Office of Inspection and Enforcement  
Attn: Mr. Ronald C. Haynes, Director  
Region I  
U. S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, Pennsylvania 19406

Dear Sir:  

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Licensee Event Report 81-025/03L-0

Attached please find License Event Report 81-025/03L-0 concerning the inoperability of three fire barrier penetration seals which was determined on September 14, 1981.

This event concerns Section 3.7.11 and is considered reportable under Section 6.9.1.9(b) of the Interim Recovery Technical Specifications.

Sincerely,

J. J. Barton
Acting Director, TMI-2

Attachments

cc: L. H. Barrett, Deputy Program Director  
   Dr. B. J. Snyder, Program Director, TMI Program Office  
   Mr. V. Stello, Director I & E
Licensee Event Report

Event Description and Probable Consequences

On September 14, 1981, during performance of surveillance procedure 4331-R3, Fire Barrier Penetration Fire Seal Inspection, three fire barrier penetration seals were declared inoperable (Penetration 3-342-05, 5-016-80, and 6-045-12). This event concerns Tech. Spec. 3.7.11 and is considered reportable under Section 6.9.1.9(b).

This event had no effect on the plant, its operation, or the health and safety of the public.

Inadequate controls to ensure fire barrier penetrations are resealed following maintenance or construction. Sealed the inoperable seals and completed the surveillance.

Proper implementation of 1410-Y-43 is being exercised at the present time.

Steven D. Chaplin
(717) 948-8461
I. EXPLANATION OF OCCURRENCE

On September 14, 1981 during performance of surveillance procedure 4331-R3, Fire Barrier Penetration Fire Seal Inspection, three fire barrier penetration seals were declared inoperable. The inoperable seals were:

Penetration 3-342-05 on 305' elevation in Control Building - barrier was penetrated to install a cable, seal was not installed.

Penetration 5-016-80 on 280' elevation in Diesel Generator Building - barrier was penetrated to install a pipe, seal was not installed.

Penetration 6-045-12 on 312' elevation in River Water Pump House - barrier was penetrated to install a cable, seal was not installed.

These silicon foam fire barrier seals were removed prior to or very soon after the accident.

II. CAUSE OF THE OCCURRENCE

Inadequate controls to ensure fire barrier penetrations are resealed following maintenance or construction.

The inoperable seals were not identified during the last surveillance cycle which was performed on December 20, 1979 (on an 18 month cycle). The surveillance procedure in effect at the time, 2331-R3, encompassed all types of fire barrier seals (silicon foam, Firewall-50, etc.) Due to problems with the Firewall-50 seals, only that part of 2331-R3 dealing with Firewall 50 seals was performed in December 1979. Through an apparent error, the remainder of surveillance 2331-R3, including the silicon foam seals, was not rescheduled for performance later as intended.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit 2 facility was in a long-term cold shutdown state. The reactor decay heat was being removed via loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.
IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

IMMEDIATE

Sealed the inoperable penetration seals and completed the surveillance.

LONG TERM

Maintenance procedure 1410-Y-43, Fire Barrier Penetration Fire Seal Repairs requires that the Shift Foreman be informed and that he institutes an hourly fire watch until the penetration is resealed. The implementation of this procedural control was lacking prior to and during the accident. The controls are being followed properly at the present time.

To prevent a recurrence of not correctly performing surveillances a responsible engineer was assigned in July 1980 to overview the Tech. Spec. surveillance program.

V. COMPONENT FAILURE DATA

N/A