

Notes

1. Abbreviations and Acronyms Used

BREATH. AIR - Breathing Air
CL - Closed Loop
CLEM - Closed Loop Ex-Vessel Machine
CLIV - Cold Leg Isolation Valve
CLCV - Cold Leg Check Valve
CRDM - Control Rod Drive Mechanism
DHX - Dump Heat Exchanger
FTP - Fuel Transfer Port
HLIV - Hot Leg Isolation Valve
HTS - Heat Transport System
H & V - Heating and Ventilation
ICCWS - In-Containment Chilled Water System
IDS - Interim Decay Storage
INSTR. AIR - Instrument Air
IT - Instrument Tree
IVHM - In-Vessel Handling Machine
M - Containment Penetration Number
MTL - Mobiltherm

2. Valve fails safe "as is" under loss of electrical power. Valve fails safe "open" on loss of pneumatic service. On loss of plant electrical power valve can be opened from Panel C-127 using 1E batteries.
3. Under a loss of electrical power the valve will move to the fail safe position to provide sufficient outgassing volume for the RAPS and/or CAPS charcoal beds.
4. Valve is only open while dryer is being recharged.
5. All valves are ASME Code Class I, Seismic Category I spring loaded check valves (11 on each of the 3 IVHM's, 1 on each of the 9 CRDM's, 1 on each of 3 FTP's and 6 on each of the IT's). These valves provide the seismic boundary on the head mounted component purge lines. They will close on cessation of purge supply.

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Safety Function Symbolism:

- A. Must response to remote actuation, if control power is not lost.
- B. Must return to safe position (closed or open) during or after an earthquake if control power (electric or pneumatic) is lost during and after an earthquake.
- C. Must maintain system pressure boundary integrity during and after an earthquake
- D. Must attain the closed position in a specific length of time (indicated) during or after the earthquake after a command to close (or open). This is a design requirement.
- E. Must function as designed after an earthquake. Relief valves must open and reclose as required in response to system pressure excursions without sticking; Check valves must open and close in response to flow reversal or interruption without sticking; Rupture discs must burst to allow passage of medium in response to predetermined overpressure conditions; Manual valves must be capable of operation; Pressure regulating valves must continue to maintain set pressure or close as required by system conditions without sticking or otherwise failing.
- F. Solenoid must vent and must remain functional by 1E power.
- G. Solenoid must keep pneumatic signal on valve in last energized position.

This report was prepared as a preliminary draft for the FSAR. Information should be treated as draft subject to change upon final approval.