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Writer's Direct Dial Number:

May 19, 1983
4410-83-L-0082

Office of Inspection and Enforcement
Attn: Mr. J. M. Allan
Acting Regional Administrator
Region I
US Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, PA 19406

80-055

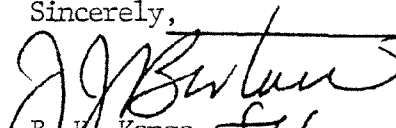
Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Updated Licensee Event Reports

The Licensee Event Reports listed in Attachment 1 have been updated and are enclosed as Attachment 2 to this letter.

If you have any questions, please contact Mr. J. J. Byrne of my staff.

Sincerely,



B. K. Kanga
Director, TMI-2

BKK/RDW/jep

Attachments

CC: Mr. L. H. Barrett, Deputy Program Director - TMI Program Office
Dr. B. J. Snyder, Program Director - TMI Program Office

8305310001 830519
PDR ADOCK 05000320
S PDR

LIST OF UPDATED LICENSEE EVENT REPORTS

<u>LER NO.</u>	<u>LER NO.</u>
80-01	81-12
80-05	81-20
80-07	81-22
80-12	81-23
80-49	81-32
80-54	81-34
80-55	81-35
80-56	81-36
80-57	81-38
81-04 *	82-34
81-08	
81-10	

* Event date on original Licensee Event Report was incorrect. This revision corrects the event date.

CONTROL BLOCK: _____ (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

7 8 9
0 1 | P A T M I 2 | 2 0 0 - 0 0 0 0 0 0 - 0 0 | 3 4 | 1 1 1 1 | 4 | 5
LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T
7 8
0 1 | REPORT SOURCE I. 6 | 0 5 0 0 0 3 2 0 | 7 | 1 1 2 7 8 0 | 8 | 0 5 1 9 8 3 | 9
DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
0 2 | On November 27, 1980 Emergency Diesel Generator (EDG) DF-X-1B failed to start. The at
0 3 | tempted start was an effort to raise the EDG ambient temperature due to the previous
0 4 | failure of the jacket coolant heater. The EDG started on the fifth attempt and then
0 5 | operated properly. This report is submitted under Section 6.9.1.9(b) because the ac-
0 6 | tion statement of Tech. Spec. 3.8.1.1(a) was entered inadvertantly. This was not a
0 7 | violation of the Tech. Specs. This event had no effect on the plant, its operation,
0 8 | or the health and safety of the public. This event is similar to LER 80-54/03L-0.
7 8 9

0 9 | SYSTEM CODE EE (11) | CAUSE CODE C (12) | CAUSE SUBCODE Z (13) | COMPONENT CODE CKTB RK (14) | COMP. SUBCODE B (15) | VALVE SUBCODE Z (16)
7 8 9 10 11 12 13 14 15 16 17
17 | LER/RO REPORT NUMBER 80 | EVENT YEAR | SEQUENTIAL REPORT NO. 55 | OCCURRENCE CODE 03 | REPORT TYPE X | REVISION NO. 1
21 22 23 24 25 26 27 28 29 30 31 32
ACTION TAKEN X (18) | FUTURE ACTION A (19) | EFFECT ON PLANT Z (20) | SHUTDOWN METHOD Z (21) | HOURS 0000 (22) | ATTACHMENT SUBMITTED Y (23) | NPRD-4 FORM SUR. N (24) | PRIME COMP. SUPPLIER X (25) | COMPONENT MANUFACTURER C770 (26)
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | An investigation determined the failure to start was a result of not maintaining the
1 1 | diesel at a high enough shutdown ambient temperature as a result of the heater failure
1 2 | which was induced by the heater's magnetic contactor malfunction. The EDG's ambient
1 3 | shutdown temperature was maintained until heater and contactor replacement was accom-
1 4 | plished on December 16, 1980.
7 8 9

1 5 | FACILITY STATUS X (28) | % POWER 000 (29) | OTHER STATUS N/A (30) | METHOD OF DISCOVERY B (31) | DISCOVERY DESCRIPTION Operator Observation (32)
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 6 | ACTIVITY RELEASED Z (33) | CONTENT Z (34) | AMOUNT OF ACTIVITY N/A (35) | LOCATION OF RELEASE N/A (36)
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 7 | PERSONNEL EXPOSURES NUMBER 000 (37) | TYPE Z (38) | DESCRIPTION N/A (39)
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 8 | PERSONNEL INJURIES NUMBER 000 (40) | DESCRIPTION N/A (41)
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
1 9 | LOSS OF OR DAMAGE TO FACILITY TYPE Z (42) | DESCRIPTION N/A (43)
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
2 0 | PUBLICITY ISSUED N (44) | DESCRIPTION N/A (45)
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

NAME OF PREPARER Steven D. Chaplin PHONE: (717) 948-8461

NRC USE ONLY

Rev. on file

LICENSEE EVENT REPORT
NARRATIVE REPORT

TMI-2

LER 80-055/03X-1

EVENT DATE - November 27, 1980

I. EXPLANATION OF OCCURRENCE

On November 12, 1980, the jacket cooling heater for the "B" Emergency Diesel Generator (EDG) became inoperable. An investigation identified that the jacket coolant heater magnetic contactor was malfunctioning which we believe induced the failure of the heater. The heaters' purpose is to maintain the diesels ambient temperature at a level sufficient to enable proper starting of the diesel and to prevent thermal shock to the diesel as a result of the EDG's fast starting and rapid loading. As a result of the heater inoperability an alternate method of maintaining the diesels' ambient temperature was initiated which included increasing the DG room's ambient temperature and by occasionally running the diesel.

On November 27, 1980, an attempt, at 0935 hours, to start the "B" diesel in order to raise the coolant temperature failed. The diesel was checked to determine the cause, but none could be determined. Three more attempts to start the diesel were made, but all were unsuccessful. The only alarm received was the "Fail to Start" alarm on each attempt. The diesel successfully started on the fifth attempt.

This failure to start is similar to one on November 17, 1980, and reported in LER 80-054/03L-0. As a result of the investigation subsequent to the November 17, 1980, failure to start, two possible causes were identified. They were:

- 1) the diesel's ambient coolant temperature was too low to allow proper ignition, and
- 2) that the lube oil pressure was not reaching the operating pressure within the trip bypass time.

With information available from this failure (November 27, 1980), the cause was determined to be the low temperature condition by elimination of low lube oil pressure as a possibility.

This report is being submitted because the Action Statement of 3.8.1.1(a) was entered inadvertently. This is not a violation of the Technical Specifications as the action statement was complied with.

II. CAUSE OF THE OCCURRENCE

The proximate cause of the event was determined to be the low temperature of the EDG. The root cause of the event has been subsequently determined

to be the failure of the jacket coolant heaters' magnetic contactor which resulted in the heater failure.

III. CIRCUMSTANCES SURROUNDING THE OCCURRENCE

At the time of the occurrence, the Unit 2 facility was in a long-term cold shutdown state. The reactor decay heat was being removed via steam generator which is operating in a 'steaming' mode. Throughout the event there was no Loss of Natural Circulation heat removal in the RCS System.

IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

IMMEDIATE

The "B" EDG was declared inoperable and the requirements of the Action Statement for Section 3.8.1.1(a) were complied with including the return of the "B" diesel to an operable status at 1130 hours on November 27, 1980.

The corrective action as specified in LER 80-54 was amplified in that the low jacket coolant temperature criterion for starting the diesel was increased from 85°F to 90°F. In addition, the cooling water pump was secured to decrease the cool-down rate of the diesel.

Efforts continued to obtain a replacement heater, but were hindered due to a parts availability problem.

Also, applicable alarm response procedures were revised to provide more detailed instructions to insure EDG operability under conditions of jacket coolant system inoperability.

LONG TERM

The faulty heater and contactor were replaced on December 16, 1980, thus restoring the diesel to its normal configuration.

Failure of the contactor was due to an internal mounting screw vibrating loose and jamming in the internal mechanism. To prevent this from happening in the future, locktite (an adhesive substance) was applied to the internal mounting screws on the Cutler-Hammer contactors for each EDG.

V. COMPONENT FAILURE DATA

Magnetic Contactor: Manufactured by Cutler-Hammer
Model #C10CN3 Series A1
Manu. Code #9716858