

July 9, 1981

100-15-411-50

Mr. J. P. O'Reilly
Region II
United States Nuclear Regulatory Commission
101 Marietta Street, NW
Atlanta, Georgia 30303



SHEARON HARRIS NUCLEAR POWER PLANT
UNIT NOS. 1, 2, 3, AND 4
DOCKET NOS. 50-400, 50-401, 50-402, AND 50-403
IE BULLETIN 81-02

Dear Mr. O'Reilly:

Carolina Power & Light Company (CP&L) has completed its review of IE Bulletin 81-02, "Failure of Gate Type Valves to Close Against Differential Pressure," and has determined that each unit of the Shearon Harris Nuclear Power Plant (SHNPP) has seventeen (17) affected valves. An Interim Report from N. J. Chiangi to J. P. O'Reilly dated December 29, 1980 was submitted in accordance with 10CFR50.55(e). In addition to the list of ten valves submitted previously, three PORV block valves have been identified as requiring attention. The total thirteen (13) affected 3-inch valves are identified in Table 1, along with their planned service, the maximum differential pressure at which they would be required to close, and the safety consequences of the valve's failure to close. Also included in the table are the four affected 4-inch valves planned for service at SHNPP, as identified by IE Bulletin 81-02. These valves, however, have a functional requirement less than the operational capability and therefore, should not require modifications.

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The testing and redesign program to determine the best modification for each valve type has not yet been completed by Westinghouse. After receipt of the results of this program and an evaluation of the results by CP&L, the planned modifications and schedule for those modifications will be submitted to you.

If you have any further questions on this subject, please contact our staff.

Yours very truly,



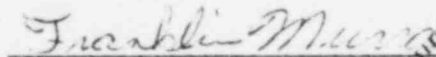
E. E. Utley
Executive Vice President
Power Supply and
Engineering & Construction

ONH/jc (N#63)
Attachment

cc: Director
Office of Inspection and Enforcement
United States Nuclear Regulatory Commission
Washington, D. C. 20555

E. Licitra (NRC)

E. E. Utley, having been first duly sworn, did depose and say that the information contained herein is true and correct to his own personal knowledge or based upon information and belief.


Notary Public

My commission expires: October 4, 1981



TABLE 1

VALVE I.D.	W-EMD MODEL REFERENCE	VALVE FUNCTION & SYSTEM	W VALVE LOCATION NO.	MAXIMUM ΔP (PSID) AS FLOW APPROACHES ZERO		ΔP (PSID) BELOW WHICH VALVE WILL CLOSE (AS SHIPPED)	POTENTIAL SAFETY CONSEQUENCES
				Equip. Spec.	Funct. Reqmt.		
3-GM88FNH	3GM99	PZR. PORV Block Reactor Coolant System	8000A ^{a)}	2750	2750	750	1, 5
3-GM88FNH	3GM99	PZR. PORV Block Reactor Coolant System	8000B ^{b)}	2750	2750	750	1, 5
3-GM88FNH	3GM99	PZR. PORV Block Reactor Coolant System	8000C	2750	2750	750	1, 5
3-GM78FN	3GM99	Chg. Pump Miniflow Iso. Chem. & Vol. Control Sys.	8106	2750	2750	750	2, 4
3-GM78FN	3GM99	Chg. Line Iso. Chem. & Vol. Control Sys.	8107 ^{c)}	2750	2750	750	2, 4
3-GM78FN	3GM99	Chg. Line Iso. Chem. & Vol. Control Sys.	8108 ^{c)}	2750	2750	750	2, 4
3-GM78FN	3GM99	Boron Inj. Tank Iso. Safety Inj. System	8801A	2750	1200	750	2, 3
3-GM78FN	3GM99	Boron Inj. Tank Iso. Safety Inj. System	8801B	2750	1200	750	2, 3
3-GM78FN	3GM99	Boron Inj. Tank Iso. Safety Inj. System	8803A	2750	1200	750	2, 3
3-GM78FN	3GM99	Boron Inj. Tank Iso. Safety Inj. System	8803B	2750	1200	750	2, 3
3-GM78FN	3GM99	Hot Leg Recirc. Iso. Safety Inj. System	8884	2750	1200	750	2, 3
3-GM78FN	3GM99	Cold Leg Recirc. Iso. Safety Inj. System	8885	2750	1200	750	2, 3
3-GM78FN	3GM99	Hot Leg Recirc. Iso. Safety Inj. System	8886	2750	1200	750	2, 3

TABLE 1 (Cont.)

VALVE I.D.	W-EMD MODEL REFERENCE	VALVE FUNCTION & SYSTEM	W VALVE LOCATION NO.	MAXIMUM ΔP (PSID) AS FLOW APPROACHES ZERO		ΔP (PSID) BELOW WHICH VALVE WILL CLOSE (AS SHIPPED)	POTENTIAL SAFETY CONSEQUENCES
				Equip. Spec.	Funct. Reqmt.		
4-GM78FN	4GM88	Chg. Pump Disch. XO Iso. Chem. & Vol. Control Sys.	8132A	2750	500	750	6
4-GM78FN	4GM88	Chg. Pump Disch. XO Iso. Chem. & Vol. Control Sys.	8132B	2750	500	750	6
4-GM78FN	4GM88	Chg. Pump Disch. XO Iso. Chem. & Vol. Control Sys.	8133A	2750	500	750	6
4-GM78FN	4GM88	Chg. Pump Disch. XO Iso. Chem. & Vol. Control Sys.	8133B	2750	500	750	6

Notes: Each valve contracted for all four Shearon Harris units.

- a) Unit 2 valve sent to Marshall Test Loop for EPRI Test Program.
- b) Unit 2 valve sent to Pilgrim.
- c) Unit 2 valve sent to Farley via Westinghouse.

TABLE 1 (Cont.)

Key to Potential Safety Consequences

<u>ID No.</u>	<u>Consequence</u>
1	(PORV Block Valves) Potential incomplete isolation of pressurizer PORV.
2	Potential cavitation of a centrifugal charging pump or safety injection pump or safety injection pump due to operation beyond maximum runout flow.
3	Potential inability to perform post-accident containment isolation.
4	Potential degradation of safety injection flow below values given in SAR.
5	Potential inability to isolate RCS pressure boundary.
6	None yet identified - valves meet functional requirement.