

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL
(TEMPORARY FORM)

CONTROL NO: 11932

FILE: INCIDENT REPORT FILE

FROM: Carolina Power & Light Co. Raleigh, N.C. E.E.Utley			DATE OF DOC 10-1-75	DATE REC'D 10-15-75	LTR xxx	TWX	RPT	OTHER
TO: Mr. Norman C. Moseley			ORIG 1-signed	CC 10	OTHER	SENT AEC PDR xxx SENT LOCAL PDR xxx		
CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D 11		DOCKET NO: 50-261		
			xxxx					
DESCRIPTION: Ltr trans the following: ACKING DO NOT				ENCLOSURES: Abnormal Occurrence #75-15 on 10-21-75 concerning operation with more than one inoperable control rod				
PLANT NAME: H.B. Robinson #2								

FOR ACTION/INFORMATION

10-16-75 JGB

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INTERNAL DISTRIBUTION

REG FILE NRC PDR OGC, ROOM P-506A GOSSICK/STAFF CASE GIAMBUSSO BOYD MOORE (L) DEYOUNG (L) SKOVHOLT (L) GOLLER (L) (Ltr) P. COLLINS DENISE REG OPR FILE & REGION (2) MIPC/PE (3) STEELE	TECH REVIEW SCHROEDER MACCARY KNIGHT PAWLICKI SHAO **STELLO **HOUSTON **NOVAK ROSS IPPOLITO TEDESCO J. COLLINS LAINAS BENAROYA VOLLMER	DENTON **GRIMES GAMMILL KASTNER BALLARD SPANGLER ENVIRO MULLER DICKER KNIGHTON YOUNGBLOOD REGAN PROJECT LDR HARLESS	LIC ASST R. DIGGS (L) H. GEARIN (L) E. GOULBOURNE (L) P. KREUTZER (E) J. LEE (L) M. RUSHBROOK (L) S. REED (E) M. SERVICE (L) S. SHEPPARD (L) M. SLATER (E) H. SMITH (L) S. TEETS (L) G. WILLIAMS (E) V. WILSON (L) R. INGRAM (L) M. DUNCAN (E)	A/T IND. BRAITMAN SALTZMAN MELTZ PLANS MCDONALD CHAPMAN DUBE (Ltr) E. COUPE PETERSON HARTFIELD (2) KLECKER EISENHUT WIGGINTON F. WILLIAMS HANAUER
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EXTERNAL DISTRIBUTION

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1 - TIC (ABERNATHY) (1)(2)(10)	1 - W. PENNINGTON, Rm E-201 GT	1 - BROOKHAVEN NAT LAB
1 - NSIC (BUCHANAN)	1 - CONSULTANTS	1 - G. ULRIKSON, ORNL
1 - ASLB	NEWMARK/BLUME/AGBABIAN	1 - AGMED (RUTH GUSSMAN) Rm B-127 GT
1 - Newton Anderson		1 - J. D. RUNKLES, Rm E-201 GT
5 - ACRS SENT TO LIC ASST		
** SEND ONLY TEN DAY REPORTS		



Carolina Power & Light Company

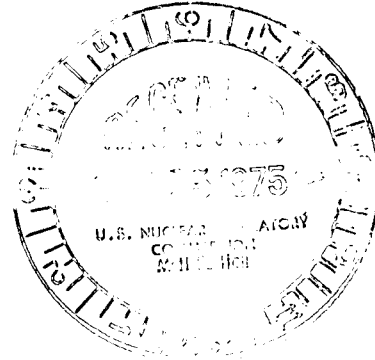
October 1, 1975

FILE: NG-3513 (R)

SERIAL: NG-75-1575

50-100

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



Dear Mr. Moseley:

H. B. ROBINSON UNIT NO. 2
LICENSE NO. DPR-23
OPERATION WITH MORE THAN ONE INOPERABLE CONTROL ROD

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.

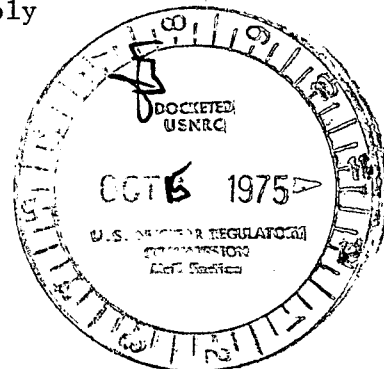
Yours very truly,

E. E. Utley
Vice-President
Bulk Power Supply

DBW:dwh

Attachment

cc: Messrs. H. R. Banks
N. B. Bessac
P. W. Howe
J. A. Jones
R. E. Jones
W. B. Kincaid
D. C. Knuth
L. I. Loflin
J. B. McGirt
D. B. Waters



11932

ABNORMAL OCCURRENCE REPORT

1. Report No. 50-261/75-15
- 2a. Report Date September 25, 1975
- 2b. Occurrence Date September 21, 1975
3. Facility H. B. Robinson Unit No. 2
Hartsville, South Carolina 29550
4. Identification of Occurrence

More than one inoperable rod was present with the reactor at power as a result of a rod control Urgent Failure. This constitutes an Abnormal Occurrence as defined in Technical Specifications 1.8.b and 3.10.5.2 (3.10.6.2 in proposed Technical Specifications).

5. Conditions Prior to Occurrence

The unit had been operating at steady-state full power until 0008 hours on September 21, 1975 when a power reduction for performance testing of secondary system pumps and the weekly turbine valve test was commenced. Power was reduced to approximately 50% and maintained at that level from 0210 to 0306 hours. The tests were completed and power level increase was commenced at 0306 hours. Rod Exercise Test, PT-21.2, was in progress. This test checks the operability of the full length control rods by inserting and withdrawing them 19 steps and observing rod position indication response.

6. Description of Occurrence

At 0315 hours on September 21, 1975, while withdrawing Shutdown Bank "A" in accordance with Periodic Test 21.2, Rod Exercise Test, an Urgent Failure alarm was received on the control panel (RTGB). This alarm prevented further step movement of the rods, leaving Shutdown Bank "A" at 218 steps on group 1 and 220 steps on group 2.

Personnel arrived at Rod Control Cabinet 1AC at 0319 hours and observed the Urgent Failure alarm light. An inspection of the cabinet components revealed an alarm light on the phase regulator. At 0330 hours the Urgent Failure alarm was manually reset. An attempt was made to move Shutdown Bank "A." The Urgent Failure alarm returned stopping the bank at 218 steps on group 1 and 221 on group 2. At 0340 hours, the decision was made to proceed with a normal reactor shutdown as far as practicable.

At 0344, the Urgent Failure alarm was reset, and this allowed movement of rods other than the twelve powered from cabinet 1AC. Load reduction for plant shutdown was commenced at 0345.

At 0429 hours with the reactor at approximately 9% power, a turbine trip was received due to high-high level in "C" steam generator. At 0441, the reactor was manually tripped from 6.5×10^{-5} amps due to the movement of control bank "C" in overlap with control bank "D" which caused an Urgent Failure alarm. This was expected when it occurred. All rods tripped satisfactorily.

7. Designation of Apparent Cause of Occurrence

The Urgent Failure resulted from a defective fuse in the AC power supply to Rod Control Cabinet 1AC. The fuse was improperly assembled during manufacture causing intermittent continuity through the fuse. When discovered, the fuse link had not burnt apart but was not making solid contact with one end of the fuse housing. This disabled one of the three phases from the AC power source to the power cabinet. When rod movement was attempted, the phase monitoring card in that cabinet sensed the loss of the AC phase and initiated the Urgent Failure alarm. With an Urgent Failure alarm present, the control rods cannot be moved. In this case there were 12 rods whose attempted movement would cause reappearance of the alarm.

8. Analysis of Occurrence

The reactor control rods and shutdown rods were all capable of tripping throughout the duration of the occurrence. Turbine power was held stable to prevent a Tavg-Tref deviation. All reactor trips were operable to provide the fullest protection possible. At no time was the reactor shutdown capability reduced by the presence of the inoperable rods. This occurrence did not create or threaten to create any hazard to the plant or the general public.

9. Corrective Action

The failure of the fuse resulted in a violation of a Limiting Condition for Operation. A unit shutdown was initiated to correct the situation.

A replacement fuse was installed after the defective fuse was discovered. It is felt that this was an isolated incident involving the assembly of this one fuse. Inspection of fuses of this type is not recommended since this may result in link damage due to twisting.

10. Failure Data

No past failures in rod control have been created by improperly assembled fuses.

Fuse Data:

Super-lag Renewable Fuse
Manufactured by Bussmann MFG.
McGraw-Edison Co.
Type - RES 30
Capacity - 1 to 30 amps
Voltage - 600 volts max.

Link Data:

Super-lag Link
Bussman MFG.
Type - LES 30
Capacity - 1 to 30 amps
Voltage - 600 volts max.