Carolina Power & Light Company

August 22, 1974

FILE: NG-3514

SERIAL: NG-74-1054

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 Mr. Moseley:

H. B. Robinson Unit No. 2
License No. DPR-23
DRO Bulletin No. 74-8
Deficiency in ITE Molded Case Circuit Breakers,
Type HE-3

In response to your letter of July 31, 1974, concerning DRO Bulletin No. 74-8, an investigation was made as to the extent of ITE, Type HE-3 circuit breakers in use at H. B. Robinson Unit No. 2. The investigation indicated that no circuit breakers of this type are presently in use at this plant. Therefore, the potential for circumstances similar to those outlined in the subject bulletin do not exist at our facility.

Yours very truly,

E. E. Utley
Vice President
Bulk Power Supply

KPY/DBW/cg

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

Letter from Carolina Power and Light Company, E. E. Utley,
dated August 22, 1974 - ROB 74-8 - 50-261

SEP 14 1974

DISTRIBUTION:
H. D. Thornburg
RO:HQ (4)
Directorate of Licensing (4)
DR Central Files
John Rizzo, OOE

PDR
Local PDR
NSIC
TIC, OR

Carolina Power & Light Company

March 21, 1974

File: NG-3513 Serial: NG-74-352

50-261

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 Mr. Moseley:

H. B. ROBINSON UNIT NO. 2
LICENSE NO. DPR-23
DRO INFORMATION REQUEST NO. 74-2

In response to Information Request No. 74-2 of February 20, 1974, concerning Main Steam Isolation Valves, Carolina Power & Light Company submits the attached information for the H. B. Robinson Unit No. 2 Plant.

Yours very truly,

E. E. Utley
Vice-President
Bulk Power Supply

JMB:mvp
Attachment

cc: Messrs. N. B. Bessac
T. E. Bowman
B. J. Furr
B. H. Grier
W. B. Howell
D. V. Menscer
D. B. Waters

336 Fayetteville Street • P. O. Box 1551 • Raleigh, N. C. 27602

Misc Appl

INFORMATION REQUEST NO. 74-2
MAIN STEAM ISOLATION VALVES

1. H. B. Robinson Unit No. 2

2. Ebasco Drawing G-190196 "Flow Diagram, Main Extraction and Auxiliary Steam Systems" showing main steam isolation valves V1-3A, V1-3B, and V1-3C is attached. These valves are the swing check type.

3. Schutte and Koerting Drawing 67-X3-143 showing sectional views of the valve assembly with overall dimensions and material is attached.

4. The manufacturer of valves V1-3A, V1-3B, and V1-3C is Schutte and Koerting Company.

5. Steam Line Pressure

Full Power (2200 MWt)	840 psig
Hot Shutdown	1005 psig
Design Pressure	1085 psig

6. The functional design requirements are contained in the attached Ebasco Purchase Contract No. 434120, Item 2.

7. Schutte and Koerting Company provided an assessment of the adequacy of these valves to perform the isolation function as follows:

The disc and pin fabrication which failed at Surry Station consisted of a 410 stainless steel pin butt welded to a 410 stainless steel disc. Weld bevel angle was 25°. This angle makes it rather difficult to obtain fusion of weld metal to the plate material because of the shallow angle and low amperage stainless steel welding rod. An investigation of the causes of this failure showed poor weld penetration into the plate and further that the 410 stainless steel material did not temper properly in the heat treat operation. This may have also contributed to the brittleness of the joint. The Robinson valve disc and pins are of carbon steel which gives a much better weld penetration in this type of joint and of course the material is not hardened and thus brittleness is of no concern. Schutte and Koerting Company believes the disc-pin material and fabrication method used for the Robinson Plant will give reliable service without abnormal failure.

8. Operational Malfunctions of the Main Steam Isolation Valves

July 11, 1972:

Main Steam Isolation Valve "B": The loop No. 2 main steam isolation valve failed during test operation. The valve was disassembled and the lower yoke pin was found broken. The piston had come off the upper air cylinder stem causing considerable damage. A new pin and air cylinder were installed under the supervision of a Schutte and Koerting Company representative. The valve was returned to service in good condition.

August 7, 1972:

Main Steam Isolation Valve "C": The loop No. 3 main steam isolation valve was blowing steam past the packing. The valve was repacked and one gland stud was renewed because of rust and wear. The gland was adjusted and the valve test operated. The valve was returned to service with no apparent leaks.

May 6, 1973:

Main Steam Check Valve: The three main steam check valves were inspected and the following conditions were noted. The "A" valve was found with cuts across the disc and seat. The seat was built up with weld metal, refinished, and a new disc and rockshaft were installed. "B" valve was in good condition with a slight amount of wear on the rockshaft and bent arm. Both parts were replaced. The "C" valve was in good condition. The three valves were reassembled and returned to service in good condition.

Planned Modifications

There is presently a Plant Modification pending the Plant Nuclear Safety Committee's approval for the main steam isolation valves. This modification involves adjusting the length of the switch actuating arm which will limit the isolation valve test stroke to approximately 3^{o} of disc arm movement. This would prevent the valve from slamming shut during test, due to the flow of steam against the disc. The present circuitry incorporates an "anti-bounce" feature; therefore, circuitry modification will not be necessary.

Letter from Carolina Power and Light Company, E. E. Utley, dated March 21, 1974 - RO Information Request 74-2 - 50-261

MAR 25 1974

DISTRIBUTION:
H. D. Thornburg
RO:HQ (4)
Directorate of Licensing (4)
DR Central Files

PDR
Local PDR
NSIC
OIS, OR