



Nebraska Public Power District

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March 29, 1993

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

Subject: Violation Response for Failure to Post Fire Watch on Inoperable Thermo-Lag
Fire Barriers (298/9305-01)
Cooper Nuclear Station
NRC Docket No. 50-298/DPR-46

- Reference: 1) Samuel J. Collins (NRC Division of Reactor Safety) to G. R. Horn (NPPD),
February 26, 1993, NRC Inspection Report 50-298/93-05 (Notice of Violation)
- 2) G. R. Horn (NPPD) to NRC (Document Control Desk), March 12, 1993,
Cable Spreading Room Thermo-Lag Radiant Energy Shields

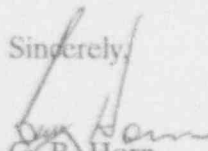
Gentlemen:

During the week of February 1, 1993, the NRC conducted an inspection (NRC Inspection No. 50-298/93-05) of the fire protection program at Cooper Nuclear Station (CNS). During this inspection, certain activities were found to be in violation of NRC requirements. Attached is the response to the Notice of Violation of Reference 1.

NPPD requests that the NRC reconsider the second part of the violation. Based on the information provided in Reference 2, the two Thermo-Lag installations in the cable spreading room are perceived to remain in compliance with the fire protection design basis and the approved 10CFR50 Appendix R exemption.

Should you have any questions or require any additional information, please contact me.

Sincerely,


G. R. Horn

Nuclear Power Group Manager

GRH:cl-16G
Attachment

cc: Regional Administrator
USNRC - Region IV

NRC Resident Inspector
Cooper Nuclear Station

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Powerful Pride in Nebraska

Handwritten initials/signature

VIOLATION 298/9305-01

STATEMENT OF VIOLATION:

"Technical Specification 3.19A states that fire barrier and fire wall penetration seals integrity shall be maintained. Technical Specification 3.19B states that if the requirement of Technical Specification 3.19A cannot be met, a continuous fire watch shall be established on at least one side of the penetration within one hour.

Contrary to the above, the licensee failed to assign fire watches to monitor fire barriers for which integrity could not be verified as follows:

- On February 2, 1993, the assigned fire watch in the residual heat removal service water booster pumps and service air compressor area, was unaware of an inoperable Thermo-Lag fire barrier located on the south wall behind an air dryer, which he was suppose to monitor. As a result, the fire watch was not in a position to monitor the inoperable fire barrier. Based on an interview with the fire watch, this condition appeared to have existed for at least 6 months.
- On February 2, 1993, there was no fire watch assigned to monitor a Thermo-Lag fire resisting barrier enclosing vertical cable risers in the cable spreading room. The fire barrier should have been declared inoperable pursuant to instructions given in NRC Bulletin No. 92-01, Supplement 1, "Failure of Thermo-Lag 330 Fire Barrier System to Perform its Specified Fire Endurance Function," dated August 28, 1992. This condition existed since the time the bulletin was issued.

This is a Severity Level IV violation (298/9305-01)."

VIOLATION RESPONSE
298/9305-01

REASON FOR THE VIOLATION:

The reason the fire watch in the residual heat removal service water booster pumps and service air compressor area was unaware of the inoperable Thermo-Lag fire barrier was a lapse in personnel attention induced by a procedural deficiency. While supplemental information identifying the Thermo-Lag areas of concern was originally provided for the benefit of fire watch personnel, it was not specified or referred to on the fire watch log. Therefore, over time, the fire watch person who was interviewed had not maintained the appropriate level of awareness of the subject barrier.

NPPD evaluated the Thermo-Lag installations in the cable spreading room upon receipt of NRC Bulletin No. 92-01 and later when Supplement 1 to the Bulletin was issued. In both cases, the guidance provided was determined not to be applicable to the unrated radiant energy shield designs in that area. As a result, the barriers were still considered capable of fulfilling their design function and were not declared inoperable. Therefore, it was decided that a fire watch in the cable spreading room was not required.

The Thermo-Lag installations in the cable spreading room were the subject of an exemption from the requirements of 10 CFR 50 Appendix R and were approved as installed in 1984. These installations are considered unrated radiant energy shields, and were not constructed as, nor ever intended to be, rated fire barrier assemblies. Updated information regarding the capabilities of these radiant energy shields to fulfill their design function and their conformance to the original exemption criteria was recently provided to the NRC in a letter dated March 12, 1993, (Reference 2) for the NRC's consideration.

CORRECTIVE STEPS TAKEN AND RESULTS ACHIEVED:

For the residual heat removal service water booster pumps and service air compressor area, fire watch personnel were re-trained and specific watch standing instructions were developed that included a diagram of the fire area demarcating the inoperable Thermo-Lag locations. Periodic interviews of fire watch personnel by management have shown the turnover at the watch post to be complete and effective. Interviewed fire watch personnel appeared to be familiar with their duties and responsibilities.

In response to the concern raised by the inspector and subsequently discussed with regional and headquarters personnel, a continuous fire watch was posted in the cable spreading room.

VIOLATION RESPONSE
298/9305-01

CORRECTIVE STEPS TO BE TAKEN TO AVOID FURTHER VIOLATIONS:

For the part of the violation concerning the residual heat removal service water booster pumps and service air compressor area, the fire watch duties and turnover procedure, CNS Procedure 0.39, will be revised to ensure that the fire watch requirements for Technical Specification fire protection impairments are specifically addressed on the fire watch/ fire watch patrol log.

Actions to restore the operability of fire barriers constructed of Thermo-Lag material are being pursued and evaluated through an on-going industry program coordinated by NUMARC. However, in order to eliminate the continuing need for the Control Building basement fire watch, corrective action is being taken during the 1993 Refueling Outage to eliminate the use of Thermo-Lag material on the wall enclosure and reroute the 125V DC control power cabling to DG No. 2 that had been installed in the two inch conduit. Upon completion of these modifications, the fire watch in that area will no longer be required.

With regard to the radiant energy shields installed in the cable spreading room, a fire watch was posted when the Thermo-Lag concern was raised by the inspector. On March 12, 1993, NPPD submitted additional information for the NRC's consideration regarding these installations which further demonstrates their design basis qualification and adherence to the requirements of the original exemption request. The fire watch in the cable spreading room will remain posted until such time as the NRC either accepts NPPD's evaluation of the installations or until the radiant energy shields are replaced with a material or design meeting NRC acceptance.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

NPPD is presently in full compliance. For the cable spreading room installations, NPPD believes that the Thermo-Lag installations fully comply with the requirements specified in the approved exemption, and therefore, compliance with technical specification requirements for fire watches in this area has been maintained. However, per discussions with NRC personnel, the fire watch will remain posted in the cable spreading room until this issue is resolved. The procedure revisions referenced above will be implemented by May 31, 1993.