

B&W  
JUN 03 1983

**GPU Nuclear**

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April 28, 1983  
4410-83-L-0089

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

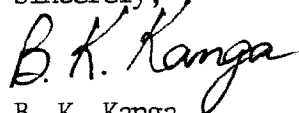
Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)  
Operating License No. DPR-73  
Docket No. 50-320  
Licensee Event Report 83-012/03L-0

Attached please find Licensee Event Report 83-012/03L-0 concerning the inoperability of the Air Intake Tunnel Halon System on March 29, 1983.

This event concerns Section 3.7.10.3 and is considered reportable under Section 6.9.1.9(b) of the Interim Recovery Technical Specifications.

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

8305110321 830428  
PDR ADDCK 05000320  
S PDR

IEE22

*air intake tunnel halon system declared inoperable*

LICENSEE EVENT REPORT

CONTROL BLOCK: 11821985 ①

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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  
7 8 9 LICENSE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T  
0 1 | R E P O R T S O U R C E | L 6 | 0 5 0 0 0 0 3 2 0 | 7 0 3 2 9 8 3 | 8 0 4 2 8 8 3 | 9  
7 8 9 REPORT SOURCE 60 -61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 | Following an inadvertent discharge of one of the zones of the Air Intake Tunnel (AIT)  
0 3 | Halon System, the six Halon bottles in the zone were recharged. The pressure of one  
0 4 | of the bottles, EI-4C, was below the chart in Surveillance Procedure 4331-SA1. A cal-  
0 5 | culation of the pressure limit determined that the pressure of EI-4C was below the  
0 6 | limit defined in Tech Spec 3.7.10.3. The AIT Halon System was declared inoperable at  
0 7 | 1111 hours on March 29, 1983. This event had no effect on the health and safety of  
0 8 | the public.

0 9 | SYSTEM CODE | CAUSE CODE | CAUSE SUBCODE | COMPONENT CODE | COMP. SUBCODE | VALVE SUBCODE |  
7 8 9 | A B | A | C | X X X X X | Z | Z |  
10 11 12 13 14 15 16  
17 | LER/RO REPORT NUMBER | EVENT YEAR | SEQUENTIAL REPORT NO. | OCCURRENCE CODE | REPORT TYPE | REVISION NO. |  
7 8 9 | 8 3 | 0 1 2 | 0 3 | I | 0 |  
20 21 22 23 24 25 26 27 28 29 30 31 32  
ACTION TAKEN | FUTURE ACTION | EFFECT ON PLANT | SHUTDOWN METHOD | HOURS | ATTACHMENT SUBMITTED | NPRD-4 FORM SUB. | PRIME COMP. SUPPLIER | COMPONENT MANUFACTURER |  
33 34 35 36 37 38 39 40 41 42 43 44 45 46 47  
X | H | Z | Z | 0 0 0 0 | Y | N | Z | 9 9 9 | 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ⑳

1 0 | This event was caused by two personnel errors: 1) Plant engineering failed to per-  
1 1 | form the calculation for the pressure limit of EI-4C in a timely manner; and, 2) Plant  
1 2 | maintenance prematurely returned the Halon System to service based on an assumption  
1 3 | that the pressure of EI-4C was acceptable. The bottle was repressurized and personnel  
1 4 | were counseled. The Surveillance Procedure is being revised.

1 5 | FACILITY STATUS | % POWER | OTHER STATUS | METHOD OF DISCOVERY | DISCOVERY DESCRIPTION |  
7 8 9 | X | 0 0 0 | Recovery Mode | A | Engineer determination |  
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  
1 6 | ACTIVITY RELEASED | CONTENT OF RELEASE | AMOUNT OF ACTIVITY | LOCATION OF RELEASE |  
7 8 9 | Z | Z | N/A | N/A |  
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  
1 7 | PERSONNEL EXPOSURES | NUMBER | TYPE | DESCRIPTION |  
7 8 9 | 0 0 0 | Z | N/A |  
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  
1 8 | PERSONNEL INJURIES | NUMBER | DESCRIPTION |  
7 8 9 | 0 0 0 | N/A |  
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  
1 9 | LOSS OF OR DAMAGE TO FACILITY | TYPE | DESCRIPTION |  
7 8 9 | Z | N/A | 8305110326 830428  
PDR ADDCK 05000320  
S PDR |  
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  
2 0 | PUBLICITY ISSUED | DESCRIPTION |  
7 8 9 | N | N/A |  
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

NAME OF PREPARER: Russ Wells PHONE: (717) 948-8461

LER 83-012/03L-0  
EVENT DATE - March 29, 1983

I. EXPLANATION OF OCCURRENCE

At 1111 hours on March 29, 1983, the Air Intake Tunnel (AIT) Halon System was declared inoperable as a result of the following event:

On March 3, 1983, there was an inadvertent actuation of one of the four zones of the AIT Halon System (see LER 83-09). The halon bottles in this zone were returned to the vendor for recharging, and were reinstalled on March 18, 1983. Maintenance crews recorded the bottle pressure for each bottle as it was installed. The pressure of one of the six bottles, EI-4C, was below the chart provided in Surveillance Procedure 4331-SA1; therefore, by procedure, the plant maintenance contacted plant engineering and requested a calculation of the pressure limit for the bottle EI-4C. Prior to the completion of the calculation, the AIT Halon System was prematurely returned to service. When the calculation was performed on March 29, 1983, it was determined that the bottle pressure for EI-4C was below the limit defined in Technical Specification 3.7.10.3. The AIT Halon System was then declared inoperable.

On March 30, 1983, the Maintenance crew repressurized bottle EI-4C to an acceptable level. The AIT Halon System was then returned to operable status, thus complying with the Action Statement of Technical Specification 3.7.10.3.

This event is considered reportable pursuant to Technical Specification 6.9.1.9(b) due to entry into and compliance with the Action Statement of Technical Specification 3.7.10.3.

II. CAUSE OF THE OCCURRENCE

The cause of this event was due to a breakdown in communications. As mentioned previously, on March 18, 1983, plant maintenance requested from plant engineering a calculation for the pressure limit for the bottle EI-4C. The calculation wasn't performed until March 29, 1983. Since maintenance was not informed of the results of the calculation, the AIT Halon System was prematurely returned to service on March 18, 1983, based on an assumption that the bottle pressure for EI-4C was acceptable.

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

Short Term

The maintenance crew repressurized bottle EI-4C to an acceptable level.

Long Term

Appropriate plant maintenance and plant engineering personnel were counseled regarding the circumstance and cause of this event; and specifically regarding 1) the importance of completing calculations for pressure limits in a timely manner, and 2) verifying the results of the pressure limit calculations before returning the AIT Halon System to service. Additionally, before the next planned maintenance on the halon bottles scheduled for September 1983, the acceptance criteria temperature/pressure scale of 4331-SA1 will be extended to 100<sup>0</sup>F.

V. COMPONENT FAILURE DATA

N/A