

## AEC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

(TEMPORARY FORM)

CONTROL NO: 5951

FILE: 410

FROM: Carolina Power & Light Company Raleigh, N.C. 27602 Mr. N.B. Bessac			DATE OF DOC 6-20-74	DATE REC'D 7-1-74	LTR X	TWX	RFT	OTHER
TO: J.F. O'Leary			ORIG 2 signed	CC	OTHER	SENT AEC PDR XXX SENT LOCAL PDR XXX		
CLASS	UNCLASS XXX	PROP INFO	INPUT	NO CYS REC'D 40		DOCKET NO: 50-261		

DESCRIPTION:  
Ltr reporting an abnormal occurrence at the  
H.B. Robinson.....concerning Safety injection  
system accumulator.....

ENCLOSURES:

ACKNOWLEDGED

PLANT NAME: H.B. Robinson

DO NOT REMOVE

FOR ACTION/INFORMATION

7-1-74

JB

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

## INTERNAL DISTRIBUTION

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

## EXTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> 1 - LOCAL PDR Hartsville, S.C.	(1)(2)(10)-NATIONAL LABS	1-PDR-SAN/LA/NY
<input checked="" type="checkbox"/> 1 - TIC (ABERNATHY)	1-ASLBP(E/W Bldg, Rm 529)	1-BROOKHAVEN NAT LAB
<input checked="" type="checkbox"/> 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
<input checked="" type="checkbox"/> 16 - ACRS SENT TO LIC ASST Teets	NEWMARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-309
7-1-74		GT



Carolina Power &amp; Light Company

June 20, 1974

File: NG-3513 and NG-3514

Serial: NG-74-745

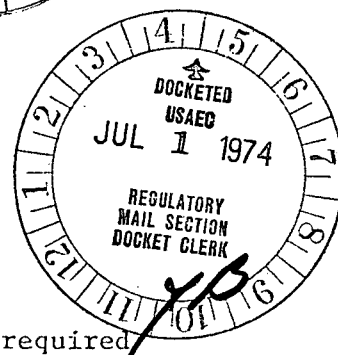
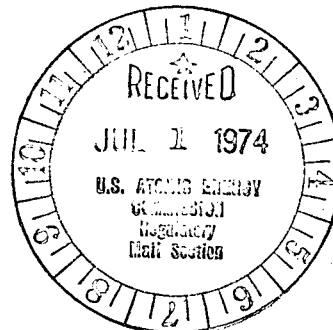
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Mr. John F. O'Leary, Director  
Directorate of Licensing  
Office of Regulation  
U. S. Atomic Energy Commission  
Washington, D. C. 20545

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

Dear Sirs:

H. B. ROBINSON UNIT NO. 2  
LICENSE NO. DPR-23  
SAFETY INJECTION SYSTEM ACCUMULATOR  
SAFETY RELIEF VALVE DESIGN REVIEW



The following unusual event report is submitted as required by Section 6.6.2.b of the Technical Specifications.

Carolina Power & Light Company completed a design review of the SIS Accumulator Safety Relief Valve installation on June 4, 1974. The review was performed in accordance with the Westinghouse publication, "Criteria and Guidelines for the Design of Safety and Relief Valve Installations on Westinghouse Pressurized Water Reactors." Safety valves 858 A, B and C are located at accumulator tanks A, B and C and are set to relieve at 700 psig. Each valve is supported by its two-inch inlet pipe which connects to the upper horizontal run between the accumulator tank and the tank level indicator.

The design review revealed the following problems:

1. The two-inch safety relief valve inlet pipe is stressed beyond allowable limits when considering the bending moment set up by the reaction force of blowing nitrogen and water at the three-inch elbow on the safety relief valve discharge.
2. The location of the safety relief valve inlet pipe on the horizontal level sensing line will cause a siphon head to develop in the level sensing line in event the safety relief

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valve lifts. Any water in the level float chamber and lower portion of the level piping will be drawn into the safety relief valve creating a slug or water hammer discharge. This will create forces of a higher magnitude than the continuous reaction forces at the safety relief valve discharge.

The following modifications will be accomplished during the 1974 refueling outage to eliminate the above conditions:

1. Three-inch tees will be installed in place of the three-inch elbows at each safety relief valve discharge. This will provide opposed discharge forces at each tee open end which will reduce the bending moment in the safety relief valve inlet pipe and result in the stresses being within allowable limits.
2. A one-fourth inch orifice will be installed above normal water level in the line between the level float chamber and the safety relief valve connection. This will reduce the volume of any water slug being siphoned into the safety valve during a discharge and will permit normal operation of the level transmitter. The orifice will prevent the water level from "bouncing" during discharge and will prevent the valve from passing slugs of water during discharge.

Yours very truly,

  
N. B. Bessac

Manager  
Nuclear Generation

JMB:mvp

cc: Messrs. T. E. Bowman  
B. J. Furr  
W. E. Graham  
D. V. Menscer  
E. E. Utley  
D. B. Waters  
R. A. Watson