

NON-PUBLIC?: N
ACCESSION #: 8801040569

LICENSEE EVENT REPORT (LER)

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

DOCKET NUMBER: 05000320

TITLE: Failure To Comply With Technical Specifications 3.7.10.2 Due To
Operator Error

EVENT DATE: 11/23/87 LER #: 87-011-00 REPORT DATE: 12/28/87

OPERATING MODE: N POWER LEVEL: 000

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR
SECTION

50.73(a)(2)(i)

LICENSEE CONTACT FOR THIS LER:

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SUPPLEMENTAL REPORT EXPECTED: No

ABSTRACT: At 1040 hours on November 23, 1987 the Technical Specifications (Tech. Specs.) 3.7.10.3 required Cable Room and Transformer Room Halon System was removed from service to perform Surveillance 4224-SUR-3812.03, "Fire System Halon System Check." Switching Order No. 13662 authorized the Halon System Main/Reserve Bank Key Switch to be positioned to the main bank. Upon taking the Halon System out-of-service, the Unit entered into the Action Statement of Tech. Spec. 3.7.10.3.a which required a roving hourly firewatch. Upon completion of the surveillance, the Utility Maintenance Foreman reported to the Shift Foreman and the Operations Manager that the surveillance was completed and that the system could be returned to service. Control Room Operator and Shift Foreman Log entries made at 1625 hours on November 23, 1987, noted that the surveillance was completed satisfactorily, the system was returned-to-service, and the hourly firewatch was secured. However, Switching Order No. 13662 was not cleared and the Main/Reserve Bank Key Switch was never repositioned. This condition was discovered on November 28, 1987, during a weekly audit of the Switching and Tagging Log by the Operations Department. The Halon System was returned-to-service at 1610 hours on November 28, 1987. Thus, from 1625 hours on November 23, 1987, to 1610 hours on November 28, 1987, the Cable Room and Transformer Room Halon System was inoperable without the Tech. Spec. Action Statement required hourly firewatch. Therefore, this event is considered

reportable pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B).

The root cause of this event is personnel error on the part of the Operations Manager and the Shift Foreman. As a long-term corrective action, all licensed operators will review this event to highlight the importance of properly returning Tech. Spec. required systems to service.

(End of Abstract)

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I. PLANT OPERATING CONDITIONS BEFORE THE EVENT

The TMI-2 facility was 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

Cable Room and Transformer Room Halon System Main Cylinder Bank was inoperable.

III. EVENT DESCRIPTION

In the past, several halon cylinders of the Cable Room and Transformer Room Halon System (IEEE Code-KQ) require for compliance with Technical Specifications (Tech. Spec.) Limiting Conditions for Operation (LCO) 3.7.10.3 had been discovered at low pressure. As a result of these problems with the Halon System, the Operations Department began checking halon cylinder pressure at a greater frequency than the Recovery Operations Plan Section 4.7.10.3.1 surveillance interval of six (6) months. As part of this increased attention to the Halon System, the Operations Manager scheduled a manual performance of Tech. Spec. Surveillance Procedure 4224-SUR-3812.03, "Fire System Halon System Check."

To perform Surveillance 4224-SUR-3812.03, the Cable Room and Transformer Room Halon System was removed from service per the requirements of TMI-2 Procedure 4000-ADM-3020.04, "Switching and Tagging Safety." The system was removed from service via Switching Order No. 13662. This order authorized the Main/Reserve Key Switch on Local Panel 727 to be positioned to the main bank position. Since the Halon System main bank was inoperable during this event, any halon activation signal would have

been sent to the inoperable main bank cylinders. The Main/Reserve Key Switch was placed in the main bank position and a red tag was placed on the switch to signify that the switch was not to be operated.

Upon taking the Halon System out-of-service, the Unit entered into the Action Statement of Tech. Spec. LCO 3.7.10.3.a. This Action Statement requires a roving hourly firewatch and restoration of the system to operable status in 14 days. The Halon System was removed from service and the Tech. Spec. Action Statement entered at 1040 hours on November 23, 1987, as noted in the Control Room Operator Log.

The Utility Maintenance Department performed Surveillance 4224-SUR-3812.03 and discovered two (2) halon cylinders at low pressure. The cylinders were replaced and the connections leak tested. Upon completion, the Utility

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Maintenance Foreman reported to the Shift Foreman and the Operations Manager that Surveillance 4224-SUR-3812.03 was completed, that the Halon System was verified operable, and that the Switching Order could be cleared and the system returned to service. Based on this information, Control Room Operator and Shift Foreman Log entries were made at 1625 hours on November 23, 1987. The entries noted that Surveillance 4224-SUR-3812.03 was completed satisfactorily, the system was returned-to-service, and the hourly firewatch was secured. However, Switching Order No. 13662 was not cleared and the system never actually returned-to-service as the Main/Reserve Key Switch at Local Panel 727 was never repositioned.

TMI-2 Procedure 4000-ADM-3020.04 requires a weekly audit of the Switching and Tagging Log to be performed by the Operations Department. This audit was being performed on November 28, 1987, when it was discovered that Switching Order No. 13662 was still active for the Cable Room and Transformer Room Halon System. At 1545 hours on November 28, 1987, the tag on the Main/Reserve Bank Switch was verified to be present on Local Panel 727. As a result of this discovery, the Halon System was returned-to-service by placing the Main/Reserve Bank Switch to the reserve position.

The Cable Room and Transformer Room Halon System was inoperable from 1625 hours on November 23, 1987, to 1610 hours on November 28, 1987, without the Tech. Spec. Action Statement required hourly firewatch. Therefore, this event is considered reportable pursuant to the requirements of 10 CFR 50.73(a)(2)(i)(B) due to a condition prohibited by the Plant's Tech. Specs.

The event date of this report is November 23, 1987, (i.e., the date the firewatch was cancelled without the system properly returned-to-service). The discovery date of this event is November 28, 1987, when the event was discovered during an audit. For purposes of reportability, the 30-day timeclock starts upon the discovery date; therefore, the due date of this LER is December 28, 1987, 30 days from November 28, 1987.

This event is similar in nature to LER 86-11.

IV. ROOT CAUSE OF THE EVENT

The root cause of this event is personnel error on the part of the Operations Manager and the Shift Foreman. They did not properly clear the Switching Order when notified that the surveillance was completed. The system was logged as being returned-to-service and the Action Statement timeclock was stopped without first repositioning the Main/Reserve Log Switch and removing the red tag.

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V. CORRECTIVE ACTIONS

Immediate - The Cable Room and Transformer Room Halon System was returned-to-service by clearing Switching Order No. 13662. The red tag was removed and the Main/Reserve Key Switch on Local Panel 727 placed in the reserve position and pinned. This action was completed at 1610 hours on November 28, 1987.

Long-Term - The Operations Manager and Shift Foreman were counseled regarding the circumstances and deficiencies surrounding this incident. The Operations Manager placed an entry into the Night Order Book so that all shifts would be aware of this incident. In addition, this LER will be reviewed by all operating crews to highlight the importance of properly returning Tech. Spec. required systems to service.

VI. COMPONENT FAILURE DATA

N/A

VII. AUTOMATIC OR MANUALLY INITIATED SAFETY SYSTEM RESPONSES

N/A

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

With the Halon System in a disabled condition, it would not have been able to extinguish a fire in the Cable Room and Transformer Room. However, indicators in the Control Room would have alerted Operators to the presence of a fire and they would have been able to take the appropriate actions to mitigate the damage caused by the fire. Loss of any instrumentation or controls due to a fire would not have prevented the maintenance of TMI-2 in a safe shutdown condition. This is supported by the TMI-2 Fire Protection Program Evaluation (FPPE), which has been reviewed and approved by the NRC. The FPPE states that a Design Basis Fire in the Cable Room and Transformer Room could result in the loss of remote operation/indication for various systems but would not jeopardize the safe shutdown condition of the plant. Thus, the event did not present an undue risk to the health and safety of the public.

ATTACHMENT # 1 TO ANO # 8801040569 PAGE: 1 of 1

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December 28, 1987
4410-87-L-0186/0278P

US Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Dear Sirs:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Licensee Event Report 87-11

Attached is Licensee Event Report 87-11 concerning the failure to comply with the Action Statement of Technical Specification 3.7.10.2 during the period of November 23, 1987, to November 28, 1987.

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

Sincerely,
/s/ F. R. Standerfer
F. R. Standerfer
Director, TMI-2

CJD/eml
Attachment
cc: Regional Administrator, Region 1 - W. T. Russell
Director, TMI-2 Cleanup Project Directorate - Dr. W. D. Travers

*** END OF DOCUMENT ***
