

*Environmental monitoring instruments fail*

JAN 26 1984

U. S. NUCLEAR REGULATORY COMMISSION  
Attachment 1  
4410-83-L-0288 *256 B & W*

LICENSEE EVENT REPORT

CONTROL BLOCK 118178811 (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | P | A | T | M | I | 2 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 1 | 4 | 5  
7 8 9 14 15 25 26 30 57 58

CON'T  
01 | L | 6 | 0 | 5 | 0 | 0 | 0 | 3 | 2 | 0 | 7 | 1 | 1 | 1 | 5 | 8 | 3 | 8 | 1 | 2 | 1 | 5 | 8 | 3 | 9  
7 8 60 61 68 69 74 75 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | At 2230 hours on November 15, 1983, a prompt reportable condition was determined to  
03 | have existed. It was determined that from November 13, 1983, to 2305 hours on  
04 | November 15, 1983, there were no operable air temperature delta-T meteorological  
05 | instruments. In addition, the wind direction instrumentation failed as of 1430 hours  
06 | on November 15, 1983. It was repaired and returned to service at 2305 hours on  
07 | November 15, 1983 also. This event is reportable pursuant to Section 6.9.1.8(b) as  
08 | a violation to Tech Spec 3.3.3.4. No significant events occurred due to this event.

09 | I | E | 11 | E | 12 | G | 13 | I | N | S | T | R | U | 14 | X | 15 | Z | 16  
9 10 11 12 13 18 19 20

17 | LER:RO REPORT NUMBER | 8 | 3 | SEQUENTIAL REPORT NO. | 0 | 5 | 7 | OCCURRENCE CODE | 0 | 1 | REPORT TYPE | L | REVISION NO. | 0  
21 22 23 24 26 27 28 29 30 31 32  
18 | C | 18 | Z | 19 | Z | 20 | Z | 21 | 0 | 0 | 0 | 0 | 0 | 0 | Y | 23 | N | 24 | L | 25 | T | 1 | 0 | 0 | 26  
33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | The air temperature delta-T instrument failed as a result of a pinched electrical  
11 | cable. The wind direction instrument failed as a result of a malfunctioning converter  
12 | card. Both failed components were part of temporary meteorological instruments  
13 | utilized during repair of the plant instruments. Work on the plant systems was  
14 | completed such that they could be returned to service.

15 | X | 28 | 0 | 0 | 0 | 0 | 29 | Recovery Mode | A | 31 | Operator observation  
7 8 9 10 12 13 44 45 46

16 | Z | 33 | Z | 34 | N/A | LOCATION OF RELEASE | 36 | N/A  
7 8 9 10 11 44 45 46

17 | 0 | 0 | 0 | 37 | Z | 38 | N/A  
7 8 9 10 11 12 13

18 | 0 | 0 | 0 | 40 | N/A  
7 8 9 10 11 12

19 | Z | 42 | N/A | 8312300262 831215  
PDR ADOCK 05000320  
S PDR

20 | N | 44 | N/A | PUBLICITY ISSUED DESCRIPTION (45) | N/A

NAME OF PREPARER S. D. Chaplin

PHONE (717) 948-8461

*Carole 2-28-84*

LER 83-057/01L-0  
EVENT DATE - November 15, 1983

I. EXPLANATION OF THE OCCURRENCE

At 2230 hours on November 15, 1983, a prompt reportable condition was determined to have existed. It was determined that from November 13, 1983, to 2305 hours on November 15, 1983, there were no operable air temperature delta-T meteorological instruments. In addition, the wind direction instrumentation failed as of 1430 hours on November 15, 1983.

On November 14, 1983, the Unit 2 Control Room day shift (7-3) found the air temperature delta-T meteorological instrumentation was inoperable. Unit 2 Control Room personnel checked with the Unit 1 Control Room to determine the status of their delta-T instrumentation. Unit 1 reported their delta-T instrumentation was operable.

On November 14, 1983, at approximately 1800 hours during performance of shift and daily checks, it was discovered that the Units 1 and 2 wind direction instrumentation had failed at 1430 hours. Repair efforts were initiated since the failure of both wind direction instrumentation channels placed Unit 2 into the action statement of Section 3.3.3.4 of the Technical Specifications. During the repair of the failed instrumentation it was identified that the Unit 1 air temperature delta-T instrumentation had in fact failed on November 13, 1983, at the same time the Unit 2 air temperature delta-T instrumentation had failed. As a result, the action statement of Technical Specification 3.3.3.4 was exceeded.

The failed meteorological instrumentation channels were restored to service at approximately 2305 hours on November 15, 1983.

Both conditions exceeded the requirements of the action statement of Technical Specification 3.3.3.4 and are, therefore, considered reportable pursuant to Technical Specification 6.9.1.8(b) of the Interim Recovery Technical Specifications.

II. CAUSE OF THE OCCURRENCE

The failure of the meteorological instrumentation was caused by two separate problems. The delta-T air temperature instrumentation failed because a transmitting wire was pinched in a junction box cover closure point while work was being performed on the system. This resulted in the wire cracking during normal flexing, thereby impairing the conductivity of the conductor.

The wind direction indicator failed when the Teledyne Geotech Wind direction converter card, Model No. 40.21-3, malfunctioned electronically.

NOTE: The failed components were part of temporary wind speed, direction, and air temperature delta-T instruments. The temporary instruments were being utilized while extensive work/improvements were being accomplished on the existing plant (TMI-1 and TMI-2) meteorological instruments.

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 loss to ambient. Throughout the event there was no effect on the Reactor Coolant System or the core.

IV. CORRECTIVE ACTIONS TAKEN OR TO BE TAKEN

The wind direction converter card and the pinched signal cable were replaced. During their replacement, the task of rewiring the existing meteorological station was completed such that it could be returned to service.



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TELEX 84-2386  
Writer's Direct Dial Number:

December 15, 1983  
4410-83-L-0288

Office of Inspection and Enforcement  
Attn: Dr. Thomas E. Murley  
Regional Administrator  
Region I  
US Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

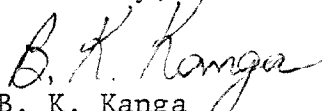
Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Licensee Event Report 83-057/01L-0

Attached please find Licensee Event Report 83-057/01L-0 concerning the failure of Unit 2 meteorological instruments on November 13, 1983, and November 15, 1983.

This event constitutes a violation of Section 3.3.3.4 and is considered reportable under Section 6.9.1.8(b) of the Interim Recovery Technical Specifications.

Sincerely,

  
B. K. Kanga  
Director, TMI-2

BKK/SDC/jep

Attachments

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

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