

NON-PUBLIC?: N  
ACCESSION #: 8609260085  
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Three Mile Island Unit 2 PAGE: 1 of 4

DOCKET NUMBER: 05000320

TITLE: Failure to Comply with Technical Specification 3.7.10.2 Due to Operator Error

EVENT DATE: 09/04/86 LER #: 86-009-00 REPORT DATE: 09/23/86

OPERATING MODE: N POWER LEVEL: 000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10CFR: 50.73(A)(2)(IV)

LICENSEE CONTACT FOR THIS LER:

NAME: Russell D. Wells, TMI-2 Licensing Engineer TELEPHONE: 717-948-8244

COMPONENT FAILURE DESCRIPTION:

CAUSE SYSTEM IB COMPONENT ANN MANUFACTURER R335 REPORTABLE TO NPRDS N

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT: At 1010 hours on September 4, 1986, TMI-2 Surveillance Procedure 4210-SUR-3826.05, "Control Room Emergency Ventilation Performance Analysis" was being performed. As a precautionary measure, the deluge system for the Control Room Bypass Filter, AH-F-5, was isolated by tagging out valve FS-V-507. Isolation of the deluge system for AH-F-5 requires compliance with the action statement of Technical Specification 3.7.10.2 which required that an hourly roving firewatch be established within one hour. However, the Control Room Operator failed to recognize this requirement when approving the switching and tagging application for FS-V-507. This condition existed until 1855 hours on September 4, 1986 when the deluge system for AH-F-5 was returned to service. This event is reportable pursuant to 10 CFR 50.73(a)(2)(ii)(B).

The root cause of this event was personnel error. The Control Room Operator failed to identify the requirement to comply with Technical Specification 3.7.10.2 when authorizing the isolation of the deluge system for AF-H-5. This event will be discussed with TMI-2 licensed operators. Additionally, the referenced surveillance procedure is being revised to identify the need to comply with Technical Specification 3.7.10.2 when isolating the deluge system for AH-F-5.

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### I. PLANT OPERATING CONDITIONS BEFORE THE EVENT

The TMI-2 facility is in a long-term cold shutdown state; the defueling evolution was in progress. The reactor decay heat was being removed via loss to ambient. Throughout this event there was no affect on the Reactor Coolant System or the core.

### II. STATUS OF STRUCTURES, COMPONENTS, OR SYSTEMS THAT WERE INOPERABLE AT THE START OF THE EVENT AND THAT CONTRIBUTED TO THE EVENT

N/A

### III. EVENT DESCRIPTION

At 1010 hours on September 4, 1986, TMI-2 Surveillance Procedure 4210-SUR-3826.05, "Control Room Emergency Ventilation Performance Analysis" was being performed in accordance with Technical Specification 3.7.7, "Control Room Emergency Air Cleanup Systems" (IEEE Code VI) a As a precautionary measure, the deluge system (IEEE Code KP) for Control Room Bypass Filter AH-F-a was isolated, by tagging out valve FS-V-507, in order to prevent inadvertent activation of the deluge system during the surveillance.

Isolating the deluge system for AH-F-a necessitated compliance with the action statement of Technical Specification 3.7.10.2, "Deluge/Sprinkler Systems". The action statement for this specification requires that an hourly roving firewatch with backup fire suppression equipment for the unprotected area be established within 1 hour. However; the Control Room Operator did not "recognize that compliance with the referenced Technical Specification action statement was required for isolation of the deluge system for AH-F-5.

The above condition existed until 1855 hours on September 4, 1986, when the deluge system for AH-F-5 was returned to service. At that time, Control Room Operator on the following shift recognized that compliance with the action statement of Technical Specification 3.7.10.2 had not been achieved.

This event is reportable pursuant to 10 CFR 10.73 (a)(2)(ii)(B) due to a condition prohibited by the plant's Technical Specification.

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#### IV. ROOT CAUSE OF THE EVENT

The root cause of this event was personnel error. The Control Room Operators failed to recognize that isolation of the deluge system for AH-F-5 required compliance with the action statement of Technical Specification 3.7.10.2. The mechanism which, in this case, should have provided this recognition was the switching and tagging application for FS-V-507. The switching and tagging application specifically requires the identification of any applicable Technical Specification. The Shift Foreman/Supervisor and Control Room Operator are required to independently verify and sign the application. In this event, the Control Room Operator failed to identify Technical Specification 3.7.10.2 on the switching and tagging application as being applicable.

It is also noteworthy that alarms 7A.MI and 7A.A3 failed to annunciate, as required, when FS-V-507 was tagged out. The annunciation of these alarms would not have prevented this event from occurring but potentially may have resulted in this event being detected earlier by the oncoming shift operators.

#### V. CORRECTIVE ACTIONS

Short-Term - The deluge system for AH-F-5 was returned to service at 1855 hours on September 4, 1986.

Long-Term - This event will be discussed with TMI-2 licensed operators to stress" the importance of thoroughly reviewing Technical Specification requirements when authorizing systems to be taken out of service.

Isolating the deluge system for AH-F-a is a conn#n precautionary measure when performing Surveillance Procedure 4210-SUR-3826.O5. Therefore, this procedure is being revised to advise personnel that compliance with the action statement of Technical Specification 3.7.10.2 is required when the deluge system for AH-F-5 is isolated.

Unit Work Instruction 4220-3611-86-G610 has been issued to troubleshoot the annunciation failure of alarms 7A.MI and 7A.A3 and repair or replace as necessary.

#### VI. COMPONENT FAILURE DATA

Alarms 7A.MI and 7A.A3 manufactured by Rochester Instrument Systems, Inc.

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#### VII. AUTOMATIC OR MANUALLY INITIATED SAFETY SYSTEM RESPONSES

N/A

## VIII. ASSESSMENT OF THE SAFETY CONSEQUENCES AND IMPLICATIONS OF THE EVENT

The Control Room Bypass Filter, AH-F-a, is located on the 351'6" elevation of the Control Building. It is located in FA-O33 and the design basis fire postulated in this area is addressed in the Revision 1 update to the GPU Nuclear Fire Hazard Analysis. The Safe Shutdown Analysis for this area states that remote operation/ indication for various systems are lost, but the ability to maintain the plant in a safe cold shutdown condition is not affected. The area where the filter is located is under constant surveillance of the zoned fire detection system and manual fire fighting equipment is available in the immediate vicinity. Rapid fire brigade response would have been available should a fire have started within the filter housing. Therefore this event did not jeopardize the health and safety of the public.

ATTACHMENT # 1 TO ANO # 8609260085 PAGE 1 OF 1

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September 23, 1986

US Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Licensee Event Report 86-09

Attached is Licensee Event Report 86-09 concerning the failure to comply with the action statement of Technical Specification 3.7.10.2 on September 4, 1986.

This event is considered reportable pursuant to Title 10 of the Code of Federal Regulations, Section 50.73(a)(2)(ii)(B).

Sincerely

F. R. Standerfer  
Vice President/Director, TMI-2

FRS/RDW/eml

Attachments

cc: Regional Administrator - Office of I & E, Dr. T. E. Murley  
Director - TMI-2 Cleanup Project Directorate, Dr. W. D. Travers

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