

AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 12857

FILE: _____

FROM: Carolina Power & Light Co. Raleigh, N.C. E.E. Utely		DATE OF DOC 12-16-74	DATE REC'D 12-19-74	LTR xxxx	TWX	RPT	OTHER
TO: Mr. Norman C. Moseley		ORIG 2-signed	CC 38	OTHER	SENT AEC PDR <u>xxxx</u> SENT LOCAL PDR <u>xxxx</u>		
CLASS	UNCLASS xxxxxx	PROP INFO	INPUT	NO CYS REC'D 40	DOCKET NO: 50-261		

DESCRIPTION:

Ltr Trans the Following :

ENCLOSURES:

Abnormal Occurrence #74-29 on 12-4-74 concerning
Failure of "B" Boric Acid Transfer Pump
.....

ACKNOWLEDGED

DO NOT REMOVE

PLANT NAME: H.B. Robinson Unit #2

FOR ACTION/INFORMATION 12-23-74 JGB

BUTLER (L)	SCHWENCER (L)	ZIEMANN (L)	REGAN (E)
W/ Copies	W/ Copies	W/ Copies	W/ Copies
CLARK (L)	STOLZ (L)	DICKER (E)	LEAR (L)
W/ Copies	W/ Copies	W/ Copies	W/ Copies
PARR (L)	VASSALLO (L)	KNIGHTON (E)	W/ Copies
W/ Copies	W/ Copies	W/ Copies	
KNIEL (L)	PURPLE (L)	YOUNGBLOOD (E)	W/ Copies
W/ Copies	W/ Copies	W/ Copies	

INTERNAL DISTRIBUTION

<u>REG FILE</u>	<u>TECH REVIEW</u>	<u>DENTON</u>	<u>LIC ASST</u>	<u>A/T IND</u>
✓ AEC PDR	✓ SCHROEDER	GRIMES	DIGGS (L)	BRAITMAN
✓ OCC. ROOM P-506A	✓ MACCARY	GAMMILL	GEARIN (L)	SALTZMAN
✓ MUNTZING STAFF	✓ KNIGHT	✓ EASTNER	GOULBOURNE (L)	B. HURT
✓ CASE	✓ PAWLICKI	BALLARD	KREUTZER (E)	PLANS
GIAMBUSO	✓ SHAO	SPANGLER	LEE (L)	MCDONALD
BOYD	✓ STELLO	<u>ENVIRO</u>	MAIGRET (L)	CHAPMAN
MOORE (L) (BWR)	✓ HOUSTON	MULLER	REED (E)	DUBE w/input
DEYOUNG (L) (PWR)	✓ NOVAK	DICKER	SERVICE (L)	E. COUPE
SKOVHOLT (L)	✓ ROSS	KNIGHTON	SHEPPARD (L)	
GOLLER (L)	✓ POLITO	YOUNGBLOOD	SLATER (E)	✓ THOMPSON (2)
P. COLLINS	✓ TEDESCO	REGAN	SMITH (L)	✓ KLECKER
DENISE	✓ LONG	PROJECT LDR	✓ TEETS (L)	✓ EISENHUT
✓ REG OPR	✓ JAINAS	<u>HARLESS</u>	WILLIAMS (E)	
FILE & REGION (2)	✓ BENAROYA		WILSON (L)	
✓ MORRIS	✓ VOLIMER			
✓ STEELE				

EXTERNAL DISTRIBUTION

✓ LOCAL PDR <u>Hartsville, S.C.</u>	✓ NATIONAL LABS.	1 - PDR SAN/LA/NY
✓ TIC (ABERNATHY) (1)(2)(10)	1 - ASLB (E W Bldg, Rm 529)	1 - BROOKHAVEN NAT LAB
✓ NSIC (BUCHANAN)	1 - W. PENNINGTON, Rm E-201 GT	1 - G. ULRIKSON, ORNL
1 - ASLB	1 - B&M SWINEBROAD, Rm E-201 GT	1 - AGMED (RUTH GROSSMAN)
1 - Newton Anderson	1 - CONSULTANTS	Rm B-127 GT
✓ ACRS XXXXXX	NEWMARK BLUME AGABIAN	1 - R. D. MUELLER, Rm E-201
SENT to Lic Asst.		GT



Carolina Power & Light Company

December 16, 1974

~~Regulatory~~

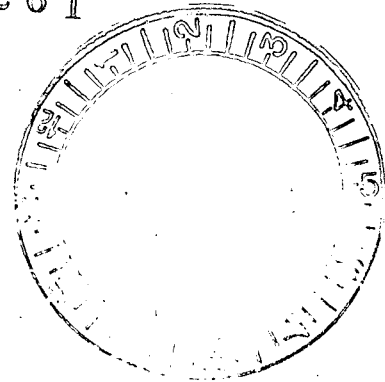
~~File Cy.~~

File: NG-3513 (R)

Serial: NG-74-1490

Mr. Norman C. Moseley, Director
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
Region II, Suite 818
230 Peachtree Street, N.W.
Atlanta, Georgia 30303

50-261



Mr. Donald Knuth, Director
Directorate of Regulatory Operations
U. S. Atomic Energy Commission
Office of Regulation
Washington, D. C. 20545

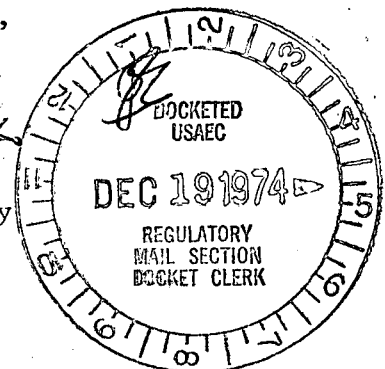
Dear Sirs:

H. B. ROBINSON UNIT NO. 2
LICENSE NO. DPR-23
FAILURE OF BORIC ACID TRANSFER PUMP SHAFT

In accordance with 6.6.2.a of the Technical Specifications for H. B. Robinson Unit No. 2, the attached Abnormal Occurrence Report is submitted for your information. This report fulfills the requirement for a written report within ten days of an Abnormal Occurrence and is in accordance with the format set forth in Regulatory Guideline 1.16, Revision 1.

Yours very truly,

E. E. Utley
Vice-President
Bulk Power Supply



JBM:DBW:mvp
Attachment

cc: Messrs. N. B. Bessac
W. B. Howell
J. B. McGirt
D. V. Menscer
D. B. Waters

12857

ABNORMAL OCCURRENCE REPORT

1. Report No. 50-261/74-29
- 2a. Date December 12, 1974
- 2b. Occurrence Date December 4, 1974
3. Facility H. B. Robinson Unit No. 2
Hartsville, S. C. 29550

4. Identification of Occurrence

Failure of "B" Boric Acid Transfer Pump constituting an abnormal occurrence as defined in Section 1.8.d of the Technical Specifications.

5. Conditions Prior to Occurrence

The plant was operating at 100% nuclear power with 705 M.W. net electrical output. "B" Boric Acid Transfer Pump was lined up to the boric acid blender and "A" Boric Acid Transfer Pump was lined up to recirculate with the Boron Injection Tank.

6. Description of Occurrence

At 2111 hours an automatic makeup signal was initiated. No flow was observed on the recorder or integrator. A local inspection indicated proper valve lineup. However, no discharge pressure was observed and the "B" pump was very noisy. "A" Boric Acid Transfer Pump was immediately test operated satisfactorily. Steps were then taken to determine the cause of "B" pump failure.

7. Designation of Apparent Cause of Occurrence

The pump motor was checked electrically and found to be sound. Investigation revealed the shaft had broken at its juncture with the rotor. The pump bearing showed excessive wear and the part of the shaft housed by the bearing was galled and scored. One previous failure of this type has occurred and bearing wear appears to have resulted in shaft fretting, vibration and ultimate failure.

8. Analysis of Occurrence

Upon determination that "B" Boric Acid Transfer Pump would not meet its design function, the "A" Boric Acid Transfer Pump was tested and operability verified. The plant safety was therefore not jeopardized, and no limiting condition of operation was violated. No personnel injuries, undue exposures, releases of radioactive materials, or threat to the public health and safety resulted from this occurrence.

9. Corrective Action

The "B" Boric Acid Transfer Pump was replaced with a spare pump and returned to service at 0243 hours, December 5, 1974. A new pump, model GVH-10K, was recommended by Chempump and is being investigated as a replacement for the problematic pump.

10. Failure Data

August 15, 1973 - Crane Chempump model G.E. 20K broken shaft near keyway.

December 4, 1973 - Crane Chempump model G.E. 20K broken shaft near keyway.

March 20, 1974 - Crane Chempump model G.E. 20K broken shaft near keyway.

August 8, 1974 - Crane Chempump model G.E. 20K broken shaft near keyway.

August 26, 1974 - Crane Chempump model G.E. 20K broken shaft at rotor
(pump end).

December 4, 1974 - Crane Chempump model G.E. 20K broken shaft at rotor
(pump end).