NRC FORM 195 (2-76)

U.S. NUCLEAR REGULATORY COMMISSION

# NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

DOCKET NUMBER: 50-261

FILE NUMBER: INCIDENT REPORT

TO: Mr N C Moseley

FROM: Carolina Pwr & Light Co
Raleigh, NC
H R Banks

DATE OF DOCUMENT: 2-23-77

DATE RECEIVED: 2-28-77

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INPUT FORM

NUMBER OF COPIES RECEIVED: 1cc

DESCRIPTION

Ltr trans the following:

1p

ENCLOSURE

Licensee Event Report (RO# 77-1) on 1-24-77 concerning bripping of "B" Boric Acid Transfer Pump due to high pump motor temperature cut-out .....(40 cys encl rec'd)

2p

[redacted]

NOTE: IF PERSONNEL EXPOSURE IS INVOLVED SEND DIRECTLY TO KREGER/J. COLLINS

PLANT NAME: H B Robinson #1

FOR ACTION/INFORMATION 3-2-77 ehf

| | |
|---|---|
| BRANCH CHIEF: | Reid |
| W/3 CYS FOR ACTION | |
| LIC. ASST.: | Zwetzig |
| W/1 CYS | Ingram |
| ACRS 16 CYS ~~HOLDING~~/SENT | As CAT B 3/2/77 |

INTERNAL DISTRIBUTION

| | |
|---|---|
| REG FILE | |
| NRC PDR | |
| I & E (2) | |
| MIPC | |
| SCHROEDER/IPPOLITO | |
| HOUSTON | |
| NOVAK/CHECK | |
| GRIMES | |
| CASE | |
| BUTLER | |
| HANAUER | |
| TEDESCO/MACCARY | |
| EISENHUT | |
| BAER | |
| SHAO | |
| VOLLMER/BUNCH | |
| KREGER/J. COLLINS | |

EXTERNAL DISTRIBUTION

| | |
|---|---|
| LPDR: Hartsville, SC | |
| TIC: | |
| NSIC: | |

CONTROL NUMBER

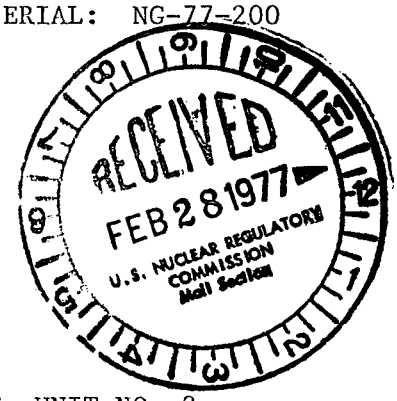
2080

261
A04

CP&L
Carolina Power & Light Company

February 23, 1977

FILE: NG-3513 (R) SERIAL: NG-77-200




Mr. Norman C. Moseley, Director
U. S. Nuclear Regulatory Commission
Region II, Suite 818
230 Peachtree Street, N.W.
Atlanta, Georgia 30303

Dear Mr. Moseley:

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET 50-261
LICENSE NO. DPR-23
LICENSEE EVENT REPORT 77-1

In accordance with Section 6.9.2.b of the Technical Specifications for the H. B. Robinson Steam Electric Plant, Unit 2, the attached Licensee Event Report is submitted. This report fulfills the requirement for a written report within thirty (30) days of a reportable occurrence and is in accordance with the format set forth in Regulatory Guide 1.16, Revision 4.

Yours very truly,

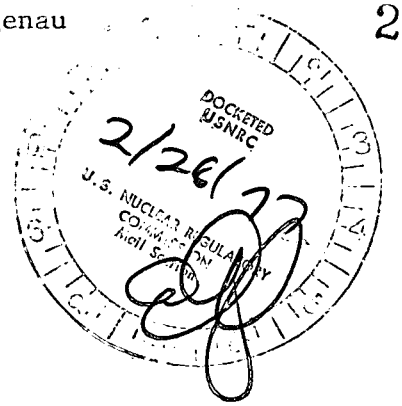
H. R. Banks
Manager
Nuclear Generation

WH:kd

Attachment

cc: Messrs. W. G. McDonald
E. Volgenau

2080




336 Fayetteville Street • P. O. Box 1551 • Raleigh, N. C. 27602

CONTROL BLOCK: [ ] (1–6)

[PLEASE PRINT ALL REQUIRED INFORMATION]

| LICENSEE NAME | LICENSE NUMBER | LICENSE TYPE | EVENT TYPE |
|---|---|---|---|
| 01 SCHBR2 (7–8, 9–14) | 00–00000–00 (15–25) | 4110 (26–30) | 03 (31–32) |

| 01 CON'T | CATEGORY | REPORT TYPE | REPORT SOURCE | DOCKET NUMBER | EVENT DATE | REPORT DATE |
|---|---|---|---|---|---|---|
| (7–8) | (57–58) | L (59) | L (60) | 050–0261 (61–68) | 012477 (69–74) | 022377 (75–80) |

EVENT DESCRIPTION

02 During normal operation "B" Boric Acid Transfer Pump tripped due to high pump motor
03 temperature cut-out. Unit was operating at 100% power with "A" Boric Acid Transfer
04 Pump available. The re-circulating line which cools and lubricates the motor was
05 found plugged with partially solidified boric acid. The line was cleaned, and the
06 pump returned to normal service. No similar occurrence had occurred. (HBR RO 77-1)

| 07 | SYSTEM CODE | CAUSE CODE | COMPONENT CODE | PRIME COMPONENT SUPPLIER | COMPONENT MANUFACTURER | VIOLATION |
|---|---|---|---|---|---|---|
| | PC (9–10) | E (11) | PUMPXX (12–17) | N (43) | C300 (44–47) | N (48) |

CAUSE DESCRIPTION

08 The "B" Boric Acid Transfer Pump's re-circulating line which cools and lubricates the
09 motor was found plugged with partially solidified boric acid. The line was cleaned
10 and the pump returned to normal service after satisfactory operation.

| 11 | FACILITY STATUS | % POWER | OTHER STATUS | METHOD OF DISCOVERY | DISCOVERY DESCRIPTION |
|---|---|---|---|---|---|
| | E (9) | 100 (10–12) | NA (13–44) | A (45) | Operator Surveillance (46–80) |

| 12 | FORM OF ACTIVITY RELEASED | CONTENT OF RELEASE | AMOUNT OF ACTIVITY | LOCATION OF RELEASE |
|---|---|---|---|---|
| | Z (9) | Z (10) | NA (11–44) | NA (45–80) |

PERSONNEL EXPOSURES

| 13 | NUMBER | TYPE | DESCRIPTION |
|---|---|---|---|
| | 000 (9–11) | Z (12) | NA (13–80) |

PERSONNEL INJURIES

| 14 | NUMBER | DESCRIPTION |
|---|---|---|
| | 000 (9–11) | NA (12–80) |

OFFSITE CONSEQUENCES

15 NA (9–80)

LOSS OR DAMAGE TO FACILITY

| 16 | TYPE | DESCRIPTION |
|---|---|---|
| | Z (9) | NA (10–80) |

PUBLICITY

17 NA (9–80)

ADDITIONAL FACTORS

18 (9–80)

19 (9–80)

NAME: J. B. McGirt PHONE: (803) 332-1351

GPO 881-667

1. Report No.: 50-261/77-1

2a. Report Date: February 17, 1977

2b. Occurrence Date: January 24, 1977

3. Facility: H. B. Robinson Unit No. 2, Hartsville, S. C. 29550

4. Identification of Occurrence: At 0747 and 0810 hours on January 24, 1977, "B" Boric Acid Transfer Pump tripped on thermal overload and was subsequently taken out of service. This constitutes a Reportable Occurrence with Technical Specifications Paragraph 6.9.2.b.2.

5. Conditions Prior to Occurrence: No unusual conditions prevailed prior to the occurrence. The plant was operating at steady state and 100% power. "B" Boric Acid Transfer Pump was re-circulating "B" Boric Acid Tank.

6. Description of Occurrence: At 0747 hours on January 24, 1977, "B" Boric Acid Transfer Pump tripped on thermal overload while re-circulating "B" Boric Acid Tank. Heat trace temperature indicated 155°F. The overload was reset and the pump re-started at 0805. A pump discharge pressure of 106# was obtained. At 0810, "B" Boric Acid Transfer Pump again tripped on thermal overload. At 0830, "A" Boric Acid Transfer Pump was aligned to the blender and to re-circulate with the boron injection tank. "B" Boric Acid Pump was taken out of service per OWP CVC-7. Investigation revealed that the "B" pump balance line was plugged with partially solidified boric acid. The balance line was cleaned, and "B" Boric Acid Transfer Pump was re-started at 1252. A discharge pressure of 108# was observed with heat tracing temperature of 180°F. The pump operated satisfactorily and was returned to normal service.

7. Designation of Apparent Cause of Occurrence: The apparent cause through investigation was that the "B" Boric Acid Transfer Pump's balance line (re-circulates to cool and lubricate the motor) was plugged with partially solidified boric acid. The loss of cooling flow across the rotor caused the pump to trip on thermal overload. The balance line was cleaned and the pump operated satisfactorily afterwards.

8. Analysis of Occurrence: The failure of "B" Boric Acid Transfer Pump was due to equipment malfunction. Corrective action was considered adequate to prevent subsequent failures. There were not any adverse effects to plant operation or to public health and safety.

9. Corrective Action: The balance line on the "B" Boric Acid Transfer Pump was cleaned and the pump re-started with satisfactory operation.

10. Failure Data: No similar failure had occurred.

CP&L
Carolina Power & Light Company

February 23, 1977

FILE: NG-3513 (R) SERIAL: NG-77-200

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U. S. Nuclear Regulatory Commission
Region II, Suite 818
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Manager
Nuclear Generation

WH:kd

Attachment

cc: Messrs. W. G. McDonald
E. Volgenau

336 Fayetteville Street ◦ P. O. Box 1551 ◦ Raleigh, N. C. 27602

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PUBLICITY

17 NA

ADDITIONAL FACTORS

18

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