

Attachment to LER 80-29/03L-1
Beaver Valley Power Station
Duquesne Light Company
Docket No. 50-334

Corrective Actions Summary

Penetration #2

The component cooling water to the residual heat removal heat exchanger inside containment isolation valve [MOV-CC-112B3] did not hold the initial applied test pressure. The motor operator limit switch set-point was re-adjusted and the valve was successfully retested. No safety problem existed since the redundant isolation valve [CC-252] was available.

Penetration #14

The inside containment [TV-CC-110E3] and outside containment [TV-CC-110E2] recirc. cooling coils AC system isolation valves did not hold the original applied test pressure. The valves seating surfaces were machined and the valve gaskets were replaced. Leakage was reduced to 65.28 SCF/D for [TV-CC-110E2] and 20.4 SCF/D for [TV-CC-110E3]. Potential safety problems were minimized by the physical design of this system. The air conditioning chilled water system is a sealed system inside containment supplying cooling water to the recirculation cooling coils and the containment air compressor aftercoolers. Additional back-up isolation is available by check valve [AC-353] and shutting [AC-150] and by the normally closed [MOV-RW-116 and 117].

Penetration #15

The charging and volume control system containment isolation valve [MOV-CH-289] did not hold the initial test pressure. A new disc was lapped in place and the valve was repacked. The retest result was an as-left leakage of 13.9 SCF/D. No safety problem existed since a redundant isolation check valve [CH-31] inside containment was available.

Penetration #18

The "C" reactor coolant pump component cooling water inlet isolation valve [TV-CC-103C] did not hold the initial test pressure. The valve stroke and limit switches were adjusted with final leakage of 12.25 SCF/D. No safety problem existed since the redundant isolation valve [TV-CC-103C1] was available.

Penetration #19

The seal return containment isolation valve [MOV-CH-378] and the containment isolation pressure equalizer valve [CH-369] did not hold the initial test pressure. A new disc and spring were installed in [CH-369] and repairs were made on [MOV-CH-378]. Final combined leakage past the two parallel valves was 114.24 SCF/D. No safety problem existed since the redundant seal return isolation valve [MOV-CH-381] was available.

Penetration #20

Safety injection accumulator fill line check valve [SI-42] did not hold the initial applied test pressure. Maintenance was performed resulting in final test leakage of 34.3 SCF/D. No safety problem existed since the redundant safety injection accumulator fill line isolation valve [SI-41] was available.

Penetration #27

The reactor coolant pump "1A" CCR outlet containment inside isolation valve [TV-CC-105E1] did not adequately hold the initial applied test pressure. The valve was repaired and the stroke was adjusted. The final leakage rate was 45.912 SCF/D. No safety problem existed since the redundant outside isolation valve [TV-CC-105E2] was available.

Penetration #28

The letdown orifice isolation valves [TV-CH-200A, B, & C] did not hold the initial test pressure. The valve stems, seats and plugs were replaced with the retest resulting in 13.1 SCF/D leakage. No safety problem existed since the redundant isolation valve [TV-CH-204] was available.

Penetration #44

The containment activity monitor suction containment isolation valves [TV-CV-101A & B] did not hold the initial test pressure. The stroke was adjusted on these valves with retest leakage of .8168 SCF for [TV-CV-101A] and 498.3 SCF/D for [TV-CV-101B]. Valve [TV-CV-101B] was then rebuilt resulting in final test leakage of 32.73 SCF/D. Potential safety implications are minimized since radioactive leakage through the valves would pass through the particulate and gas activity monitors [RM-215 A & B] allowing manual isolation at the containment activity monitor suction isolation valve [CV-15].

Penetration #46

The fill header control valve [FCV-CH-160] did not hold the initial applied test pressure. The stem-plug and seat were replaced in valve [FCV-CH-160] resulting in a final leakage rate of 32.8 SCF/D. No safety problem existed since the redundant fill header check valve [CH-170] was available. Valve [CH-170] did not initially meet the requirements of BVT 1.47.3 which required valve lifting at a differential pressure greater than 1.2 psi. The initial testing showed actual lifting at approximately 1.15 psi. This requirement per BVPS Unit #1 FSAR for a check valve on a containment incoming line is incorporated to preclude inleakage after a passive line failure between containment and the outside isolation valve. Inleakage would not be a problem since this line is isolated from the primary system by [MOV-RC-556A, 556B, and 556C].

Penetration #49

Pressurizer relief tank nitrogen supply check valve [RC-68] did not hold the initial applied test pressure. A new disc spring and gasket were installed resulting in final test leakage of 18.8 SCF/D. No safety problem existed since the redundant pressurizer relief tank nitrogen isolation valve [TV-RC-101] was available.

Penetration #60 and #62

The 1A and 1B low head safety injection to hot legs check valves [SI-13] and [SI-14] did not hold the initial test pressure. The discs were found to be oriented incorrectly on both valves when they were disassembled for maintenance. The disc was rotated and valves retested resulting in test leakage of 228.7 SCF/D for [SI-13] and [SI-14]. No safety problem existed since 1A and 1B low head safety injection to reactor coolant hot legs motor operated valves [MOV-SI-890A] and [MOV-SI-890B] were available. A problem was found to exist with the internal arrangement in these type velan check valves. Certain valve disc types will be replaced during the second refueling.

Penetration #68 and #69

The reactor containment sump suction valves to the 1A and 1B low head safety injection pumps [MOV-SI-860A and B] did not hold the initial test pressure. The valves were repacked and the seating surfaces were lapped. The final test resulted in a combined leakage rate of 335 SCF/D for the two valves. No safety problem existed since these penetrations are designed to have a water seal between the containment and outside atmosphere preventing leakage in or out of containment by flooding of the containment sump during an accident.

Penetration #87

The recombiner 1B containment return line isolation valve [HY-111] and inside containment check valve [HY-120] both passed the initial leak test. [HY-120] did not pass the initial BVT 1.47.3 lift test. A weight change was made on the check valve lift arm. A successful BVT 1.47.3 and type "C" retest were performed on [HY-120]. No safety problem existed since isolation was available with [HY-111].

Penetration #88

The recombiner 1A containment return line isolation valve [HY-110] and inside containment check valve [HY-119] passed the initial type "C" leak test, but [HY-119] did not meet the requirements of BVT 1.47.3. A maintenance inspection of valve [HY-119] found an "O" ring incorrectly installed. The rubber disc, gland, and gaskets were replaced and the valve was retested with an acceptable leakage of 2.4 SCF/D. The valve also met BVT 1.47.3 requirements on the retest. No safety problem existed since valve [HY-110] was available.

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Penetration #96 and #113

The boron injection tank outlet isolation valves [MOV-SI-867C] and [MOV-SI-867D] did not hold the initial applied test pressure. Valve [MOV-SI-867C] was replaced and valve [MOV-SI-867D] was rebuilt. A retest was performed resulting in an acceptable combined leakage for [MOV-SI-867C], [MOV-SI-867D] and [SI-91] of 359.04 SCF/D. No safety problem existed since the boron injection tank to reactor coolant cold leg check valve [SI-94] was available.