

LICENSEE EVENT REPORT

CONTROL BLOCK: _____ (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | G A E I H 1 | 2 | 0 0 - 0 0 0 0 0 - 0 0 | 3 | 4 1 1 1 1 | 4 | _____ | 5

CON'T
01 | REPORT SOURCE | L | 6 | 0 5 0 0 0 3 2 1 | 7 | 0 8 1 1 8 1 | 8 | 0 9 0 9 8 1 | 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)
02 | On 8-11-81, with Hatch 1 performing Rx. S/U and on 8-18-81, with the unit
03 | at steady state 91.7% thermal power oil leaks were discovered on the HPCI
04 | oil system. This is reportable under Tech Spec 6.9.1.9.b. As per Tech
05 | Spec 3.5.D RCIC, ADS, CSS, and LPCI were operable and no significant
06 | events occurred. This is a non-repetitive event and there were no
07 | effects upon public health and safety.

09 | SYSTEM CODE | S F | 11 | CAUSE CODE | E | 12 | CAUSE SUBCODE | B | 13 | COMPONENT CODE | V A L V O P | 14 | COMP. SUBCODE | C | 15 | VALVE SUBCODE | Z | 16
17 | LER/RO REPORT NUMBER | 8 1 | 21 | EVENT YEAR | 8 1 | 22 | SEQUENTIAL REPORT NO. | 0 8 8 | 24 | OCCURREN. CODE | 0 3 | 28 | REPORT TYPE | L | 30 | REVISION NO. | 0 | 32
18 | ACTION TAKEN | A | 18 | 33 | FUTURE ACTION | A | 19 | 34 | EFFECT ON PLANT | Z | 20 | 35 | SHUTDOWN METHOD | Z | 21 | 36 | HOURS | 0 0 0 0 | 22 | 37 | ATTACHMENT SUBMITTED | Y | 23 | 40 | 41 | NPRD-4 FORM SUB. | Y | 24 | 42 | PRIME COMP. SUPPLIER | N | 25 | 43 | COMPONENT MANUFACTURER | R 2 9 0 | 26 | 44 | 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)
10 | These oil leaks were due to a ruptured diaphragm on the Robt. Shaw Dia-
11 | phragm Control Valve. The diaphragm was replaced each time with ones
12 | not meeting original design specifications. Close monitoring will con-
13 | tinue until Terry Turbine supplies a diaphragm meeting original design
14 | specifications.

15 | FACILITY STATUS | C | 28 | 8 | % POWER | 0 0 0 | 29 | 10 | OTHER STATUS | NA | 30 | 13 | METHOD OF DISCOVERY | A | 31 | 44 | DISCOVERY DESCRIPTION | HPCI Oil Level Hi/Lo Annun. Alarmed | 32 | 46

16 | ACTIVITY CONTENT RELEASED OF RELEASE | Z | 33 | 8 | 9 | AMOUNT OF ACTIVITY | NA | 35 | 11 | LOCATION OF RELEASE | NA | 36 | 44

17 | PERSONNEL EXPOSURES NUMBER | 0 0 0 | 37 | 11 | TYPE | Z | 38 | 12 | DESCRIPTION | NA | 39 | 13

18 | PERSONNEL INJURIES NUMBER | 0 0 0 | 40 | 11 | DESCRIPTION | NA | 41 | 12

19 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | 10 | DESCRIPTION | NA | 43 | 11

20 | PUBLICITY ISSUED DESCRIPTION | N | 44 | 10 | DESCRIPTION | NA | 45 | 11

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PDR ADOCK 05000321
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NRC USE ONLY

NAME OF PREPARER C. L. Coggin - Supt. Plt. Eng. Serv. PHONE 912-367-7851

LER #: 50-321/1981-088
Licensee: Georgia Power Company
Facility Name: Edwin I. Hatch
Docket #: 50-321

Narrative Report
for LER 50-321/1981-088

On 7-12-81, the Unit 1 HPCI, Robert Shaw diaphragm control valve (Model VC-210) supplied by General Electric, was installed to solve a previous HPCI inoperability problem (Ref: LER 50-321/1981-068). It was unknown at the time that the diaphragm supplied with the valve was made of a material not meeting original design spec. The new valve along with its diaphragm was installed and HPCI was proven operable following this event.

On 7-21-81, with Unit 1 at steady state 95.7% thermal power, procedure HNP-1-6011 "HPCI Leakage Inspection" was being performed. During this inspection, the diaphragm in the HPCI Robert Shaw diaphragm control valve ruptured and the inspection was stopped. HPCI was declared inoperable per Tech Spec 3.5.D.2 and RCIC, ADS, CSS, and LPCI were operable. There were no effects upon public health and safety due to this event.

Upon inspection of the diaphragm, it was observed that the diaphragm was deformed, thereby leading plant personnel to believe the wrong size diaphragm rather than a non-coil compatible diaphragm was installed in the G.E. Supplied, Robert Shaw diaphragm control valve. A replacement diaphragm was obtained through Robert Shaw for the model VC-210 Control Valve, and it was unknown at the time that the diaphragm was non-oil compatible and therefore had a reduced lifetime. The diaphragm was installed and HPCI was proven operable.

On 8-11-81, with Unit 1 in Rx startup at 0% thermal power, the operators noticed that the "HPCI Oil Tank Level High/Low" annunciator was activated and upon investigation, it was discovered that the HPCI oil tank was emptied due to a ruptured diaphragm in the Robert Shaw diaphragm control valve. The HPCI system was declared inoperable per Tech Spec section 3.5.D, RCIC, ADS, CSS, and LPCI were operable. No significant event occurred.

Upon examination of the diaphragm, it was found to be in the same deformed shape as the one previously removed. It was then realized that the diaphragms obtained from Robert Shaw were non-oil compatible. An attempt to obtain an oil compatible diaphragm from G.E. and Terry Turbine was made but proved unsuccessful due to the unavailability of a replacement diaphragms capable of meeting original design specifications.

Site personnel felt that using the Robert Shaw diaphragms with the reduced lifetime could be used if the diaphragm was replaced on a bi-weekly basis, until replacement diaphragm capable of meeting the original design spec. was available. The diaphragm was replaced and HPCI was proven operable.

On 8-18-81, at 9:45 EDT and with Unit 1 at steady state 91.7% thermal power, the monthly test of "HPCI Pump Operability" (HNP-1-3303) was being performed. As per procedure "HPCI Leakage Inspection" (HNP-1-6011) it was found that the Robert Shaw diaphragm in the Robert Shaw Control Valve had ruptured. The HPCI system was declared inoperable and per Tech Spec Section 3.5.D.2 RCIC, ADS, CSS, and LPCI were operable. No significant event occurred.

The diaphragm for the control valve was replaced with a Terry Turbine Supplied diaphragm different from the one previously installed, but capable of 100 cycles. Close monitoring of the number of cycles placed on the diaphragm is in progress until a replacement meeting the 1000 cycle condition is available.

This is a non-repetitive event and there were no effects upon public health and safety due to this event. There is no impact on Unit 2 HPCI since it has the 1000 cycle diaphragm installed. This is currently being evaluated as a potential 10CFR21.

The 1000 cycle diaphragm will be installed in Unit 1 HPCI following receipt.