



Carolina Power & Light Company

June 1, 1979

FILE: NG-3513 (R)

SERIAL: GD-79-1435

79 JUN 4 P 1: 28

USNRC REGION II
ATLANTA, GEORGIA

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

H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2
DOCKET NO. 50-261
LICENSE NO. DPR-23
RESPONSE TO IE BULLETIN NO. 79-04

Dear Mr. O'Reilly:

Carolina Power & Light Company has reviewed the subject document and provides the following response to items one through five of the bulletin.

Item 1: List all Seismic Category 1 piping systems (or portions thereof) where 3, 4, or 6-inch diameter Velan swing check valves are installed or are scheduled to be installed.

CP&L

Response: Carolina Power & Light Company has determined that all of the 3, 4, and 6-inch 1500-pound class Velan check valves installed in the H. B. Robinson Plant were supplied by Westinghouse. Subsequent to the identification by Velan of valves supplied to Westinghouse with incorrect drawing weights, Westinghouse provided CP&L with a list of valves to be investigated. These valves, identified by the plant Architect Engineer (AE) tag numbers, are as follows:

<u>AE Tag No.</u>	<u>Size</u>	<u>System</u>	<u>Location</u>
312A	3"	CVCS	Charging line loop 1 (RCS) hot leg just downstream of the regenerative heat exchanger (3-CH-2501R-15).
312B	3"	CVCS	Charging line loop 2 (RCS) cold leg just downstream of the regenerative heat exchanger (3-CH-2501R-15A).

Handwritten initials

7907190578

790195
OFFICIAL COPY

312C	3"	CVCS	Between the charging pump discharge header and the regenerative heat exchanger (3-CH-2502R-14).
399	3"	CVCS	In the let-down line between the nonregenerative heat exchanger and the mixed bed demineralizers (3-CH-151R-22).
879A	3"	SIS	"A" SI pump discharge isolation (3-SI-1501R-12).
879B	3"	SIS	"B" SI pump discharge isolation (3-SI-1501R-13).
879C	3"	SIS	"C" SI pump discharge isolation (3-SI-1501R-126).

Item 2: Verify for all those systems identified in Item 1 above that correct check valve weights were used in the piping analysis. Explain how and when the correct valve weights were determined.

CP&L

Response: The original analyses of the lines in which the seven valves are installed have been reviewed by the Plant AE, who performed the analyses, and the weights used have been identified. For all cases except valve 312B, 60 pounds were used, whereas, the actual weight is 85 pounds. For valve 312B, 450 pounds were used and the actual weight is 85 pounds.

Item 3: If incorrect valve weights were used, explain what actions have been taken or are planned to reevaluate the piping systems affected.

CP&L

Response: For the case of valve 312B, no reanalysis is required due to the conservatism of the original analysis.

New analyses have been performed for the cases of valves 312A, 312C, 879A, 879B, 879C, and 399 using the correct valve weights.

Item 4: Specify for all the affected systems identified in Item 1 whether modifications were or are required to the piping systems or their supports because of changes in valve weight. Also, include the basis for

June 1, 1979

this determination. For those systems in which the actual valve weight is greater than the design weight, provide a summary of stresses and loads and their allowable limits for the piping and its supports.

CP&L

Response: The increased check valve weights caused no significant change in the stresses or loads on the piping analyzed. A summary of the stresses and allowable limits follows:

<u>AE Tag No.</u>	<u>Line No.</u>	<u>Thermal</u>		<u>Seismic (DBE)</u>	
		<u>Max. Stress (Psi)</u>	<u>Allow Stress (Psi)</u>	<u>Max. Stress (Psi)</u>	<u>Allow Stress (Psi)</u>
312A	3-CH-15	25534	27013	21201	29380
399	3-CH-22	17608	27575	1721	36000
312C	3-CH-14	1168	27450	26244	36000
879A,B,C	3-SI-14				
	3-SI-12	18779	27325	20064	35640
	3-SI-126				
	4-SI-110				
	4-SI-109				

No modifications are required as a result of increased valve weights because the loadings on the supports did not change significantly (less than 33 pounds). However, structural analyses were performed on all supports installed on the affected lines and four supports were identified which require modification due to base plate flexibility considerations. These supports will be modified consistent with the requirements of the program initiated to satisfy the requirements of I&E Bulletin 79-02. The support modifications for safety related systems will be completed prior to start-up from the current refueling outage.

Item 5: Identify the analytical technique including identification of any computer codes used to determine the stresses indicated in Item 4.

CP&L

Response: All new analyses were performed using the latest version of Ebasco's Pipe Stress 2010 Program. (Ref. St. Lucie No. 2 FSAR, Section 3.11.2).

Mr. J. P. O'Reilly

-4-

June 1, 1979

Carolina Power & Light Company believes the above information satisfies the concerns of the bulletin, and therefore plans no further action regarding this subject.

Yours very truly,



E. E. Utley
Executive Vice President
Power Supply & Customer Services

CSB:jpw*

cc: NRC, OIE