

FILE:

FROM: Carolina Power & Light Company Raleigh, N.C. 27602 E.E. Utley			DATE OF DOC 7-8-74		DATE REC'D 7-19-74		LTR X	TWX	RPT	OTHER	
TO: J.F. O'Leary			ORIG 2 signed		CC OTHER		SENT AEC PDR SENT LOCAL PDR				XXX XXX
CLASS	UNCLASS	PROP INFO	INPUT		NO CYS REC'D		DOCKET NO:				
	XXX				40		50-261				

DESCRIPTION:

Ltr trans the following....

ENCLOSURES:

Abnormal occurrence No.50-261/74-12
concerning Boron Injection tank out of
specifications (HIGH)

ACKNOWLEDGED

(40 cys encl rec'd)

PLANT NAME: H.B. Robinson

DO NOT REMOVE

FOR ACTION/INFORMATION

7-19-74 JB

BUTLER (L)	SCHWENCER (L)	ZIEMANN (L)	REGAN (E)
W/ CYS	W/ CYS	W/ CYS	W/ CYS
CLARK (L)	STOLZ (L)	DICKER (E)	LEAR
W/ CYS	W/ CYS	W/ CYS	W/ 7 CYS
W/ CYS	VASCALLO (L)	KNIGHTON (E)	W/ CYS
W/ CYS	W/ CYS	W/ CYS	W/ CYS
KNIEL (L)	PURPLE (L)	YOUNGBLOOD (E)	W/ CYS
W/ CYS	W/ CYS	W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
AEC PDR	HENDRIE	GRIMES	DIGGS (L)	BRAITMAN
OGC	SCHROEDER	GAMMILL	GEARIN (L)	SALTZMAN
MUNTZING/STAFF	MACCARY	KASTNER	GOULBOURNE (L)	B. HURT
CASE	KNIGHT	BALLARD	KREUTZER (E)	
GIAMBUSSO	PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	SHAO		MAIGRET (L)	MCDONALD
MOORE (L)(LWR-2)	STELLO	ENVIRO	REED (E)	CHAPMAN
DEYOUNG (L)(LWR-1)	HOUSTON	MULLER	SERVICE (L)	DUBE w/input
SKOVHOLT (L)	NOVAK	DICKER	SHEPPARD (L)	E. COUPE
GOLLER (L)	ROSS	KNIGHTON	SLATER (E)	
P. COLLINS	IPPOLITO	YOUNGBLOOD	SMITH (L)	D. THOMPSON (2)
DENISE	TEDESCO	REGAN	TEETS (L)	KLECKER
REG OPR	LONG	PROJECT MGR	WILLIAMS (E)	EISENHUT
FILE & REGION (3)	LAINAS		WILSON (L)	
MORRIS	BENAROYA	HARLESS		
STEELE	VOLLMER			

EXTERNAL DISTRIBUTION

1 - LOCAL PDR Hartsville, S.C.	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
1 - 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 GUSSMAN)
1 - P. R. DAVIS	1-CONSULTANTS	Rm B-127 GT
16 - ACRS SENT TO LIC ASST Teets	NEWARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-100
7-19-74		CT



Carolina Power & Light Company

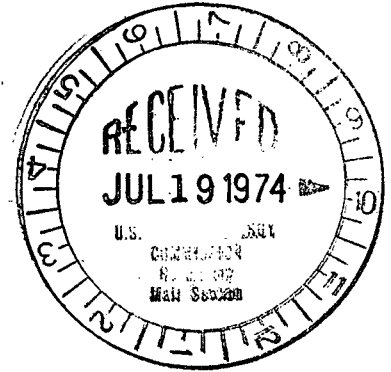
July 8, 1974

File: NG-3513 & NG-3514

Serial: NG-74-526

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

Mr. John F. O'Leary, Director
Directorate of Licensing
Office of Regulation
U. S. Atomic Energy Commission
Washington, D. C. 20545



Dear Sirs:

50-261

H. B. ROBINSON UNIT NO. 2
LICENSE DPR-23
BORON INJECTION TANK OUT OF SPECIFICATIONS (HIGH)

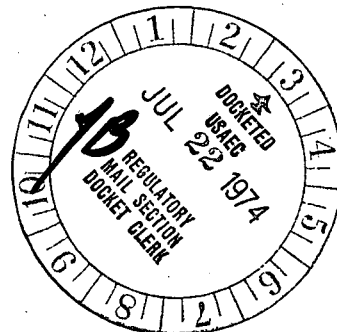
In accordance with 6.6.2.a of the Technical Specifications for H. B. Robinson Unit No. 2, the attached Abnormal Occurrence Report is submitted for your information. This report fulfills the requirement for a written report within ten days of an Abnormal Occurrence and is in accordance with the format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

Yours very truly,

E. E. Utley
Vice-President
Bulk Power Supply

JBM:DBW:mvp
Attachment

cc: Messrs. N. B. Bessac
B. J. Furr
W. E. Graham
D. V. Menscer
D. B. Waters



ABNORMAL OCCURRENCE REPORT

1. Report No. 50-261/74-12
- 2a. Date 7-2-74
- 2b. Occurrence Date 7-1-74
3. Facility H. B. Robinson Unit No. 2
Hartsville, South Carolina 29550

4. Identification of Occurrence

Boron Injection Tank Concentration out of Specifications. (High)

5. Condition Prior to Occurrence

The unit was operating at 90% reactor power and 506 MWe net electrical load with all systems normal.

6. Description of Occurrence

At 1115 hours, following routine sampling and analysis of the Boron Injection Tank it was reported that the Boron Concentration of the solution was 23,146 ppm which was 646 ppm above the limit permitted by Section 3.3.1.1.b of the Technical Specifications. The System Load Dispatcher was notified of this condition and informed that a load reduction would begin as soon as preparations were completed.

The Boron Injection Tank was immediately put on recirculation with a Boric Acid Tank of a concentration known to be within permissible limits and sampling scheduled for intervals of 15 minutes.

Preparations for placing the reactor in a hot shutdown condition were completed at 1201 hours and an orderly load reduction begun.

At 1209 hours, the Boron Injection Tank concentration was reported to be 22,441 which was within permissible limits, therefore, the load reduction was terminated and 90% reactor power re-established at 1220 hours.

7. Designation of Apparent Cause of the Occurrence

At 0700 hours on 7-1-74, "A" and "B" Boric Acid Tanks were placed in a recirculation mode in preparation for routine sampling. Following one hour recirculation, both tanks were sampled and analyzed with the following results: "A" Tank - 22,032 ppm Boron, "B" Tank - 22,268 ppm Boron. At 0906 hours, the Boron Injection Tank was placed on recirculation with "B" Boric Acid Tank for approximately two hours, after which the tank was sampled, analyzed and found out of specifications.

As the BIT was recirculated with a BAT which was known to be within specified limits, it must be assumed that the initial sample was not representative of the contents of the tank, although, the lines were flushed according to procedures prior to collection of the sample.

8. Analysis of Occurrence

Sampling and analysis of highly concentrated boric acid solutions is difficult due to precipitation of the sample as temperatures are reduced. Although a 1000 ml. sample is collected, the slightest particle of concentrated Boric Acid can result in erroneous values and as the span between permissible high and low concentration is relatively narrow, can lead to violations. This was apparently the cause of this Abnormal Occurrence as samples taken within one hour confirmed the tank to be within specifications.

9. Corrective Action

No immediate corrective action was required other than recirculating the liquid and resampling for further analysis.

For long range corrective measures, the operating group has been instructed, in writing, to maintain the Boric Acid Tanks within a range of 500 ppm above the lower Technical Specification Limit and 500 ppm below the high limit. This should prevent occurrences of this type, except, in instances where unrepresentative samples are collected.

The RC&T Technicians have been instructed to begin immediate resampling and analysis on a continuing schedule any time a tank is found outside of permissible limits.

Westinghouse personnel are presently engaged in a study of the feasibility of operating within a wider span of Boron concentrations while continuing to maintain the requirements for a safe reactor shutdown under accident conditions.

10. Failure Data

1. May 4, 1971 - Low BIT Concentration (Incident Report No. 22)
2. July 13, 1972 - Low BIT Concentration (Incident Report No. 45)
3. October 19, 1972 - Low BIT Concentration (Incident Report No. 48)
4. January 3, 1974 - Low BIT Concentration (Report No. 50-261/74-1)