

50-261

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER  
INCIDENT REPORT

TO: Mr N C Moseley

FROM: Carolina Pwr & Light Co  
Raleigh, NC  
H R BanksDATE OF DOCUMENT  
2-23-77

DATE RECEIVED 2-28-77

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☒ UNCLASSIFIED

PROP

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## DESCRIPTION

Ltr trans the following:

lp

## PLANT NAME:

H B Robinson #1

## 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

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

FOR ACTION/INFORMATION 3-2-77 ehf

BRANCH CHIEF:

W/3 CYS FOR ACTION

LIC. ASST.:

W/1 CYS

ACRS 16 CYS HOLDING/SENT

Reid

Zwetzig

Ingram

As CAT B

3/2/77

## INTERNAL DISTRIBUTION

REG FILE

NRC PDR

I &amp; 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



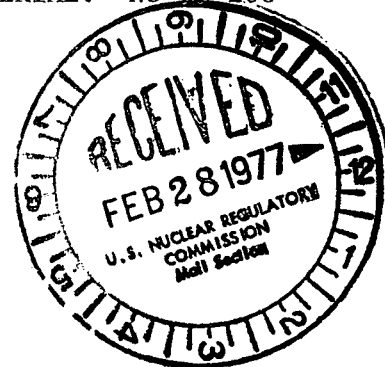
Carolina Power & Light Company

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,

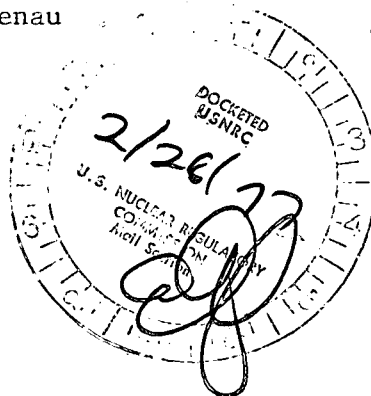
H. R. Banks  
Manager  
Nuclear Generation

WH:kd

Attachment

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

2080



CONTROL BLOCK: 1 6

[PLEASE PRINT ALL REQUIRED INFORMATION]

LICENSEE NAME: 01 S C H B R 2  
7 8 9 14  
LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0  
15 25  
LICENSE TYPE: 4 1 1 1 0  
26 30  
EVENT TYPE: 0 3  
31 32  
CATEGORY: 01 CON'T  
57 58  
REPORT TYPE: L  
59  
REPORT SOURCE: L  
60  
DOCKET NUMBER: 0 5 0 - 0 2 6 1  
61 68  
EVENT DATE: 0 1 2 4 7 7  
69 74  
REPORT DATE: 0 2 2 3 7 7  
75 80

## EVENT DESCRIPTION

02 During normal operation "B" Boric Acid Transfer Pump tripped due to high pump motor  
7 8 9 80  
03 temperature cut-out. Unit was operating at 100% power with "A" Boric Acid Transfer  
7 8 9 80  
04 Pump available. The re-circulating line which cools and lubricates the motor was  
7 8 9 80  
05 found plugged with partially solidified boric acid. The line was cleaned, and the  
7 8 9 80  
06 pump returned to normal service. No similar occurrence had occurred. (HBR RO 77-1)  
7 8 9 80

SYSTEM CODE: 07 P C  
7 8 9 10  
CAUSE CODE: E  
11  
COMPONENT CODE: P U M P X X  
12 17  
PRIME COMPONENT SUPPLIER: N  
43  
COMPONENT MANUFACTURER: C 3 0 0  
44 47  
VIOLATION: N  
48

## CAUSE DESCRIPTION

08 The "B" Boric Acid Transfer Pump's re-circulating line which cools and lubricates the  
7 8 9 80  
09 motor was found plugged with partially solidified boric acid. The line was cleaned  
7 8 9 80  
10 and the pump returned to normal service after satisfactory operation.  
7 8 9 80

FACILITY STATUS: 11 E  
7 8 9  
% POWER: 1 0 0  
10 12 13  
OTHER STATUS: NA  
44  
METHOD OF DISCOVERY: A  
45  
DISCOVERY DESCRIPTION: Operator Surveillance  
46 80  
FORM OF ACTIVITY RELEASED: 12 Z  
7 8 9  
CONTENT OF RELEASE: Z  
10 11  
AMOUNT OF ACTIVITY: NA  
44  
LOCATION OF RELEASE: NA  
45 80

## PERSONNEL EXPOSURES

13 0 0 0  
7 8 9 11 12 13  
TYPE: Z  
12  
DESCRIPTION: NA  
13 80

## PERSONNEL INJURIES

14 0 0 0  
7 8 9 11 12  
DESCRIPTION: NA  
12 80

## OFFSITE CONSEQUENCES

15  
7 8 9  
NA  
80

## LOSS OR DAMAGE TO FACILITY

16 7  
7 8 9 10  
TYPE: 7  
10  
DESCRIPTION: NA  
80

## PUBLICITY

17  
7 8 9  
NA  
80

## ADDITIONAL FACTORS

18  
7 8 9  
80

19  
7 8 9  
80

NAME: J. B. McGirt

PHONE: (803) 332-1351

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.



Carolina Power & Light Company

February 23, 1977

FILE: NG-3513 (R)

SERIAL: NG-77-200

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U. S. Nuclear Regulatory Commission  
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Yours very truly,

H. R. Banks  
Manager  
Nuclear Generation

WH:kd

Attachment

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

# LICENSEE EVENT REPORT

CONTROL BLOCK: 1 6

[PLEASE PRINT ALL REQUIRED INFORMATION]

LICENSEE NAME										LICENSE NUMBER										LICENSE TYPE					EVENT TYPE	
01	S	C	H	B	R	2	0	0	-	0	0	0	0	-	0	0	4	1	1	1	0	0	3			
7	8	9				14	15									25	26					30	31	32		

CATEGORY		REPORT TYPE	REPORT SOURCE	DOCKET NUMBER					EVENT DATE					REPORT DATE										
01	CON'T		L	L	0	5	0	-	0	2	6	1	0	1	2	4	7	7	0	2	2	3	7	7
7	8	57	58	59	60	61					68	69					74	75					80	

## EVENT DESCRIPTION

02	During normal operation "B" Boric Acid Transfer Pump tripped due to high pump motor																							80
03	temperature cut-out. Unit was operating at 100% power with "A" Boric Acid Transfer																							80
04	Pump available. The re-circulating line which cools and lubricates the motor was																							80
05	found plugged with partially solidified boric acid. The line was cleaned, and the																							80
06	pump returned to normal service. No similar occurrence had occurred. (HBR RO 77-1)																							80

SYSTEM CODE		CAUSE CODE		COMPONENT CODE				PRIME COMPONENT SUPPLIER		COMPONENT MANUFACTURER				VIOLATION	
07	P	C	E	P	U	M	P	X	X	N	C	3	0	0	N
7	8	9	10	11	12				17	43	44			47	48

## CAUSE DESCRIPTION

08	The "B" Boric Acid Transfer Pump's re-circulating line which cools and lubricates the																							80
09	motor was found plugged with partially solidified boric acid. The line was cleaned																							80
10	and the pump returned to normal service after satisfactory operation.																							80

FACILITY STATUS		% POWER		OTHER STATUS				METHOD OF DISCOVERY		DISCOVERY DESCRIPTION					
11	E	1	0	0	NA				A	Operator Surveillance					
7	8	9	10	12	13				44	45	46				80

FORM OF ACTIVITY RELEASED		CONTENT OF RELEASE		AMOUNT OF ACTIVITY				LOCATION OF RELEASE					
12	Z	Z	NA				NA						
7	8	9	10	11			44	45					80

## PERSONNEL EXPOSURES

NUMBER		TYPE		DESCRIPTION										
13	0	0	0	Z	NA									
7	8	9	11	12	13								80	

## PERSONNEL INJURIES

NUMBER		DESCRIPTION											
14	0	0	0	NA									
7	8	9	11	12									80

## OFFSITE CONSEQUENCES

15	NA																							80
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## LOSS OR DAMAGE TO FACILITY

TYPE		DESCRIPTION											
16	Z	NA											
7	8	9	10										80

## PUBLICITY

17	NA																							80
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## ADDITIONAL FACTORS

18																								80
19																								80

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