

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1) THREE MILE ISLAND - UNIT 1														DOCKET NUMBER (2) 0 5 0 0 0 2 8 9						PAGE (3) 1 OF 0 3																																				
TITLE (4) ANTICIPATORY REACTOR TRIP																																																								
EVENT DATE (5)			LER NUMBER (8)				REPORT DATE (7)			OTHER FACILITIES INVOLVED (6)																																														
MONTH	DAY	YEAR	YEA	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES				DOCKET NUMBER(S)																																											
0	1	0	4	8	6	8	6	0	0	2	0	0	0	1	2	9	8	6	0	5	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)																																																					
POWER LEVEL (10)			<table border="0"> <tr> <td>N</td> <td>20.402(a)</td> <td>20.408(e)</td> <td>X</td> <td>80.73(a)(2)(iv)</td> <td>73.71(b)</td> </tr> <tr> <td>0</td> <td>2</td> <td>2</td> <td></td> <td>80.73(a)(2)(v)</td> <td>73.71(c)</td> </tr> <tr> <td></td> <td>20.405(a)(1)(i)</td> <td>80.36(e)(1)</td> <td></td> <td>80.73(a)(2)(vii)</td> <td rowspan="4">OTHER (Specify in Abstract below and in Text, NRC Form 365A)</td> </tr> <tr> <td></td> <td>20.405(a)(1)(ii)</td> <td>80.36(e)(2)</td> <td></td> <td>80.73(a)(2)(viii)(A)</td> </tr> <tr> <td></td> <td>20.405(a)(1)(iii)</td> <td>80.73(a)(2)(i)</td> <td></td> <td>80.73(a)(2)(viii)(B)</td> </tr> <tr> <td></td> <td>20.405(a)(1)(iv)</td> <td>80.73(a)(2)(ii)</td> <td></td> <td>80.73(a)(2)(ix)</td> </tr> <tr> <td></td> <td>20.405(a)(1)(v)</td> <td>80.73(a)(2)(iii)</td> <td></td> <td>80.73(a)(2)(x)</td> <td></td> </tr> </table>															N	20.402(a)	20.408(e)	X	80.73(a)(2)(iv)	73.71(b)	0	2	2		80.73(a)(2)(v)	73.71(c)		20.405(a)(1)(i)	80.36(e)(1)		80.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 365A)		20.405(a)(1)(ii)	80.36(e)(2)		80.73(a)(2)(viii)(A)		20.405(a)(1)(iii)	80.73(a)(2)(i)		80.73(a)(2)(viii)(B)		20.405(a)(1)(iv)	80.73(a)(2)(ii)		80.73(a)(2)(ix)		20.405(a)(1)(v)	80.73(a)(2)(iii)		80.73(a)(2)(x)	
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LICENSEE CONTACT FOR THIS LER (12)																																																								
NAME												TELEPHONE NUMBER																																												
DENNIS V. HASSLER, TMI-1 LICENSING ENGINEER												AREA CODE 7 1 7 9 4 8 - 8 8 3 3																																												
COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)																																																								
CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPDOS																																					
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SUPPLEMENTAL REPORT EXPECTED (14)																																																								
YES (If yes, complete EXPECTED SUBMISSION DATE)												X		NO		EXPECTED SUBMISSION DATE (15)		MONTH		DAY		YEAR																																		

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

On January 4, 1986, the unit was being restored to power operation following a planned Reactor Trip on January 2, 1986. The main generator was placed on line at 0327 hours and power escalation was commencing when at 22% power an Anticipatory Reactor Trip from Turbine Trip occurred at 0343 hours.

The Turbine Trip was caused by high moisture separator level. Because of an undetected failure in a valve controller in the heater drains flow path, the heater drains backed up into the moisture separator causing the unusually high level and subsequent turbine trip. The plant response to this trip was normal and the unit stabilized at hot shutdown conditions.

No procedural or equipment changes are considered to be required. The failed controller was replaced and power escalation recommenced.

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LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

FACILITY NAME (1) THREE MILE ISLAND - UNIT 1	DOCKET NUMBER (2) 0 5 0 0 0 2 8 9 8 6 - 0 0 2 - 0 0 0 2 OF 0 3	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			

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

ANTICIPATORY REACTOR TRIP

I. Plant Operating Conditions Before the Event

Prior to the Reactor Trip the unit was at 22% power and escalating following the planned Reactor Trip on 01/02/86.

II. Status of Structures, Systems, or Components that were Inoperable at the Start of the Event and that Contributed to the Event

All systems, components and structures were operable and no major surveillance testing was in progress at the time of the trip.

III. Event Description

Following the planned Reactor Trip on 01/02/86 in accordance with the established Power Escalation Test Program, the unit was being restored to power operation. The main generator (TB/TG)* was placed on line at 0327 hours and power escalation was commencing when at 22% power an Anticipatory Reactor Trip from Turbine Trip occurred at 0343 hours. (Note that at < 20% power this RPS trip is automatically bypassed.)

The Turbine Trip was caused by high moisture separator (SB/MSR)* level. Because of an undetected failure in a valve controller (SB/LCV)* in the heater drains flow path, the heater drains backed up into the moisture separator (SB/MSR)* causing the unusually high level and subsequent turbine trip. The plant response to this trip was normal and the unit stabilized at hot shutdown conditions.

IV. Component Failure Data

Component Name:	6th stage drains tank high level dump valve positioner
System Name:	HD-V-4 Controller (positioner) - SB/LCV
Cause Code:	X (Other) - Valve controller air ports clogged with dirt/rust
Component Mfg/Model No:	Fisher-4780 - 10" (Manufacturer NPRDS No. F130)
Reportable to NPRDS:	No
Method of Discovery:	HD-V-4 found closed with 6th stage drain tank high level

*IEEE Std. 805 - 1984 and IEEE Std. 803A - 1983 - System Identifier (SI)/
Component Function Identifier (CFI).

LICENSEE EVENT REPORT (LER) TEXT CONTINUATION

U.S. NUCLEAR REGULATORY COMMISSION

APPROVED OMB NO. 3150-0104

EXPIRES: 8/31/85

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V. Automatic or Manually Initiated Safety System Response

The Reactor Protection System responded as expected to the anticipatory trip signal. No other safety system was initiated.

VI. Assessment of the Safety Consequences and Implications of the Event

There was no safety consequences to this secondary side single failure trip of the RPS.

VII. Previous Events of Similar Nature

None

VIII. Corrective Actions Planned

HD-V-4 positioner was replaced and power escalation re-commenced.



GPU Nuclear Corporation
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TELEX 84-2386
Writer's Direct Dial Number:

January 29, 1986
5211-86-2009

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

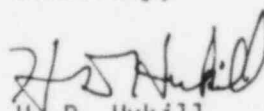
Dear Sir:

Three Mile Island Nuclear Station Unit 1 (TMI-1)
Operating License No. DPR-50
Docket No. 50-289
LER 86-002-0

This letter transmits License Event Report (LER) No. 86-002-0 which involves an Anticipatory Reactor Trip. Public health and safety were unaffected.

This LER is being submitted pursuant to 10 CFR 50.73, using the required NRC forms (attached). NRC Form 366 contains an abstract which provides a brief description of the event. For a complete understanding of the event, refer to the text of the report which appears on Form 366A.

Sincerely,


H. D. Hukill
Director, TMI-1

HDH/DVH/spb

Enclosure

cc: T. E. Murley, NRC Region I, Regional Administrator
R. Conte, NRC, Senior Resident Inspector
J. Thomas, NRC, Project Manager

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