NRC FORM 366 (7-77) blown rupture disc in containment penetration

AUG 12 1983

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

Attachment 1
4410-83-L-0136

B&W

CONTROL BLOCK: 1 | 1 8 1 4 3 2 9 | 6 (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 (3) | 4 1 1 1 1 (4) | (5)

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

CON'T

0 1 | REPORT SOURCE L (6) | 0 5 0 0 0 3 2 0 (7) | 0 6 0 3 8 3 (8) | 0 7 0 5 8 3 (9)

7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 | At 1430 hours on June 3, 1983, the rupture disc on the inboard flange of Reactor Build-

0 3 | ing containment penetration R561 was breached due to a high pressure hose rupture with-

0 4 | in the penetration. A single penetration barrier was maintained by the outboard flange

0 5 | with its attached containment isolation valves. This event is reportable pursuant to

0 6 | T.S. 6.9.1.9(b). ~~This event had no effect on the health and safety of the public.~~

0 7 |

0 8 | 7 8 9 80

	SYSTEM CODE	CAUSE CODE	CAUSE SUBCODE	COMPONENT CODE	COMP. SUBCODE	VALVE SUBCODE
0 9	S A (11)	E (12)	C (13)	P I P E X X (14)	A (15)	Z (16)
7 8	9 10	11	12 13	18	19	20

(17) LER/RO REPORT NUMBER	EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE	REPORT TYPE		REVISION NO.
	8 3	—	0 1 8	/	0 3	L	—	0
	21 22	23	24 26	27	28 29	30	31	32

ACTION TAKEN	FUTURE ACTION	EFFECT ON PLANT	SHUTDOWN METHOD	HOURS (22)	ATTACHMENT SUBMITTED	NPRD-4 FORM SUB.	PRIME COMP. SUPPLIER	COMPONENT MANUFACTURER
A (18)	Z (19)	Z (20)	Z (21)	0 0 0 0	Y (23)	N (24)	A (25)	Z 9 9 9 (26)
33	34	35	36	37 40	41	42	43	44 47

Carole 9-20-83

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 | The cause of this event was a high pressure hose rupture which filled the penetration

1 1 | with liquid, pressurized the penetration, and subsequently caused the rupture disc to

1 2 | breach. The hose rupture was attributed to line pressure pulsing. The hose and rup-

1 3 | ture disc were replaced. Containment integrity was restored at 0930 hours on June 20,

1 4 | 1983.

7 8 9 80

	FACILITY STATUS	% POWER	OTHER STATUS (30)	METHOD OF DISCOVERY	DISCOVERY DESCRIPTION (32)
1 5	X (28)	0 0 0 (29)	Recovery Mode	A (31)	Operator Observation
7 8	9 10 12	13	44	45 46	80

	ACTIVITY RELEASED	CONTENT OF RELEASE	AMOUNT OF ACTIVITY (35)	LOCATION OF RELEASE (36)
1 6	Z (33)	Z (34)	N/A	N/A
7 8	9	10 11 44		45 80

	PERSONNEL EXPOSURES NUMBER	TYPE	DESCRIPTION (39)
1 7	0 0 0 (37)	Z (38)	N/A
7 8	9 11	12 13	80

	PERSONNEL INJURIES NUMBER	DESCRIPTION (41)
1 8	0 0 0 (40)	N/A
7 8	9 11	12 80

	LOSS OF OR DAMAGE TO FACILITY TYPE	DESCRIPTION (43)
1 9	Z (42)	N/A
7 8	9 10	80

	PUBLICITY ISSUED	DESCRIPTION (45)
2 0	N (44)	
7 8	9 10	

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PDR ADOCK 05000320
S PDR

NRC USE ONLY

68 69 80

NAME OF PREPARER Russ Wells

PHONE: (717) 948-8461

GPO 917-825

LICENSEE EVENT REPORT
NARRATIVE REPORT
TMI-II
LER 83-018/03L-0
EVEMT DATE - JUNE 3, 1983

I. EXPLANATION OF OCCURRENCE

At 1430 hours, on June 3, 1983, during decontamination (decon) operations, the rupture disc on the inboard flange of Reactor Building containment penetration R561 breached. This was due to a high pressure hose within the penetration rupturing, which filled the penetration with liquid and pressurized it to the point of breaching the rupture disc. The high pressure decon pump was secured and the outside containment isolation valves were closed. With the rupture disc on the inboard flange of containment penetration R561 breached, a double barrier in the penetration did not exist. A single penetration barrier was maintained by the outboard flange of the containment penetration with its attached containment isolation valves.

The high pressure air hose and rupture disc were replaced. Containment integrity was restored at 930 hours on June 20, 1983.

This event is considered reportable pursuant to Tech Spec 6.9.1.9(b).

II. CAUSE OF THE OCCURRENCE

The cause of this event was due to a ruptured high pressure hose within penetration R561. The rupture occurred at the hose coupling as a result of surging of the hose due to cycling of the high pressure decon pump.

The rupture of the hose caused the penetration to be filled with liquid and resulted in the breaching of the rupture disc on the inboard flange.

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

Immediate

The high pressure decon pump was secured and the outside containment isolation valves were closed to maintain the single penetration barrier.

The rupture disc and high pressure hose were replaced. Containment integrity was restored at 0930 hours on June 20, 1983.

Long Term

N/A

V. COMPONENT FAILURE DATA

Rupture disc - Continental Disc Corporation

High Pressure Hose - National Liquid Blasting Corporation

AUG 12 1983 B&W

GPU Nuclear

GPU Nuclear Corporation
Post Office Box 480
Route 441 South
Middletown, Pennsylvania 17057
717 944-7621
TELEX 84-2386
Writer"s Direct Dial Number:

July 5, 1983
4410-83-L-0136

Office of Inspection and Enforcement
Attn: Mr. 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 83-018/03L-0

Attached please find Licensee Event Report 83-018/03L-0 concerning the breach of a rupture disc on Reactor Building containment penetration R561 on June 3, 1983.

This event concerns Section 3.6.1.1 and is considered reportable under Section 6.9.1.9(b) of the Interim Recovery Technical Specifications.

Sincerely,

B. K. Kanga

B. K. Kanga
Director, TMI-2

BKK/RDW/grs

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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