

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) McGuire Nuclear Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 7 0	PAGE (3) 1 OF 0 5
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TITLE (4)
Fire Watch Patrols Were Not Performed Due to a Personnel Error

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)																																											
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES		DOCKET NUMBER(S)																																									
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<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">OPERATING MODE (9) 6</td> <td colspan="11">THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)</td> </tr> <tr> <td rowspan="5">POWER LEVEL (10) 0 0 0</td> <td>20.402(b)</td> <td>20.408(a)</td> <td>20.408(e)</td> <td>80.73(a)(2)(iv)</td> <td>73.71(b)</td> </tr> <tr> <td>20.408(a)(1)(i)</td> <td>80.38(a)(1)</td> <td>80.73(a)(2)(v)</td> <td>73.71(e)</td> <td rowspan="4">OTHER (Specify in Abstract below and in Text, NRC Form 386A)</td> </tr> <tr> <td>20.408(a)(1)(ii)</td> <td>80.38(a)(2)</td> <td>80.73(a)(2)(vi)</td> <td></td> </tr> <tr> <td>20.408(a)(1)(iii)</td> <td>80.73(a)(2)(i)</td> <td>80.73(a)(2)(viii)(A)</td> <td></td> </tr> <tr> <td>20.408(a)(1)(iv)</td> <td>80.73(a)(2)(ii)</td> <td>80.73(a)(2)(viii)(B)</td> <td></td> </tr> <tr> <td></td> <td>20.408(a)(1)(v)</td> <td>80.73(a)(2)(iii)</td> <td>80.73(a)(2)(x)</td> <td></td> <td></td> </tr> </table>												OPERATING MODE (9) 6	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)											POWER LEVEL (10) 0 0 0	20.402(b)	20.408(a)	20.408(e)	80.73(a)(2)(iv)	73.71(b)	20.408(a)(1)(i)	80.38(a)(1)	80.73(a)(2)(v)	73.71(e)	OTHER (Specify in Abstract below and in Text, NRC Form 386A)	20.408(a)(1)(ii)	80.38(a)(2)	80.73(a)(2)(vi)		20.408(a)(1)(iii)	80.73(a)(2)(i)	80.73(a)(2)(viii)(A)		20.408(a)(1)(iv)	80.73(a)(2)(ii)	80.73(a)(2)(viii)(B)			20.408(a)(1)(v)	80.73(a)(2)(iii)	80.73(a)(2)(x)		
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LICENSEE CONTACT FOR THIS LER (12)

NAME Julio G. Torre, Licensing	TELEPHONE NUMBER AREA CODE 7 0 4 3 7 3 - 8 0 2 9
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 26, 1986, it was discovered that required fire barrier watch patrols in the Unit 2 cable room were not performed from February 13, 1986 through March 26, 1986. Hourly patrols had been instituted on February 6, 1986 in response to Technical Specification (T.S.) 3.7.11 when fire retardant material was removed from a penetration in the floor of the Unit 2 cable room. The fire retardant material was removed from the penetration to route cables through the floor to a new cabinet installed for the Inadequate Core Cooling Monitor system.

Unit 2 was in Mode 6, Refueling, at the time of the discovery.

This incident is attributed to a Personnel Error due to the incorrect declaration of the penetration as operable by the Shift Engineer. A contributing cause is a Management Deficiency due to an inadequacy in the administrative controls for ensuring the operability of equipment.

Hourly fire barrier watch patrols for the subject penetration were resumed by Security personnel on March 26, 1986, at 1257, and were maintained until the fire penetration was declared operable on April 5, 1986, at 1930.

The fire zone detectors in the subject area were operable during the time the fire watch patrols were missed. No fires occurred in the subject area while the fire watch patrols were not performed.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

On March 26, 1986, it was discovered that required fire barrier watch patrols in the Unit 2 cable room were not performed from February 13, 1986 through March 26, 1986. Hourly patrols had been instituted on February 6, 1986 in response to Technical Specification (T.S.) 3.7.11 when fire retardant material was removed from a penetration in the floor of the Unit 2 cable room. The fire retardant material was removed from the penetration to route cables through the floor to a new cabinet installed for the Inadequate Core Cooling Monitor system. The hourly patrols had been discontinued on February 13, 1986 as a result of the penetration having been declared operable on February 12, 1986. Hourly patrols were instituted again on March 26, 1986 and continued until the penetration was closed.

Unit 2 was in Mode 6, Refueling, at the time of the discovery.

This incident is attributed to a Personnel Error due to the incorrect declaration of the penetration as operable by the Shift Engineer. Contributing was a Management Deficiency due to an inadequacy in the administrative controls for ensuring the operability of equipment.

BACKGROUND:

McGuire Nuclear Station Technical Specification 3.7.11 requires all fire barrier penetrations (walls, floor/ceilings, cable tray enclosures, and other fire barriers) separating safety-related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire windows, fire dampers, cable piping, and ventilation duct penetration seals) to be operable at all times. With one of the required fire barrier penetrations and/or sealing devices inoperable either: 1) a continuous fire watch must be established within 1 hour, or 2) the fire detectors on at least one side of the inoperable assembly must be verified operable and an hourly fire watch patrol established.

The installation of the Inadequate Core Cooling Monitoring system is covered by a Nuclear Station Modification (NSM). The NSM required the installation of two cabinets in the Unit 2 cable room located in the auxiliary building on 750' elevation. Cables for these cabinets were routed through the bottom of the cabinet and through a penetration in the floor to their required destinations. The penetration through the floor is identified as no. 2-750-101-02.

Hourly Fire Barrier Patrol tags are used to log hourly inspections of inoperable fire barriers. The back of the tag contains blanks for the date and time of the inspection and initials of the individual performing the inspection. There are 48 entry blanks on each tag and another tag is used when the previous tag is full of entries.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

DESCRIPTION OF EVENT:

During the planning of the installation of the subject NSM, discussions were made among the responsible personnel to determine who would provide the required fire watch during the job. Personnel representing the contracted security organization at McGuire (Southern Security) stated that a security post would be required for the job and therefore, Security personnel agreed to take responsibility for the fire watch. Implementation of the NSM began on February 6, 1986, and the fire retardant material was removed from a portion of the penetration at 0917. The penetration was declared inoperable, and continuous fire watch was started at 0917 by Security personnel. The fire watch was changed to an hourly watch patrol after Security personnel determined a security post was not required. Work continued, and the fire penetration was left open (inoperable) to facilitate the required work.

On February 12, 1986, the Shift Engineer was contacted and it was requested that he determine the status of several penetrations which were declared inoperable including penetration no. 2-750-101-02. The Technical Specification Action Item Logbook (TSAIL) was being reviewed to bring forward the outstanding items in the TSAIL. The Shift Engineer contacted several personnel to determine the status of the work. After discussions, the Shift Engineer was convinced that penetration no. 2-750-101-02 was operable. The Shift Engineer then initialed the "verified by" blank in the TSAIL and initialed the book acknowledging that penetration no. 2-750-101-02 was operable.

Security personnel performing the fire watch were unaware of the entry in the logbook. The fire watch patrol continued until the entry blanks on the fourth fire watch tag were completed. The personnel performing the fire watch patrol requested the issuance of a new tag. The personnel who are responsible for the issuance of fire watch tags checked the TSAIL and notified the Security personnel that the fire penetration had been declared operable and that no fire watch patrols were necessary. The fire watch patrol was subsequently terminated. The times logged on the fire tag indicates the fire watch continued for about 10 hours past the time the penetration was logged operable. Work to pull cable through penetration no. 2-750-101-02 continued and the fire penetration remained open.

On March 26, 1986, Station personnel checked the progress of work for the subject NSM by visually inspecting the job site. It was observed at this time that no fire watch was in progress and Security personnel were asked whether the fire watch was still being performed. After an investigation, Security personnel determined the fire watch had been terminated. The penetration was declared inoperable at 1256. The fire watch patrol for the penetration was resumed by Security personnel at this time.

Work requiring the open fire penetration continued until April 4, 1986. The penetration was then sealed in accordance with the appropriate procedure - Initial Penetration and Penetration Repairs. The penetration was declared operable on April 5, at 1930, and the fire watch patrol was terminated.

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TEXT (If more space is required, use additional NRC Form 365A's) (17)

CONCLUSION:

With his entry in the TSAIL, the Shift Engineer took responsibility for the operability of the fire penetration. The Shift Engineer verified the penetration was operable based on information obtained verbally. Inadequate action was taken by the Shift Engineer to ensure the penetration was operable before he signed the TSAIL logbook.

The number of penetrations inoperable may have contributed to this incident. The Shift Engineer expressed difficulty in tracking the work request job status through the tracking process. These circumstances could have contributed to misidentification of the penetration in question. However, circumstances, such as the above are not uncommon and therefore demonstrate the necessity of good communication of information.

Due to the fact that the penetration was not closed until April 4, 1986, the entry in the TSAIL did not properly reflect the operability of the penetration. This incident is attributed to a Personnel Error due to the incorrect entry in the TSAIL by the Shift Engineer which caused the fire watch patrol to be discontinued.

Operations Management Procedure (OMP) 2-5 (Technical Specifications Action Item Logbook) provides instruction for the control and use of this logbook. OMP 2-5 allowed anyone to verify equipment is operable and it required the Senior Reactor Operator (SRO) to acknowledge that the person had verified the equipment was operable. The procedure did not require a controlled method for ensuring the equipment was operable; therefore, a management deficiency contributed to this incident.

A review of past reports revealed no similar incidents. Therefore, this incident is considered an isolated occurrence.

There were no personnel injuries, radiation overexposures, or releases of radioactive materials as a result of this incident.

CORRECTIVE ACTION:

- Subsequent:
- 1) An hourly fire watch patrol was initiated and performed by Security personnel from March 26, 1986 through April 5, 1986.
 - 2) The penetration fire barrier was repaired in accordance with the Initial Penetration and Penetration Repair procedure.
 - 3) Operations Management Procedure 2-5 was revised to require personnel to obtain proper documentation as to the operability of the equipment logged inoperable in the TSAIL logbook before the equipment is declared operable.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

- 4) The OMP was revised to require a full signature by the person verifying the equipment operable.

SAFETY ANALYSIS:

During the time period the fire watch patrols were not performed in the cable room, other Security personnel performed fire door inspections in the area which required entry into the room. Additionally, CMD-N personnel were working 6 days per week and 8-10 hours per day in the room and would have been able to identify any fire in the area. The fire zone detectors in zones 45 and 52 were operable during the time the fire watch patrols were missed and no fires occurred in the area.

The health and safety of the public were not affected by this incident.

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

September 22, 1986

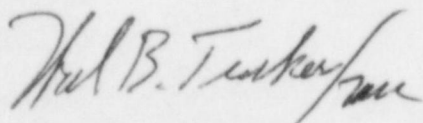
Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: McGuire Nuclear Station - Unit 2
Docket No. 50-370
LER 370/86-05-01

Gentlemen:

Pursuant to 10 CFR 50.73, attached is Revision 1 to Licensee Event Report 370/86-05 concerning missed fire watch patrols due to a personnel error. The revision is due to more detailed information being discovered. Bars in the right margin indicate where changes have been made. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,



Hal B. Tucker

JBD/96/jgm

xc: Dr. J. Nelson Grace
Regional Administrator, Region II
U.S. Nuclear Regulatory Commission
101 Marietta St. NW, Suite 2900
Atlanta, Georgia 30323

INPO Records Center
Suite 1500
1100 Circle 75 Parkway
Atlanta, GA 30339

M&M Nuclear Consultants
1221 Avenue of the Americas
New York, NY 10020

American Nuclear Insurers
c/o Dottie Sherman, ANI Library
The Exchange, Suite 245
270 Farmington Avenue
Farmington, CT 06032

Mr. Darl Hood
U.S. Nuclear Regulatory Commission
Office of Nuclear Reactor Regulation
Washington, D.C. 20555

Mr. W.T. Orders
NRC Resident Inspector
McGuire Nuclear Station

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