

* CONTROL BLOCK:

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 (1)

0	1	P	A	T	M	I	1	2	0	0	-	0	0	0	0	0	-	0	0	3	4	1	1	1	1	4					5																																																										
7	8	9						14	15	25										26	30					37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
		LICENSEE CODE							LICENSE NUMBER											LICENSE TYPE						CAT																																																															

CON'T

REPORT
SOURCE

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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | During investigation into a field questionnaire (FQ-C-8267) it was noted that, contrary
03 | to safety grade design criteria for electrical separation, EFW Auto Initiation redun-
04 | dant circuits (Red, Green) were routed in the same cable bundle. This is considered
05 | reportable per T.S. 6.9.2.A.9. Public health and safety were unaffected.

0	6	
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07 | _____

0 8 0 80

09		SYSTEM CODE C H		11	CAUSE CODE B		12	CAUSE SUBCODE A		13	COMPONENT CODE Z Z Z Z Z Z					14	COMP. SUBCODE X		15	VALVE SUBCODE Z		16	
7	8	9	10		11		12		13		14		15		16		17		18		19		
17		LER/RO REPORT NUMBER		EVENT YEAR 8 3		21	22	SEQUENTIAL REPORT NO. 0 4 4		24	25	26	OCCURRENCE CODE 0 1		28	29	REPORT TYPE T		30	REVISION NO. 0		32	
ACTION TAKEN F		FUTURE ACTION F		18	19	EFFECT ON PLANT Z		20	SHUTDOWN METHOD Z		21	HOURS 0 0 0 0		22	ATTACHMENT SUBMITTED Y		23	NPRD-4 FORM SUB. N		24	PRIME COMP. SUPPLIER Z		25
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | This modification was originally designed to meet the initial short term requirement,
1 1 | NUREG 0578 2.1.7a, for control grade circuitry. When the design criteria was upgraded
1 2 | to safety grade this circuitry was not fully reviewed and upgraded. The redundant
1 3 | cables will be separated.

1 4 80

1 5 FACILITY STATUS (28) X
% POWER 0 0 0 (29)
OTHER STATUS (30) NRC Order
METHOD OF DISCOVERY C (31) Field Questionnaire
DISCOVERY DESCRIPTION (32)

ACTIVITY CONTENT
RELEASED OF RELEASE AMOUNT OF ACTIVITY (35)
1 6 Z (33) Z (34) N/A

LOCATION OF RELEASE (36)
N/A

PERSONNEL EXPOSURES					
NUMBER			TYPE	DESCRIPTION	
1	7	0	0	0	(37) Z (38)
N/A 8312130161 331128					

PERSONNEL INJURIES		PDR ADOCK 05000289	
NUMBER	DESCRIPTION	S	PDR
1 2 0 0 0	(40) N/A		

8		9		11		12	
		LOSS OF OR DAMAGE TO FACILITY					
TYPE		DESCRIPTION					
1	9	Z	42	N/A			

		PUBLICITY		(45)		NRC USE ONLY
ISSUED		DESCRIPTION				
2	0	N	(44)	N/A		

NAME OF PREPARER R. A. Szczech

PHONE 717-948-8833

I. Current Activities at the Time of the Occurrence

Three Mile Island Unit 1 was in cold shutdown.

II. Circumstances Leading to the Occurrence

In response to a field questionnaire (FQ-C-8267), a site walkdown was performed by our Architect Engineer on September 21, 1983 and confirmed by GPUN personnel on November 9, 1983. It was noted that redundant cabling in the EFW Auto Initiation Circuitry namely circuits RU-489 (Red) and RU-490 (Green), were located in the same cable catwalk bundle. The present cable routing violates electrical cable separation criteria and resulted from a failure to modify the system in accordance with the safety grade upgrade criteria. We consider this to be an installation design error.

III. Description

As described in our letter of June 28, 1979, GPUN agreed to provide auto initiation of the motor driven EFW pumps upon loss of both feedwater pumps or loss of 4 RCPs. This commitment was included in the August 9, 1979 Order (Order Item 1, part 1a) and was described in the TMI-1 Restart Report 2.1.1.7.3 as single failure proof and arranged in two redundant trains. The walkdowns in response to the field questionnaire discussed in Section II show that the red and green cables are not adequately separated. This is considered reportable in accordance with Technical Specification 6.9.2.A.9.

IV. Resultant Event

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

V. Previous Events of a Similar Nature

None.

VI. Root Cause

We have determined that in response to NUREG 0578, Item 2.1.7a which required a control grade circuit in the short term, this control grade circuitry (RU 489 & 490) was not fully reviewed by the AE when the revised commitment to a modified safety grade system was made.

VII. Immediate Corrective Action

None.

VIII. Long Term Corrective Action

Cable RU-489 will be separated from the existing cable bundle containing RU-490 prior to exceeding 250°C RCS temperature. The LER will be reviewed with the appropriate design engineering personnel.

IX. Component Failure Data

None.



GPU Nuclear Corporation
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Middletown, Pennsylvania 17057-0191
717 944-7621
TELEX 84-2386
Writer's Direct Dial Number:

November 28, 1983
5211-83-350

Dr. Thomas 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 83-044/01T-0

Attached is the 14 day follow-up report for Licensee Event Report
83-044/01T-0 concerning improper safety grade cable routing. Health
and safety of the public were not affected.

Sincerely,

H. D. Hukill
Director, TMI-1

HDH:RAS:jrg
Attachment

cc: R. J. Conte
Document Management Branch

IE22
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