

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) McGuire Nuclear Station - Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 7 0 1 OF 0 3										PAGE (3) 1 OF 0 3																							
TITLE (4) Safety Train "B" Electray Disconnected and in Contact With Train "A" Electray																																											
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																									
0 5		2 8		8 5		8 5		0 1		6		0 0		0 6		2 7		8 5		DOCKET NUMBER(S) 0 5 0 0 0 0																							
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: (Check one or more of the following) (11)																																									
1		20.402(b)										20.405(c)										50.73(a)(2)(iv)										73.71(b)											
POWER LEVEL (10)		1 0 0										20.405(a)(1)(i)										50.36(c)(1)										50.73(a)(2)(v)										73.71(c)	
		20.405(a)(1)(ii)										50.36(c)(2)										X 50.73(a)(2)(vii)										OTHER (Specify in Abstract below and in Text, NRC Form 366A)											
		20.405(a)(1)(iii)										50.73(a)(2)(i)										50.73(a)(2)(viii)(A)																					
		20.405(a)(1)(iv)										50.73(a)(2)(ii)										50.73(a)(2)(viii)(B)																					
		20.405(a)(1)(v)										50.73(a)(2)(iii)										50.73(a)(2)(ix)																					
LICENSEE CONTACT FOR THIS LER (12)																																											
NAME Jerry Day - Licensing										TELEPHONE NUMBER AREA CODE 7 0 4 3 7 3 - 7 0 3 3																																	
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																											
CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NPD		CAUSE		SYSTEM		COMPONENT		MANUFACTURER		REPORTABLE TO NPD																									
SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)										MONTH		DAY		YEAR																			
YES (If yes, complete EXPECTED SUBMISSION DATE)										X NO																																	

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

On May 28, 1985, Quality Control personnel reported the discovery of a violation of safety train cable separation criteria. The violation occurred because the electray (cable support tray) for train "B" cable was loosened from its supports and allowed to rest on the cable tray below ("A" train). The electray was apparently lowered to facilitate the installation of a pipe hanger in December 1982, and was not reinstalled afterward.

Unit 2 was in Mode 1 at 100% power at the time of this discovery. The unit had been at various power levels and modes prior to the discovery.

This incident is attributed to an Administrative Deficiency because adequate controls were not used by the Construction department to ensure that electray was reinstalled following removal. The electray was reinstalled, thus restoring cable separation.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

FACILITY NAME (1) McGuire Nuclear Station - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 7 0	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		8 5	— 0 1 6	— 0 0	0 2	OF	0 3

TEXT (If more space is required, use additional NRC Form 365A-1)

The electray in this incident is a four inch tray and contains cables which terminate at local components (motor operated valves, solenoid valves, etc). The dates in which the electray was installed are not available for areas beyond main breakout points. The dates available from the cable pull cards for the affected cables reveal that some of the cables were pulled and terminated between 1979 and 1981. The electray was completed and in place prior to these dates.

The erection of a pipe hanger began after the cable tray was in place. The mounting base of the hanger was arranged in a way such that one of the holes could not be drilled with the electray in place. It is concluded at this point that the electray was loosened from its mounting and lowered so that the hanger could be mounted. The hanger was inspected by a QC inspector on January 7, 1983, but the electray was not noticed as being down. The lighting in this area is marginal for detailed work but is adequate for most area inspections. The cable trays are mounted near the ceiling and could not be obviously detected from the floor as being in contact with each other. The inspector was not familiar with electrical separation criteria at the time of the hanger inspection. These factors contributed to the electray not being replaced at the time the hanger work was completed.

In October 1984, the Construction department began using station procedures for the work they were to perform. This change required the use of station work requests, station procedures and Planning department reviews. These station procedures have clearly defined guidelines for the completion and documentation of work performed. At the present time, station Maintenance and Planning personnel believe that the work request system is thorough enough to prevent this type of occurrence from being repeated.

QC Inspector "A" noticed, on May 22, that the electray was down and that safety train separation was not in compliance with installation specifications while observing another job in the area. After leaving the area, the inspector talked to some IAE supervisors about the electray. Apparently the supervisors did not realize the importance of the cable separation violation and no further action was taken at that time. The inspector could not remember the supervisors with whom he had discussed this problem. The discussion took place in the IAE shop area and was described as a casual discussion.

The inspector returned to the area of the electray problem on May 28, 1985 to see if corrective action had been taken. He found that no work had been performed to correct the problem. A Nonconforming Item Report was written to ensure that the electray was installed.

The equipment associated with the affected cables is as follows:

Process RAD Monitor Isolation

Accumulator Nitrogen Supply Outside Containment Isolation

Safety Injection Pump 2B Hot Leg Injection Header Isolation

Auxiliary Building Vent System Return Isolation

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

ND Pump 2A Discharge Containment Isolation

NS Pump 2A Discharge Containment Isolation

IAE Technicians reinstalled the electray using the procedure "Field Run Electray on Conduit Support Systems" by 1700 on May 28, 1985.

CORRECTIVE ACTIONS:

Subsequent: QC personnel wrote an NCI to identify the inadequate cable separation problem.

IAE personnel wrote a work request to reinstall the electray.

Planned: Station Maintenance and Planning personnel believe that the present controls used in maintenance activities and prior changes to the modification control program are adequate to prevent a re-occurrence of this type incident. No further actions are planned.

SAFETY ANALYSIS:

The cables affected by this incident remained operable throughout the period in which the separation criteria was violated. The cables were vulnerable to simultaneous safety train damage in the event of a postulated fire or missile incident. These type incidents are unlikely in this area because of the remote location of the cable trays. The electray is near the ceiling away from any rotating machinery. A smoke detector is mounted about five feet from the point of the cable tray contact and would have provided early fire detection 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

June 27, 1985

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

Subject: McGuire Nuclear Station, Unit 2
Docket No. 50-370
LER 370/85-16

Gentlemen:

Pursuant to 10 CFR 50.73 Sections (a)(1) and (d), attached is Licensee Event Report 370/85-16 concerning a Safety Train "B" Electray that was found disconnected from its support and in contact with a Safety Train "A" Electray. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

H.B. Tucker
Hal B. Tucker

JBD:smh

Attachment

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Document Control Desk

June 27, 1985

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cc: Dr. J. Nelson Grace, Regional Administrator
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