

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)  
DISTRIBUTION FOR INCOMING MATERIAL

50-261

REC: O'REILLY J P  
NRC

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CAROLINA PWR & LIGHT

DOCDATE: 01/17/78  
DATE RCVD: 01/24/78

DOCTYPE: LETTER NOTARIZED: NO  
SUBJECT:

COPIES RECEIVED  
LTR 0 ENCL 1

LICENSEE EVENT REPT (RD 50-261/77-32) ON 12/19/77 CONCERNING WHILE RETURNING  
TO FULL PWR FOLLOWING A REACTOR TRIP, TRANSIENT XENON CONDITIONS RESULTED IN A  
50% PWR RESTRICTION DUE TO CONSTANT AXIAL OFFSET CONTROLS.

PLANT NAME: H B ROBINSON - UNIT 2

REVIEWER INITIAL: XJM  
DISTRIBUTOR INITIAL:

\*\*\*\*\* DISTRIBUTION OF THIS MATERIAL IS AS FOLLOWS \*\*\*\*\*

INCIDENT REPORTS  
(DISTRIBUTION CODE A002)

FOR ACTION: BRANCH CHIEF REID\*\*W/4 ENCL

INTERNAL: REG FILE\*\*W/ENCL  
I & E\*\*W/2 ENCL  
SCHROEDER/IPPOLITO\*\*W/ENCL  
NOVAK/CHECK\*\*W/ENCL  
KNIGHT\*\*W/ENCL  
HANAUER\*\*W/ENCL  
EISENHUT\*\*W/ENCL  
SHAO\*\*W/ENCL  
KREGER/J. COLLINS\*\*W/ENCL  
L. CROCKER\*\*W/ENCL

NRC PDR\*\*W/ENCL  
MIPC\*\*W/3 ENCL  
HOUSTON\*\*W/ENCL  
GRIMES\*\*W/ENCL  
BUTLER\*\*W/ENCL  
TEDESCO\*\*W/ENCL  
BAER\*\*W/ENCL  
VOLLMER/BUNCH\*\*W/ENCL  
ROSA\*\*W/ENCL

EXTERNAL: LPDR'S  
HARTSVILLE, SC\*\*W/ENCL  
TIC\*\*W/ENCL  
NSIC\*\*W/ENCL  
ACRS CAT B\*\*W/16 ENCL

DISTRIBUTION: LTR 45 ENCL 45  
SIZE: 1P+1P+2P

CONTROL NBR: 780240045

\*\*\*\*\*

THE END

\*\*\*\*\*



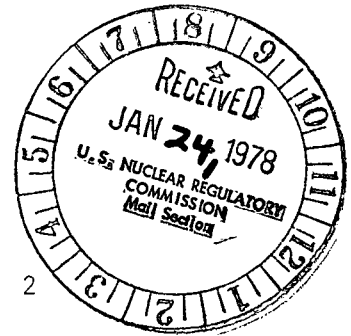
January 17, 1978

REGULATORY DOCKET FILE COPY

FILE: NG-3516 (R)

SERIAL: GD-78-095

Mr. James P. O'Reilly, Director  
U. S. Nuclear Regulatory Commission  
Region II, Suite 1217  
230 Peachtree Street, N.W.  
Atlanta, Georgia 30303



H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET 50-261  
LICENSE NO. DPR-23  
LICENSEE EVENT REPORT 77-32

Dear Mr. O'Reilly:

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,

A handwritten signature in cursive script, appearing to read 'H. R. Banks'.

H. R. Banks  
Manager  
Nuclear Generation

DCS:tme

Attachment

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

780240045

A002/5 \*  
0/1

# LICENSEE EVENT REPORT

CONTROL CLOCK: 

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(PLEASE PRINT ALL REQUIRED INFORMATION)

LICENSEE NAME: S C H B R 2  
 LICENSE NUMBER: 00-0000-00  
 LICENSE TYPE: 4110  
 EVENT TYPE: 03  
 CATEGORY: CONT  
 REPORT TYPE: L  
 REPORT SOURCE: L  
 DOCKET NUMBER: 050-0261  
 EVENT DATE: 121977  
 REPORT DATE: 011778

## EVENT DESCRIPTION

02 While returning to full power following a reactor trip, transient xenon conditions re-  
7 8 9 80  
03 sulted in a 50% power restriction due to Constant Axial Offset Controls (CAOC). This  
7 8 9 80  
04 constituted a condition leading to operation in a degraded mode permitted by Technical  
7 8 9 80  
05 Specification 3.10.2.9 which is reportable according to Specification 6.9.2.b.2. On  
7 8 9 80  
06 December 20, 1977, CAOC requirements were satisfied and the power increased. (Con't)  
7 8 9 80

PRIME

SYSTEM CODE				CAUSE CODE	COMPONENT CODE						COMPONENT SUPPLIER	COMPONENT MANUFACTURER				VIOLATION
0	7			F	Z	Z	Z	Z	Z	Z	Z	Z	9	9	9	N
7	8	9	10	11	12					17	43	44			47	48

## CAUSE DESCRIPTION

03	The event resulted from transient xenon conditions following a reactor trip with near	80
7 8 9		
03	end of cycle boron concentrations.	80
7 8 9		
10		80
7 8 9		

11	F	034	NA	A	NA
7 8	9	10 12	13 44	45	46 80
FORM OF ACTIVITY RELEASED					
12	Z	Z	NA		NA
7 8	9	10 11	12 44	45	46 80
CONTENT OF RELEASE					
AMOUNT OF ACTIVITY					
LOCATION OF RELEASE					

## PERSONNEL EXPOSURES

NUMBER			TYPE	DESCRIPTION
13	000		Z	NA

## PERSONNEL INJURIES

NUMBER			DESCRIPTION
1	0	0	NA

## OFFSITE CONSEQUENCES

[illegible]

LOSS OR DAMAGE TO FACILITY

TYPE			DESCRIPTION
15	Z		NA

PUBLICITY

1	7	NA	
7	8	3	80

### ADDITIONAL FACTORS

18 (Event Description Con't) (HBR-RO-77-32)

Supplemental Information Attached

NAME R. B. Starkey, Jr. *[Signature]* PHONE: (803) 332-1351

Supplemental Information For  
Reportable Occurrence 77-32

1. Report No.: 50-261/77-32
- 2a. Report Date: January 4, 1978
- 2b. Occurrence Date: December 19, 1977
3. Facility: H. B. Robinson Unit No. 2, Hartsville, South Carolina
4. Identification of Occurrence: While returning to full power following a reactor trip, transient xenon conditions resulted in a 50 percent power restriction due to Constant Axial Offset Controls (CAOC). This constituted a condition leading to operation in a degraded mode permitted by Technical Specification 3.10.2.9 which is reportable according to Paragraph 6.9.2.b.2.
5. Conditions Prior to Occurrence: The Unit was at 34 percent reactor power returning to full power following a reactor trip from full power.
6. Description of the Occurrence: At 1321 hours on December 19, 1977, reactor power was being increased subsequent to criticality. At approximately 15 percent power, all excore values of percent delta flux exceeded their target bands on the positive side. An effort was underway to return plant load to full power where a reactor trip occurred approximately two hours earlier. At 1521 hours, the total accumulated time, while outside of the target bands, exceeded the two-hour criteria of Technical Specification 3.10.2.9.b. This Specification requires that a "...power increase to a level greater than 50% of rated power is contingent upon the indicated axial flux difference (delta flux) not being outside its target band for more than two hours cumulative out of the preceeding 24 hour period." This requirement restricted power to 50 percent until 2303 hours on December 20, 1977. This constituted operation in a degraded mode permitted by Specification 3.10.2.9.
7. Designation of Apparent Cause: The occurrence resulted from transient xenon conditions and the inability to dilute boron quickly as a result of end-of-cycle boron conditions.
8. Analysis of Occurrence: As a result of the occurrence, no limiting condition for operation was exceeded. However, the event resulted in operation in a degraded mode permitted by Technical Specifications which is reportable according to Specification 6.9.2.b.2.
9. Corrective Action: Corrective actions for the conditions were dictated by the operating power level restriction of Technical Specifications.

Supplemental Information For  
Reportable Occurrence 77-32  
(continued)

10. Failure Data: Similar events occurred on: August 7, 1976 (Re: HBR2 RO 76-16)  
October 5, 1977 (Re: HBR2 RO 76-22)  
November 26, 1977 (Re: HBR2 RO 77-30)

RECEIVED DOCUMENT  
CONTROL DESK

DTB JAN 20 PM 12 33

U.S. NAC  
DISTRIBUTION SERVICES  
BRANCH