, however, the extent of the effects on the sprinkler were not recognized.

Corrective Action

The on-shift Shift Supervisor involved with this event has been counselled on the significance of fully identifying all effects and consequences associated with removing equipment from service. NRC Form 366A

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

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A copy of the report detailing the significance of this event will be required reading for all Senior Reactor Operators. Presently, existing Administrative Procedures regarding removal of equipment from service and Technical Specification related effects are felt to be adequate to preclude recurrence.

Analysis Of The Event

The operability of the fire suppression systems ensures that adequate fire suppression capability is available to confine and extinguish fires occurring in any portion of the facility where safety-related equipment is located. The fire suppression system consists of the water system, sprinklers, and fire hose stations. The collective capability of the fire suppression system is adequate to minimize potential damage to safety-related equipment and is a major element in the facility fire protection program.

In the event that portions of the fire suppression systems are inoperable, a continuous fire watch with alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. Contrary to this requirement, alternate methods of fire protection were not available in Switchgear Room 1-C from 0629 to 0830.

During the period when no fire watch was being maintained, the immediate capability to confine and extinguish fires was reduced, however, immediate fire detection capabilities were not reduced. Switchgear Room 1-C is equipped with two smoke actuated fire detectors. Both of which were operable during the period when the sprinkler system was inoperable and no continuous fire watch was maintained. These fire detection instruments are required by Technical Specifications to ensure that adequate warning capability is available for the prompt detection of fires.

This event is being reported per 10CFR50.73 (a)(2)(i) as a condition prohibited by Technical Specifications.

Additional Information

The water flow switch fire detector WFS-2B, which was being replaced, is a Notifier, Model NVR-2BE. Information regarding its failure can be found in LER 87-010.

For information on past occurrences regarding the failure to implement fire watch patrols due to the loss of fire barrier penetration integrity, reference: LER 83-061, LER 83-068 and LER 83-076.



General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0550

June 5, 1987

Nuclear Regulatory Commission Document Control Desk Washington, DC 20555

DOCKET 50-255 - LICENSE DPR-20 - PALISADES PLANT - LICENSEE EVENT REPORT 87-015 - FAILURE TO ESTABLISH FIRE WATCH ASSOCIATED WITH INOPERABLE SPRINKLERS - CORRECTED COPY

Licensee Event Report (LER) 87-015, (Failure to Establish Fire Watch Associated With Inoperable Sprinklers) is attached. This event is reportable to the NRC per 10CFR50.73(a)(2)(i).

This attached LER supersedes the one attached to our June 3, 1987 letter. A copy of LER 87-013 was inadvertently renumbered as LER 87-015 and attached to the June 3, 1987 submittal. We apologize for any inconvenience this error may have caused.

Thomas C Bordine

Staff Licensing Engineer

CC Administrator, Region III, NRC NRC Resident Inspector - Palisades

Attachment

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