

## LICENSEE EVENT REPORT

### UPDATE REPORT:

PREVIOUS REPORT DATE: 7/13/81

CONTROL BLOCK: 

--	--	--	--	--	--

 ①

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0	1	M	D	C	C	N	1	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 7 8 REPORT SOURCE L 6 0 5 0 0 0 3 1 7 7 0 6 1 4 8 1 8 0 5 1 9 8 3 9 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

At 1241 during shutdown operations, while performing a test, it was discovered that #12 MSIV would not shut in the required time (T.S. 3.7.1.5). The MSIV was placed in the shut position as required. After the reactor was placed in Mode 4, the stroke time was adjusted. The valve was tested satisfactorily at 1510 on 6/15/81. #11 MSIV remained operable during the event. Similar events: LER'S 50-317/81-24 and 50-318/81-07.

09		SYSTEM CODE		CAUSE CODE		CAUSE SUBCODE		COMPONENT CODE				COMP. SUBCODE		VALVE SUBCODE			
0	9	C	D	B		B		V	A	L	V	E	X	F	D		
7	8	9	10	11	12	12	13	13	14	15	16	17	18	19	20		
(17) LER/RO REPORT NUMBER		EVENT YEAR		SEQUENTIAL REPORT NO.		OCCURRENCE CODE		REPORT TYPE		REVISION NO.							
81		81		044		03		X		1							
21		22		23		24		25		26							
ACTION TAKEN		FUTURE ACTION		EFFECT ON PLANT		SHUTDOWN METHOD		HOURS		ATTACHMENT SUBMITTED		NPRD-4 FORM SUB.		PRIME COMP. SUPPLIER		COMPONENT MANUFACTURER	
A	Z	Z		Z		0030	Y	Y		A		R340					
33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 During the most recent refueling outage, the valve packing junk ring was  
1 1 discovered to have galled the stem. The ring was tested and found to be  
1 2 an alloy instead of a mild steel. Being very close to the stem, the ring  
1 3 was binding the stem, slowing valve closure. The ring was replaced with a  
1 4 proper one, and the purchase spec. was revised to prevent recurrence.

1 5 D 28 0 0 0 29 NA 30 C 31 Non-routine Test 32

ACTIVITY CONTENT  
RELEASED OF RELEASE

1 6 3 3 10 11

1 6 3 3 10 11

AMOUNT OF ACTIVITY (35)

NA

LOCATION OF RELEASE (36)

NA

PERSONNEL EXPOSURES									
NUMBER			TYPE	DESCRIPTION					
1	7	0	0	0	(37)	Z	(38)	NA	(39)

PERSONNEL INJURIES		NUMBER		DESCRIPTION	
1	8	0	0	0	NA

1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5		6		7		8		9		10		11		12	
1		2		3		4		5															

8 9 10  
PUBLICATION  
ISSUED DESCRIPTION (45) NA  
S PDR  
PDR ADOCK 05000317  
NRC USE ONLY  
2 0 N (44)  
58 69

NAME OF PREPARER S. M. Davis/P. J. Weir

PHONE: 301-269-4973/4871

# BALTIMORE GAS AND ELECTRIC COMPANY

P.O. BOX 1475

BALTIMORE, MARYLAND 21203

NUCLEAR POWER DEPARTMENT  
CALVERT CLIFFS NUCLEAR POWER PLANT  
LUSBY, MARYLAND 20657

May 19, 1983

Mr. James M. Allan  
Acting Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region 1  
631 Park Avenue  
King of Prussia, PA 19406

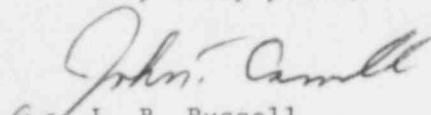
Docket No. 50-317  
License No. DPR 53

Dear Mr. Allan:

In accordance with Technical Specification 6.9 please find the attached follow-up report for LER 81-44/3X, Rev. 1.

Should you have any questions regarding this report, we would be pleased to discuss them with you.

Very truly yours,

  
L. B. Russell  
Plant Superintendent

LBR:PJW:bsb

cc: Director, Office of Management Information  
and Program Control  
Messrs: A. E. Lundvall, Jr.  
J. A. Tiernan

TE22  
111

LER NO. 81-44/3X, Rev. 1  
DOCKET NO. 50-317  
LICENSE NO. DPR-53  
EVENT DATE 6/14/81  
REPORT DATE 5/19/83  
ATTACHMENT

---

#### CAUSE DESCRIPTION AND CORRECTIVE ACTIONS

During the most recent refueling outage, 12 MSIV was disassembled and overhauled. During disassembly, heavy stem galling was observed to have extended to the junk ring location inside the packing gland. Subsequent x-ray spectography indicated that the junk ring which was removed was composed of an alloy chemically similar to an AISI grade 4140 chromium molybdenum. The drawing of the valve calls for a AISI grade 1015-1025 mild carbon steel.

Upon each stroke of the MSIV, the junk ring is the closest stationary part to the valve stem (.005" clearance). Thus, it should be, as designed, a significantly softer steel than the stainless steel stem. If, as found, it is a steel similar in hardness to the stem, galling may and did occur. This tends to bind the stem, slowing valve closure.

Before reassembly, a junk ring made of the proper material was fabricated on site and installed in the valve.

The purchase specification by which replacement parts are obtained from the manufacturer has been changed to require documentation of proper junk ring material composition. The first junk rings procured since then have been tested by the licensee and determined to, in fact, be mild steel. Additionally, the valve overhaul procedure has been changed to make the final bonnet bolt torque pass after backseating the valve. This will result in a better alignment of the bonnet and its enclosed packing chamber parts (including the junk ring) with the valve stem.