








- GENERAL NOTES:
1. FOR ADDITIONAL INFORMATION ON DESIGN REQUIREMENTS OF THIS SYSTEM SEE:
PROCESS FLOW DIAGRAM
SYSTEM DESIGN SPECIFICATION
FUNCTIONAL CONTROL PROGRAM M-241 SHEET 2 OF 2
FOR IDENTIFICATION OF THE ABOVE SEE MASTER PARTS LIST.
 2. LOCATE SUPPRESSION CHAMBER SPRAY RING HEATER AS CLOSE AS POSSIBLE TO THE TOP OF THE SUPPRESSION CHAMBER.
 3. ALL VENTS AND DRAINS TO KRAUSSTEIN ARE TO BE ROUTED BY A.C.E.
 4. BECHTEL MUST AND NECESSARY PIPING AND VALVES TO ALL HIGH AND LOW POINTS NOT SERVED BY EQUIPMENT VENTS AND DRAINS.
 5. CHEMICAL CLEANING CONNECTIONS, VALVES, ETC. AS REQUIRED ARE PROVIDED BY A.C.E.
 6. ALL MOTOR OPERATED VALVES HAVE REMOTE MANUAL SWITCHES AND INDICATOR LIGHTS IN THE MAIN CONTROL ROOM. ISOLATION VALVES TO BE REMOVED FROM VALVE 1001-21 HAVE SMALL LIGHT INDICATION IN THE MAIN CONTROL ROOM.
 7. ALL VENTS AND DRAINS ARE 3/4" UNLESS OTHERWISE SPECIFIED.
 8. REFER TO BECHTEL PIPING SPECIFICATIONS 6480-M-300 AND M-400 FOR PIPING MATERIALS, WELD CLASSIFICATIONS AND INSTRUMENT PIPING STANDARDS.
 9. THE RHR SYSTEM IS A CLASS 1 SYSTEM EXCEPT AS NOTED.
 10. ALL EQUIPMENT & INSTRUMENTATION ARE SUPPLIED BY A.C.E. UNLESS DESIGNATED (A BECHTEL SUPPLY). ALL PIPING AND VALVING IS SUPPLIED BY BECHTEL UNLESS DESIGNATED BY (A.C.E. SUPPLY).
 11. THESE DRAWINGS INCORPORATES REVISIONS 1, 2, 3 & 4 OF CE-APP'D DRAWING 1206382.
 12. REFER TO M-215 FOR COOLING WATER TO RHR PUMP SEAL COOLER.
 13. A SOURCE OF WATER IS PROVIDED TO MAINTAIN THE SYSTEM AND FOR WATER. WATER PIPING LOCATION UPSTREAM OF AND NON-ISOLATABLE FROM VALVE 1001-23.
 14. FOR CONDENSING PUMP AND INSTRUMENT LINE DETAILS, SEE BECHTEL MESSAGE.
 15. LOCAL CONTROL SWITCH "S" LOCATED ON ALTERNATE SHUTDOWN PANEL SHALL BE IN "REMOTE" TO OPERATE THESE VALVES FROM CONTROL ROOM.
 16. LOCAL CONTROL SWITCH IN ALTERNATE SHUTDOWN PANEL WILL INTERRUPT POSITION INDICATOR IN CONTROL ROOM.
 17. CHECK VALVES 1001-RBA & B ARE PREVIOUSLY PROVIDED WITH UNIDIRECTIONAL AND BIPASS VALVES. CHECK VALVES NOW THE AIR OPERATORS HAVE BEEN REMOVED PER IMPOCS-82 5X-M-004.
 18. FOR TEMPERATURE ELEMENT / TORUS PENETRATION CROSS-REFERENCE SEE DRAWING M-004.
 19. FLEX HOSE SHALL BE 1/2" O.D. BRASS BRAIDED HOSE, MODEL NO. M-2099 WITH BUTYL BLEND LINING, EPDM COVER COMPLETE WITH 316 STAINLESS STEEL METAL BOLL JOINT ASSEMBLY WITH 3/4" MANIFOLD 3/4" MANIFOLD. FLEX HOSE SHALL BE FIELD PROCURED AND ROUTED TO CHEMICAL WASTE.
 20. LEVEL SWITCH LS-8000 HAS BEEN ELECTRICALLY DISCONNECTED FROM ISOLATED IN PLACE. PROVIDE PRESSURE BOUNDARY FUNCTION ONLY.
 21. M-1001-50 DRAIN IS LOCATED ON THE VALVE BONNET WHICH IS NOT TO BE REMOVED UNTIL THE DRAIN IS BEING REORIENTED. SEE ORIGINAL DESIGN SPECIFICATION M105.
 22. RO-1001-75 INSTALLED DURING AUGMENTED FUEL POOL COOLING MODES 1 AND 2.
 23. REFER TO FUNCTIONAL CONTROL DIAGRAMS, RHR SYSTEMS. (SEE REFERENCE DRAWINGS)
 24. REFER TO FUNCTIONAL CONTROL DIAGRAMS, CORE SPRAY SYSTEMS. (SEE REFERENCE DRAWINGS)
 25. REFER TO FUNCTIONAL CONTROL DIAGRAMS, RHR SYSTEMS. (SEE REFERENCE DRAWINGS)
 26. REFER TO FUNCTIONAL CONTROL DIAGRAMS, NUCLEAR BOILER. (SEE REFERENCE DRAWINGS)
 27. REFER TO CONTAMINATION ATMOSPHERIC CONTROL SYSTEM, SM434 SM3. (SEE REFERENCE DRAWINGS)
 28. REFER TO REACTOR PROTECTION SYSTEM, & D. (SEE REFERENCE DRAWINGS)
 29. DRAINS ON VALVES M01001-28A & 28B CONTAIN THREADED CAPS WHICH ARE WELDED.
 30. THE POWER LEADS TO M01001-60 MOTOR OPERATOR HAVE BEEN DISCONNECTED AT MCC AND MOTOR.
 31. THE PIPING OUTSIDE OF CONTAINMENT ATTACHED TO PENETRATION 2-17 HAS BEEN AWAYED IN PLACE BY PDC 86-526.
 32. SUCTION STRAINERS BS-8002A, AND BS-8002B ARE SHARED BY THE CORE SPRAY AND RESIDUAL HEAT REMOVAL SYSTEMS. THEY APPEAR ON PILGRIM STATION DRAWINGS M241 SHEET 1, M242, ISM241 SHEET 1 AND ISM242.
 33. THE INTERNALS OF VALVE 1001-132 HAVE BEEN REMOVED FOR DETAILS SEE DRAWING NO. M132C17.

 SYSTEM INTENDED
FUNCTION BOUNDARY

COMPONENTS SUBJECT TO AMR

-  RESIDUAL HEAT REMOVAL SYSTEM AMRM-02
-  CORE SPRAY SYSTEM AMRM-03
-  HIGH PRESSURE COOLANT INJECTION SYSTEM AMRM-05
-  REACTOR CORE ISOLATION COOLING SYSTEM AMRM-06
-  PRIMARY CONTAMINANT PENETRATIONS AMRM-20
-  FUEL POOL COOLING AND FUEL HANDLING AND STORAGE SYSTEMS AMRM-21
-  REACTOR COOLANT SYSTEM PRESSURE BOUNDARY AMRM-33

0	10-31-05					
NO.	DATE	DESCRIPTION	BY	ENG	CHK	APP
REVISIONS						
LRA-M-241-SH-01-0						
CAD FILE						
LRA-M-241-SH-01_E81.DGN						
RASTER FILE						
M-241-SH-01_E81.CAL						