

## (7-77)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

CON'T

0	1
7	8

REPORT SOURCE

L	6	0	5	0	0	0	2	8	9	7	1	2	1	4	8	3	8	1	2	2	9	8	3	9
60	61	DOCKET NUMBER						68	69	EVENT DATE						74	75	REPORT DATE						80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0	8	
7	8	9

09		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE						COMP. SUBCODE		VALVE SUBCODE						
0	9	S	F	A		X		Z	Z	Z	Z	Z	Z	X		Z						
7	8	9	10	11		12		13					18	19		20						
LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.												
17		8	3	—		0	4	6	/	0	1	T	—	0								
21	22	23		24	26	27		28	29	30		31		32								
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER						
Z	18	F	19	Z	20	Z	21	0	0	0	0	Y	23	N	24	Z	25	Z	9	9	9	26
33	34	35		36		37		38	39	40	41		42		43		44	45	46	47		

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The circuits were originally installed as non-safety circuits and were not upgraded

1 1 when the circuit was modified. This circuit will be disconnected until proper separa-

1 2 tion is achieved. Circuits for all makeup pumps will be rerouted in safety grade

1 2 raceways.

1 4

FACILITY STATUS (28) 1 5 X  
% POWER (29) 0 0 0  
OTHER STATUS (30) NRC Order  
METHOD OF DISCOVERY (31) B  
DISCOVERY DESCRIPTION (32) QC Report

ACTIVITY CONTENT  
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35) LOCATION OF RELEASE (36)

1 6 Z 33 Z 34 N/A N/A

PERSONNEL EXPOSURES		TYPE		DESCRIPTION
NUMBER				
1	7	0	0	0
		37	Z	38
				N/A

PERSONNEL INJURIES		DESCRIPTION (41)	
NUMBER			
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
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96	0	0	0
97	0	0	0
98	0	0	0
99	0	0	0
100	0	0	0

7	8	9	10	11	12	LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION		8401230478 831229 PDR ADOCK 05000289 S PDR
1	Q	Z	(42)	N/A				

7	8	9	10										
PUBLICITY				NRC USE ONLY									
ISSUED				N/A									
DESCRIPTION													

NAME OF PREPARER R. A. Szczech

PHONE 717-948-8833

I. CURRENT ACTIVITIES AT THE TIME OF OCCURRENCE

Three Mile Island Unit 1 was in cold shutdown.

II. CIRCUMSTANCES LEADING TO THE OCCURRENCE

In about 1974 a modification was implemented to provide a low lube oil pressure trip to MU-PlA, B and C. The trip signal was blocked upon receipt of an Engineered Safeguards (ES) signal.

The oil pressure switches were replaced in (1977) with switches that were seismically rated and ES interlock was removed. At this time, the cables should have been upgraded to safety grade, but were not.

Material Non-Conformance Report 115-81 identified a green marked cable in a red channel tray. The cable was found to be related to the oil pressure trip. The cable was found to be incorrectly routed. The circuit was also found to be classified as not important to safety.

III. DESCRIPTION

The circuits for MU-PlC low oil pressure trip do not meet separation criteria. The circuits were originally installed as non-safety circuits and were not upgraded when the circuit was modified. This circuit did not meet the routing criteria for an important to safety circuit in that it originated in a green channel panel and was routed in a red channel tray. Trip circuits for MU-PlA and B have acceptable separation. These circuits for MU-PlA, B and C, are installed in some non-safety trays; however, the trays are all in Seismic 1 Buildings and have the same design as seismically mounted trays.

IV. RESULTANT EVENTS

No significant event took place as a result of this event.

V. PREVIOUS EVENTS OF A SIMILAR NATURE

LER 83-044

VI. ROOT CAUSE

The apparent root cause for the occurrence was design oversight in that the trip circuits were not upgraded to meet separation criteria when the Field Change package was issued to remove the ES interlock.

VII. IMMEDIATE CORRECTIVE ACTION

No immediate corrective action is required because of current plant condition. However, it should be noted that procedures implemented since 1981 provide assurance that this type of event is unlikely to recur.

VIII. LONG TERM CORRECTIVE ACTION

1. Circuit routing for MU-PlA and B were reviewed and found to have acceptable separation. Prior to startup the seismic adequacy of the circuits for MU-PlA and B will be confirmed and the lube oil pressure trip will be disconnected for MU-PlC until acceptable separation is established. The lube oil pressure trip circuit for MU-PlC may be reconnected for Tech Spec testing but will be disconnected when the test is complete. Disconnecting the low pressure trip is acceptable because it is for equipment protection only and the HPI function will be fully operable with cable disconnected. A modification package is being prepared to re-route the circuits in question for MU-PlA, B, and C. This modification is scheduled to be completed by July, 1984.
2. A review of all cable routing for modifications which upgrade a system or component to safety grade will be performed to assure that cables are properly routed and classified. This will be completed by July, 1984.



GPU Nuclear Corporation  
Post Office Box 480  
Route 441 South  
Middletown, Pennsylvania 17057-0191  
717 944-7621  
TELEX 84-2386  
Writer's Direct Dial Number:

December 29, 1983

5211-83-378

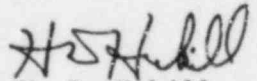
Dr. T. E. Murley  
Region I, Regional Administrator  
U. S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

Dear Sir:

Three Mile Island Nuclear Station, Unit 1 (TMI-1)  
Operating License No. DPR-50  
Docket No. 50-289  
LER 83-046/01T-0

Attached is the 14 day follow-up report for Licensee Event Report 83-046/01T-0 concerning improper safety-related circuit routing. Health and safety of the public were not affected. As discussed with R. Conte on December 28, 1983, this report is being submitted one day late.

Sincerely,

  
H. D. Hukill  
Director, TMI-1

HDH:RAS:jrg

Enclosure

cc: R. J. Conte  
Document Management Branch