

Docket No. 50-320

August 21, 1979  
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Mr. Robert C. Arnold  
Sr.-Vice President  
Metropolitan-Edison Company  
Three Mile Island Nuclear Station  
Mail Stop 201  
Middletown, PA

Dear Mr. Arnold:

SUBJECT: TECHNICAL SPECIFICATIONS FOR FIRE PROTECTION MODIFICATIONS, TMI-2

Recently, the NRC-TMI-2 Support Staff conducted an in-depth review of the fire protection systems installed in various TMI-2 exhaust ventilation systems for the protection of charcoal filters against a potential fire. Our observations and recommendations for corrective action are noted below.

1. The manual valve on the supply to the deluge/sprinkler systems to the fuel handling building, AH-F-14A/B (item h of the Tech Specs) and auxiliary building exhaust filters AE-F-10A/B (item k of the Tech Specs) are presently in the closed position. As the system now exists, operator action is required to actuate the fire protection for either unit. This is acceptable, however, because of existing circumstances the areas adjacent to these units now house material whose fire loading far exceeds the initial design criteria. These areas are also beyond the reach of the presently installed fire hoses. It is therefore suggested that detectors be installed and portable fire suppression be added immediately to protect these areas. The detectors should alarm locally and in the control room. It is further suggested that a survey be made to reevaluate the fire loading and the fire protection available in other areas where the existing conditions have changed drastically since the initial conditions.
2. The existing valving arrangement and alarming system for the protection of the condenser exhaust filters (item l of the Tech Specs) is not acceptable. As piped up it requires manually opening three valves, one at the unit and two near the standpipe, before the fire protection for this unit can be actuated. It is recommended that the valve near the unit be locked in the open position. It will still require the opening of two valves but these are located near each other and it will eliminate

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Mr. Robert C. Arnold

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opening the third valve which is approximately 30 feet away. As installed, the fire detection buzzer alarms locally, near the unit. It is located approximately 30 feet or more from the manned station. Because of the noise level in that area and because the attendant at that station may be doing other duties, it is recommended that the fire detection be a load bell alarm located at the manned station or in the control room.

3. The existing valving arrangement for the protection of the auxiliary building backup exhaust filters (item 2 of the Tech Specs) is complicated. Each unit has a bank of four valves. It requires the opening of these valves and the opening of the valve at the control panel mounted on the wall of the outside of the building to activate a fire suppression system. The installed valves are not of the rising stem type making it difficult to recognize at a glance whether they are in the open or closed position. It is recommended that because of the complexity of the system the fire brigade be schooled immediately in the procedure requirements for actuating the fire suppression system and that periodically they be required to practice these procedures. It is also recommended that the valves be tagged in the closed position and that they be inspected periodically to verify that they are in the closed position.
4. It has also come to our attention that as a result of an earlier fire protection plant survey certain modifications to the fire protection system were recommended. However, the due date for these modifications was to be prior to startup following the first refueling. In light of the existing conditions that due date is unrealistic. It is suggested that these modifications be reexamined and those found pertinent be implemented as soon as possible.

Due to the safety significance of these observations it is requested that you take immediate action to implement the recommendations noted above. We would appreciate a response within one week from the date of the letter indicating those actions that have been completed and a schedule for completing the rest.

We are prepared to meet with you and your staff to discuss the comments in more detail if you believe a meeting would be desirable.

Sincerely,

**POOR ORIGINAL**

*/s/* 992 259  
John T. Collins, Deputy Director  
TII-2 Support

cc: J. Herbein, Met-Ed, Mail Stop 120  
T. O'Connor, Met-Ed, Mail Stop Eng. 2  
H. Denton  
R. Vollmer

M. Greenberg  
J. Werniel  
D. Eisenhut  
R. Fitzpatrick

JTCollins:cj  
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