

## LICENSEE EVENT REPORT

Attachment to AECM-83/0224

Page 1 of 3

CONTROL BLOCK:

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 M S G G S 1 2 0 0 - 0 0 0 0 0 0 - 0 0 3 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  
LICENSEE CODE LICENSE NUMBER LICENSE TYPE CAT

CON'T

01 REPORT SOURCE L 6 0 5 0 0 0 4 1 6 7 1 1 0 2 8 2 8 0 4 0 8 8 3 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  
DOCKET NUMBER EVENT DATE REPORT DATE

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 On 11/2/82, with the plant in cold shutdown, the SDC loop B of the RHR  
03 system was secured (declared inoperable) for a planned maintenance  
04 activity. A standby service water valve at the outlet of the RHR B loop  
05 Hx's was determined to be installed incorrectly during the construction  
06 phase. This required entering the action statement of T.S.3.4.9.2. RWCU  
07 was used as an alternate method of decay heat removal. This is reported  
08 pursuant to T.S.6.9.1.13.b.  
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

09 SYSTEM CODE CAUSE CODE CAUSE SUBCODE COMPONENT CODE COMP. SUBCODE VALVE SUBCODE  
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  
C F B C V A L V E X B D  
17 LER RO REPORT NUMBER EVENT YEAR SEQUENTIAL REPORT NO. OCCURRENCE CODE REPORT TYPE REVISION NO.  
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  
8 2 1 2 7 0 3 X 2  
ACTION TAKEN FUTURE ACTION EFFECT ON PLANT SHUTDOWN METHOD HOURS ATTACHMENT SUBMITTED NPD-4 FORM SUB. PRIME COMP. SUPPLIER COMPONENT MANUFACTURER  
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  
X Z Z Z 0 0 0 0 Y N A P 3 4 0

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 The cause was a construction installation error. The valve was removed  
11 and then reinstalled correctly and a retest conducted. The retest was  
12 satisfactorily completed. This is being submitted as a final report.  
13  
14  
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

15 FACILITY STATUS % POWER OTHER STATUS METHOD OF DISCOVERY DISCOVERY DESCRIPTION  
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  
8 0 0 0 NA A Preoperational Test Phase  
16 ACTIVITY CONTENT RELEASED OF RELEASE AMOUNT OF ACTIVITY LOCATION OF RELEASE  
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  
Z Z NA NA  
17 PERSONNEL EXPOSURES NUMBER TYPE DESCRIPTION  
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  
0 0 0 Z NA  
18 PERSONNEL INJURIES NUMBER DESCRIPTION  
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  
0 0 0 NA  
19 LOSS OF OR DAMAGE TO FACILITY TYPE DESCRIPTION  
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  
Z NA  
20 PUBLICITY DESCRIPTION  
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  
N NA  
ISSUED DESCRIPTION  
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  
N NA

8304130340 830408  
PDR ADDCK 05000416  
S PDR

NRC USE ONLY

NAME OF PREPARER M. V. Rohrer

PHONE

SUPPLEMENTARY INFORMATION TO  
LER 82-127/03 X-2

Mississippi Power & Light Company  
Grand Gulf Nuclear Station - Unit 1  
Docket No. 50-416

Technical Specification Involved: 3.4.9.2  
Reported Under Technical Specification: 6.9.1.13.b

The following description of the event was provided in interim LER 82-127/03 X-1.

Event Narrative:

Case History of SSW Valve Problem  
Valve: P41F068A, F068B (SSW Outlet to RHR Hx.)  
Valve Type: 18" PRATT 1100 Butterfly Valve

Introduction:

The Pratt butterfly disc has two different faces, face (1) is a smooth flat surface, face (2) is a semi-convex surface. A direct quote from the Vendor Manual states "in some instances a flow direction is given for Pratt 1100 valves. It is characteristic of the offset disc to have a different required operating torque for each of the two flow directions."

History of P41F068A, F068B:

Initially during preoperational testing on the SSW system, problems were encountered with the F068A & B valves. Specifically the valves would not stroke closed against flow, the torque switch would eventually trip the motor. Large amounts of turbulence were encountered simultaneous with the failure to stroke closed. It was then suggested that perhaps the valve was installed incorrectly for this particular application (flat surface of disc was facing flow).

At this time the P41F068A valve was then rotated 180° in the line and reinstalled so that the curved surface was now facing flow. Presumably, the curved surface aids in opening the valve, by minimizing the dp across the valve and hence the torque required to operate the valve. A retest with flow was conducted and the valve's performance was satisfactory. Similarly the F068B valve experienced the same problems and thus it was deemed necessary to perform the same corrective action on it. Assuming that the same physical rotation of the valve disc and body was to be performed this should have solved the problem. When the valve was turned around the retest was performed (with flow). The torque switch tripped on valve motor torque when operating the valve in the OPEN position. After repeated trials and adjustment of valve packing the valve operation was determined to be unsatisfactory. The valve was again removed, and it was discovered that when the valve was rotated initially, the valve disc was rotated again after the valve disc and body were rotated as one.

This suggested there was a problem with the valve disc/seat interface which could have been the reason the valve failed the retest.

To provide further clarification, both loops A & B are layed out nearly identical and flow characteristics for each loop are approximately identical. Loop flow characteristics would have a negligible effect on the valves performance.

The valve was again reinstalled and again the retest was performed. The valve failed the retest, and was then opened up for further evaluation. At this time the elastic stop nut inside the Limitorque operator was adjusted (loosened) to decrease the tension on the operator worm gear and shaft. This affects the operator of the torque switch assembly. Upon reassembly of the operator the valve was again tested and this time passed. Since the retest, the valve has performed satisfactorily. This is being submitted as a final report.