

*Update on failed incore thermocouple*  
UPDATE REPORT - PREVIOUS REPORT DATE November 1, 1983

303

NRC FORM 368  
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

NOV 16 1984

*B&W*

CONTROL BLOCK: 195420 (1)

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | P | A | T | M | I | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 4 | 1 | 1 | 1 | 1 | 4 | 5  
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 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 58

CON'T  
01 | REPORT SOURCE | L | 6 | 0 | 5 | 0 | 0 | 0 | 3 | 2 | 0 | 7 | 1 | 0 | 0 | 5 | 8 | 3 | 8 | 1 | 0 | 1 | 2 | 8 | 4 | 9  
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 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  
REPORT SOURCE DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | At 0820 hours on October 5, 1983, Incore Thermocouple B-7 was declared inoperable.  
03 | This failure placed the unit in the Action Statement of Technical Specification  
04 | Limiting Condition for Operation 3.3.3.6, Table 3.3-10, and is considered report-  
05 | able under Technical Specification 6.9.1.8(b). This event had no adverse effects  
06 | on the plant, its operations, or the health and safety of the public.  
07 |  
08 |

09 | SYSTEM CODE | X | X | 11 | CAUSE CODE | E | 12 | CAUSE SUBCODE | X | 13 | COMPONENT CODE | I | N | S | T | R | U | 14 | COMP. SUBCODE | E | 15 | VALVE SUBCODE | Z | 16 |  
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 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  
LER/RD REPORT NUMBER | 8 | 3 | 21 | 22 | SEQUENTIAL REPORT NO. | 0 | 5 | 0 | 23 | 24 | 26 | OCCURRENCE CODE | 0 | 1 | 27 | 28 | REPORT TYPE | X | 30 | REVISION NO. | 1 | 32 |  
ACTION TAKEN | X | 18 | FUTURE ACTION | X | 19 | EFFECT ON PLANT | Z | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 | 0 | 0 | 0 | 22 | ATTACHMENT SUBMITTED | Y | 23 | NPRO-4 FORM SUB. | N | 24 | PRIME COMP. SUPPLIER | N | 25 | COMPONENT MANUFACTURER | B | 1 | 5 | 5 | 26 |  
33 34 35 36 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  
CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

*Rev. 0 on file*

*8-12-01*

10 | The reason for the failure of the thermocouple is not known and may not be possible  
11 | to determine given the condition of the Unit 2 core relative to incore instrumenta-  
12 | tion. Incore Thermocouple B-7 was checked to ensure the problem is not in any  
13 | component that is accessible for repairs. B-7 has been declared out-of-service.  
14 |

15 | FACILITY STATUS | X | 28 | % POWER | 0 | 0 | 0 | 29 | OTHER STATUS | Recovery Mode | 30 | METHOD OF DISCOVERY | A | 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 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

16 | ACTIVITY TAKEN | Z | 33 | CONTENT OF RELEASE | 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 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

17 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 0 | 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 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

18 | PERSONNEL INJURIES NUMBER | 0 | 0 | 0 | 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 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

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19 | 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 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

20 | 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 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

NAME OF PREPARER Russ Wells

PHONE (717) 948-8461

NRC USE ONLY

LER 83-050/01X-1  
EVENT DATE - October 5, 1983

I. EXPLANATION OF THE OCCURRENCE

At 0820 hours on October 5, 1983, Incore Thermocouple B-7 was declared inoperable.

To date, eleven (11) LER's, including this one, concern thermocouple failures. The others are LER 80-13, 80-41, 80-50, 80-53, 81-05, 81-13, 82-15, 83-10, 83-27, and 83-32.

There are now eighteen (18) of the fifty-two (52) Incore Thermocouples reported as being out-of-service (B-7, D-14, E-11, F-8, G-5, H-9, H-13, K-11, K-12, L-6, L-11, L-13, M-7, M-9, N-8, N-9, O-6, and O-12).

This failure placed the unit in the Action Statement of Technical Specification Limiting Condition for Operations 3.3.3.6, Table 3.3-10. This event is considered reportable under Technical Specification 6.9.1.8(b).

II. CAUSE OF THE OCCURRENCE

The precise reason for the failure/erratic behavior of Incore Thermocouple B-7 is not known and may not be possible to determine given the condition of the Unit 2 core relative to incore instrumentation.

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 Incore Thermocouple was troubleshot to ensure that the problem is not in any component that is accessible for repairs. Based on the results of the troubleshooting, Incore Thermocouple B-7 has been declared out-of-service. No further action is considered applicable.

V. COMPONENT FAILURE DATA

The failed thermocouple was a Type K (Chromium/Alumel) thermocouple, Model No. DAZA-76-7R-1B-1T-1C, supplied by Babcock and Wilcox, manufactured by Bel Fab, Inc.



**GPU Nuclear Corporation**

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October 12, 1984

US Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

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 concerning this information, please contact Mr. J. J. Byrne of my staff.

Sincerely,

F. R. Standerfer  
Vice President/Director, TMI-2

FRS/RDW/jep

Attachments

cc: Regional Administrator - Office of I & E, Dr. T. E. Murley  
Program Director - TMI Program Office, Dr. B. J. Snyder  
Deputy Program Director - TMI Program Office, Mr. L. H. Barrett

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LER UPDATE PACKAGE

82-038/03L-1  
83-007/03X-1  
83-020/03X-1  
83-021/03X-1  
83-022/03X-1  
83-023/01X-1  
83-024/01X-1  
83-025/03X-1  
83-031/03X-1  
83-036/03X-2  
83-040/03X-1  
83-042/01X-1  
83-043/03X-1  
83-044/03X-1  
83-046/03X-1  
83-050/01X-1  
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