Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

October 9, 1992

Dr. Thomas Murley, Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: Generic Letter 90-06, "Resolution of Generic Issue 70, 'Power-operated Relief Valve and Block Valve Reliability,' and Generic Issue 94,' 'Additional Low-Temperature Overpressure Protection for Light Water Reactors."

Byron Station Units 1 and 2, NRC Docket Numbers 50-454/455, Braidwood Station Units 1 and 2, NRC Docket Numbers 50-456/457, Zion Station Units 1 and 2, NRC Docket Numbers 50-295/304.

NRC TAC Numbers M77332, M77333, M77334, M77235, M77397 and M77398

Reference: 1) Letter from NRC, R.M. Pulsifer to CECo, T.J. Kovach dated August 10, 1992.

2) Letter from CECo, D. Taylor to the NRC dated December 6, 1990.

Dr. Murley,

The NRC letter (reference 1) provides the staff's review of Commonwealth's response (reference 2) to Generic Letter 90-06. The purpose of this letter is to provide clarification to assure the staff that Commonwealth Edison is meeting the requirements of the Generic Letter. The NRC staff position requires that valves in PORV control air systems be included within the scope of a program covered by subsection IWV, "Inservice Testing of Valves in Nuclear Power Plants," of Section XI of the ASME Boiler and Pressure Vessel Code. In reference 1, the NRC staff concluded that Commonwealth Edison's response did not adequately meet this position. The staff did not accept the position that successful completion of the PORV stroke test indirectly verifies operability of the control air systems.

A PORV stroke test and an accumulator pressure decay test are performed at Byron, Braidwood, and Zion Stations. These tests assure the capability of the safety backup supply system, the air check valves that isolate the safety backup accumulator supply in the event of loss of normal air supply, and the control air system valves.

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The PORV stroke test verifies operability of the control air valves by testing them under the same conditions and through the same flow path that would exist under both normal and safety backup air supply conditions. The Byron, Braidwood and Zion Station configurations do not contain distinctly separate normal (nonsafety) and safety backup air supply systems. In reference 1, the NRC staff apparently believes that the air supply systems at Byron, Braidwood, and Zion Stations are separate, as other plants are configured.

At Byron, Braidwood, and Zion, instrument air is the normal air supply source and an air accumulator is the safety backup supply source. At Byron and Braidwood the normal flow path of instrument air to the PORV control air valves passes through the safety backup air accumulator. Therefore, the flow to the control air valves must go through the safety backup accumulator regardless of whether the operating air supply is from the normal source (instrument air) or from the backup air supply (air accumulator). At Zion, the instrument air does not pass through the accumulator. There is one isolation valve between the accumulator and the instrument air header which remains open. Therefore, the same flow path to the control valves is utilized regardless of whether the operating air is from the normal source or backup air supply. Two attachments are enclosed; one for the Byron and Braidwood system configurations and one for the Zion system configuration.

The IST program PORV stroke test is performed by using the normal air supply path. The test also verifies that the air check valves that isolate the safety backup accumulator in the event of a loss of normal air supply will open. In addition, a pressure decay test is performed to verify that the check valves will close and that the valves are leak tight. In this test, the normal air supply is interrupted using an isolation valve upstream of the pressure regulator valve, and the safety backup accumulator is then monitored for any drop in pressure.

Therefore, Commonwealth Edison assures the capability of the safety backup supply to adequately operate the PORVs by performing the normal IST program and the testing described above at Byron, Braidwood, and Zion Stations. The design of the air supply system allows the normal and backup systems to be tested simultaneously. CECo will continue to perform these tests to satisfy the requirements of Generic Letter 90-06.

Respectfully,

Marcia A. Jackson
Nuclear Licensing Administrator
Generic Issues

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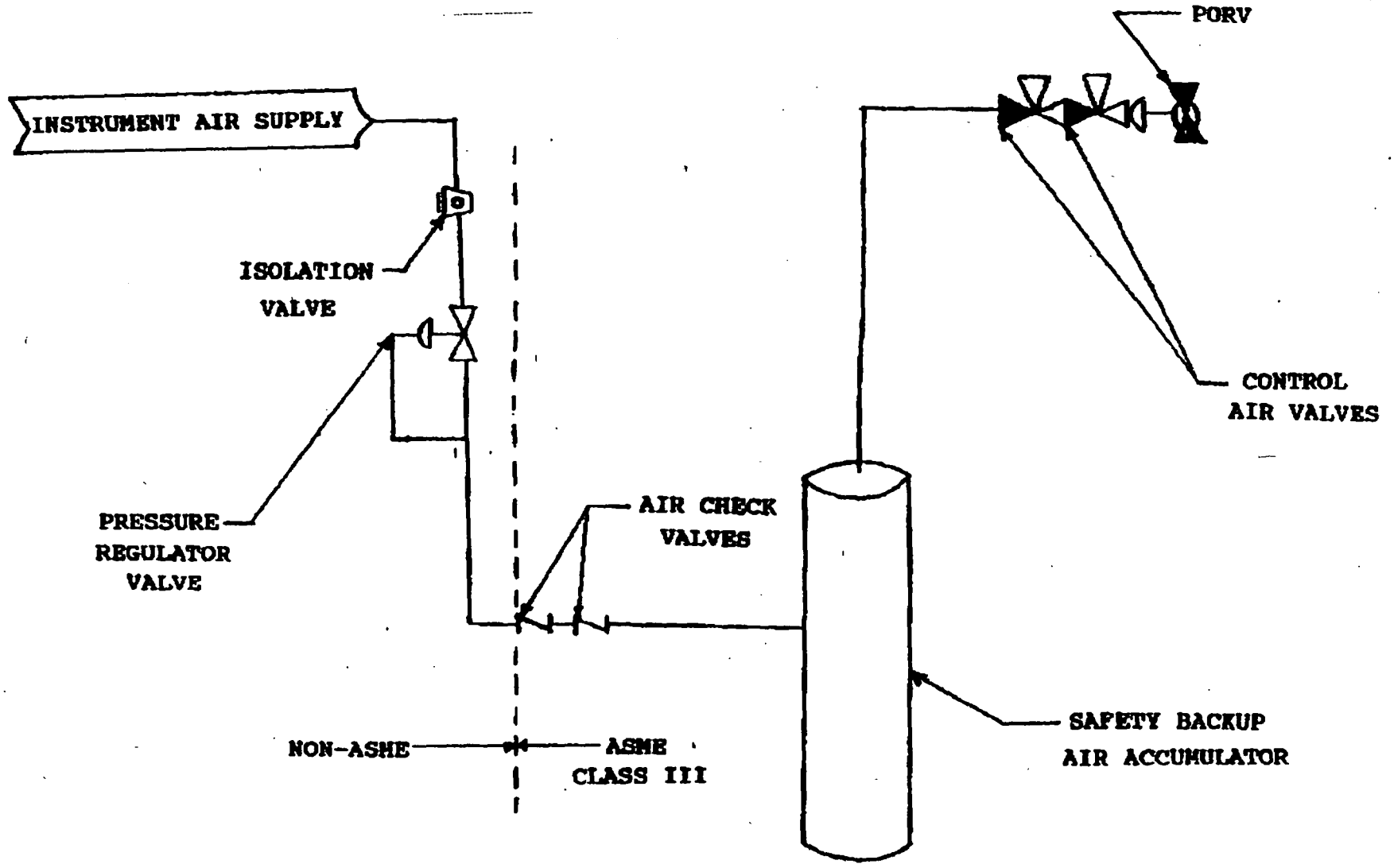
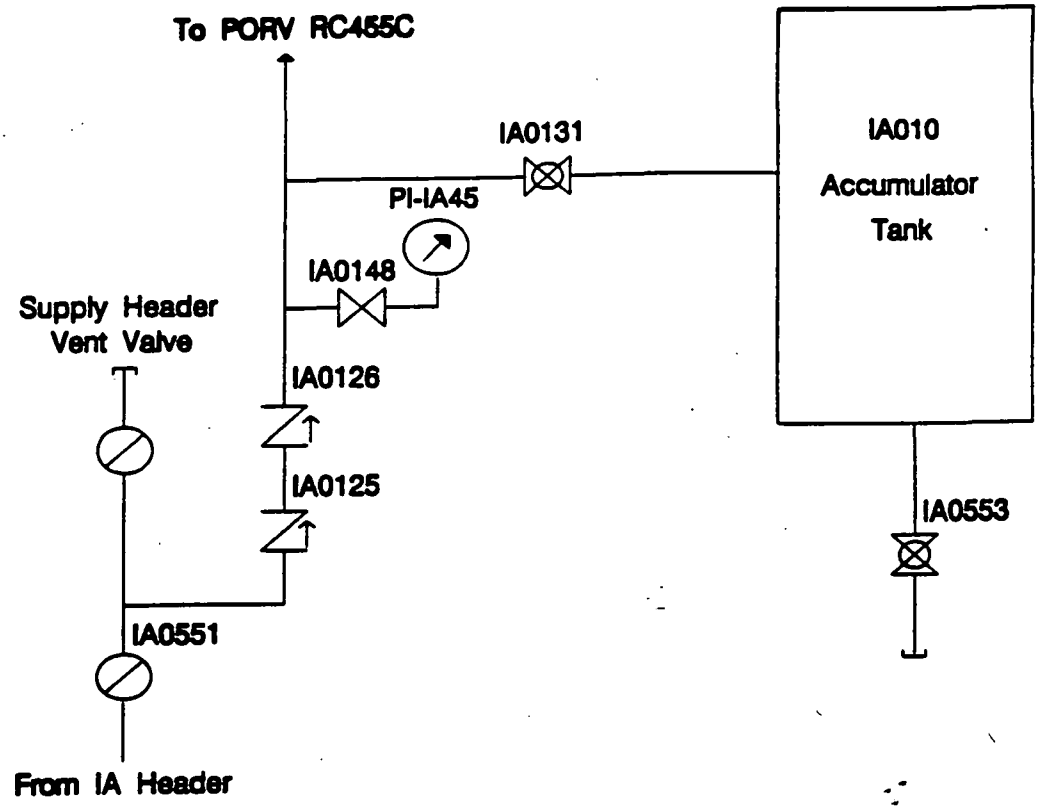
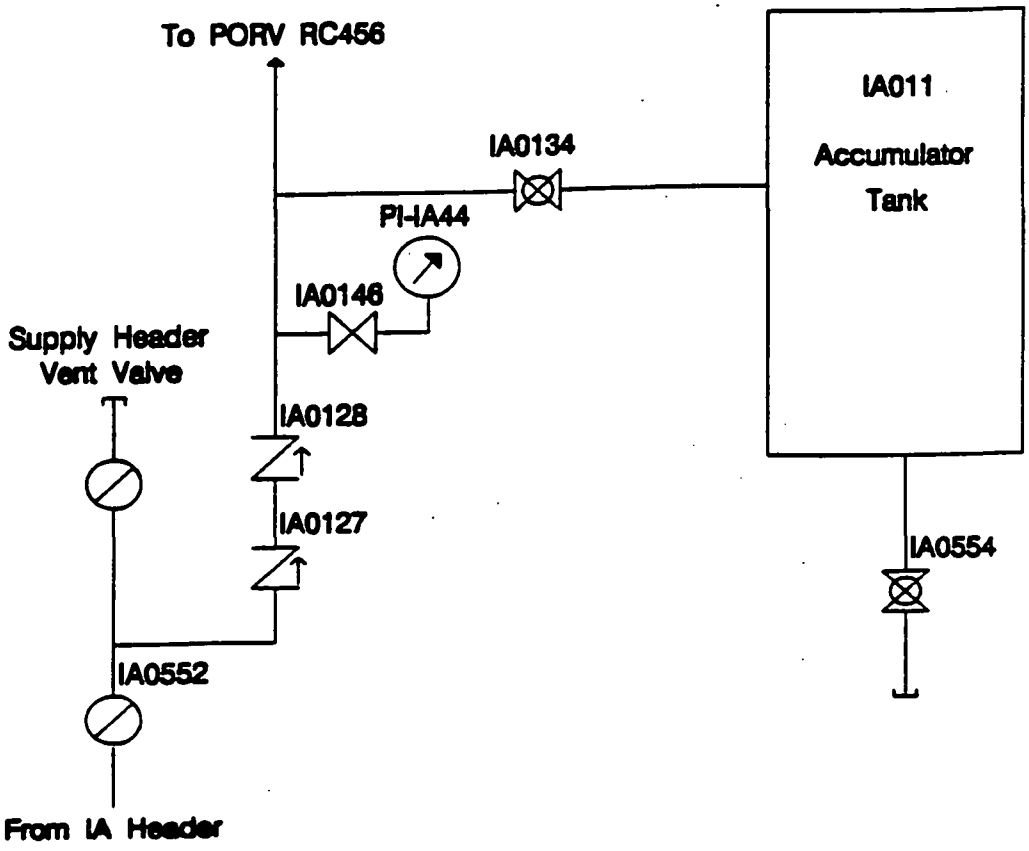


BYRON AND BRAIDWOOD STATION SYSTEM CONFIGURATION

ATTACHMENT





ZION STATION SYSTEM CONFIGURATION