



- NOTES:
- ALL VALVES ARE SAME SIZE AS PIPE UNLESS OTHERWISE NOTED.
  - EXPLANATION OF VALVE AND INSTRUMENT NUMBERS: 100 INSTRUMENT NO. (UNIT) (TYPE) (SYSTEM) (INSTRUMENT NO.) VALVE NO. 1 70 100
  - ALL VALVE AND INSTRUMENT NUMBERS ON A UNIT BASIS ARE PREFIXED WITH THE UNIT NUMBER I.E., (1-) FOR UNIT 1 AND (2-) FOR UNIT 2. INSTRUMENTS AND VALVES COMMON TO BOTH UNITS PREFIXED WITH (0-).
  - MAIN PROCESS SYSTEM VALVES ARE SHOWN IN THEIR NORMAL OPERATING POSITION.
  - ALL PIPING AND VALVES FOR CONTAINMENT ISOLATION ARE TVA CLASS B. THE REMAINDER OF SYSTEM PIPING AND VALVES ARE TVA CLASS C.G.H. AND AS NOTED INSTRUMENT TAKEOFFS THRU THE FIRST VALVE ARE THE SAME TVA CLASS AS THE PROCESS PIPING.
  - ALL VALVE NUMBERS ON SHEET 2 ARE TO BE PREFIXED WITH 1-70 AND SHEET 3 WITH 2-70 UNLESS OTHERWISE SPECIFIED.
  - VALVES WITH AN "H" ARE USED TO BALANCE SYSTEM FLOWS TO THE EQUIPMENT SERVED.
  - STRAINERS ARE TO BE INSTALLED FOR USE DURING SYSTEM CLEAN UP AND REMOVED BEFORE NORMAL OPERATION BEGINS.
  - THE COMPONENT COOLING SYSTEM DESIGN PRESSURE IS 150 PSIG AND THE DESIGN TEMPERATURE IS 200°F. UNLESS OTHERWISE NOTED, ALL DETERMINING TO THE COMPONENTS IN THE SYSTEM ARE LIMITING COMPONENTS AND THE HYDROSTATIC TEST PRESSURE INVOLVING HYDROSTATIC TESTING MAY BE USED IF ENR APPROVES THEIR APPLICATION. HYDROSTATIC TEST PRESSURE INFORMATION AND NO LONGER MAINTAINED AS DESIGN OUTPUT.
  - ALL CLASS C PIPING IS SEISMICALLY SUPPORTED. HOWEVER THE HYDROSTATIC TEST IS NOT WITHIN THE QA PROGRAM. ALL CLASS H PIPING IN THE COLD BUILDING IS SUPPORTED WITH 47059 TYPICALS AND THE PRESSURE BOUNDARY IS NOT WITHIN THE QA PROGRAM. ALL PIPING DOWNSTREAM OF TEST RELIEF, VENT, OR DRAIN VALVES WHICH OPEN TO ATMOSPHERE IS TVA PIPING CLASS C UNLESS OTHERWISE NOTED, AND IS NOT WITHIN THE PRESSURE BOUNDARY QA PROGRAM.
  - VALVES ARE TO REMAIN LOCKED CLOSED EXCEPT DURING SAMPLING OPERATIONS.
  - FOR CLASS C DEFINITION, SEE CLASS C NOTE 4 ON 47821-1.
  - FLOW CONTROL VALVES (FCV) MARKED WITH "PD" ARE ADMINISTRATIVELY LOCKED IN THE OPEN/CLOSED POSITION (SHOWN ON FLOW DIAGRAM) AT MOTOR CONTROL CENTER DUE TO APPENDIX R INTERACTION. BREAKERS ARE SET IN THE TRIP POSITION TO PREVENT UNAUTHORIZED OPERATION.
  - FOR DEFINITION OF SYMBOLS OF "LC" OR "LO", REFER TO MWD BARRERBOOK.
  - VALVES 1-0KV-70-687 AND 2-0KV-70-687 REQUIRE MAINTENANCE ON THEIR SOFT SEATS AFTER A THERMAL BARRIER LEAK. THIS VENDOR SUPPLIED SOFT MOUNTED EQUIPMENT HAS BEEN DETERMINED TO BE ACCEPTABLE FOR USE WITH THE DESIGN PARAMETERS LISTED IN NOTE 10. SEE CALCULATION NO. EPM-MJD-051289 / WBN-70-0003 / MEB-WBN-70, REV. 0. REFERENCE DRAWING 1-821338-104 DESIGN CRITERIA SYSTEM DESIGN DOCUMENT.
  - USE THE LATEST REVISION ON ALL WORK UNLESS OTHERWISE SPECIFIED. SEE THE LATEST REVISION OF THE 47821 SERIES DRAWINGS. \*PIPING SYSTEM CLASSIFICATION: \*
  - 3-70-4002 - - - COMPONENT COOLING SYSTEM DESCRIPTION
  - VALVES 2-1SV-70-516, -574, -587, -705, AND 2-FCV-70-92 HAVE BEEN FITTED WITH A 1/16" INCH THICK NEOPRENE RUBBER GASKET FULL SHEET WHICH EXTENDS OVER THE UNIT 1 SIDE OF THE VALVE DISC. THE SPACE BETWEEN THE GASKET AND THE VALVE DISC IS FILLED WITH A CASTING MADE OF SILICONE GEL 170 A & B SILICONE ELASTOMER. PRIOR TO UNIT 2 FUEL LOAD, THE FUNCTION OF THESE VALVES WILL BE RESTORED. REFERENCE DCN P-0563A.
  - TEMPORARY CONDITION FOR VALVE UNIT 1 OPERATION.
  - VALVE IS ADMINISTRATIVELY LOCKED IN THE OPEN POSITION. (WITH BREAKER OPEN) (APPENDIX R).
  - VALVE IS ADMINISTRATIVELY LOCKED IN THE CLOSED POSITION. (WITH BREAKER OPEN) (APPENDIX R).
  - THESE VALVES ARE UNIT 1/2 INTERFACE POINTS AND MUST EITHER BE A LOCK CLOSED OR B LOCKED WITH HAND WHEELS REMOVED.
  - (1) & (2) DENOTES UNIT 1 & UNIT 2 INTERFACE POINTS. THE STRUCTURAL BOUNDARY FOR CATEGORY 1 PIPING IS THE FIRST ANCHORED EQUIPMENT OR PIPE ANCHOR ON THE UNIT 2 SIDE OF THE INTERFACE POINT. BECAUSE OF THIS, SOME INTERFACE POINTS WILL HAVE MORE THAN ONE STRUCTURAL TERMINATION.
  - TYPICAL CONDUITS FOR CCS LIQUID EFFLUENT (RADIATION) MONITORS D, 1-2-RE-90-123 ARE DEPICTED ON 1-478610-90-2.
  - VALVE IS ADMINISTRATIVELY LOCKED IN CLOSED POSITION. (APPENDIX R)
  - SOME CIDS ON THIS DRAWING HAVE BEEN CHANGED AND MAY DIFFER FROM THE CIDS SHOWN ON OTHER DOCUMENTS FOR THE SAME COMPONENT. THE ALTERNATE ID SCREEN (A1) IN EMS CAN BE ACCESSED AS NECESSARY TO DETERMINE IF PREVIOUS CIDS EXISTED FOR A SPECIFIC COMPONENT.
  - THIS SYMBOL INDICATES THE COMPONENT MAY BE REPLACED WITH A COMMERCIAL GRADE ITEM IN AN ASME SECTION III SYSTEM IN ACCORDANCE WITH NRC GENERIC LETTER 89-09.
  - VALVE IS ADMINISTRATIVELY LOCKED IN THE OPEN POSITION, WITH BREAKER OPEN (NOT FOR APPENDIX R).
- REFERENCE DRAWINGS:
- 47864 SERIES - - - COMPONENT COOLING SYSTEM PIPING
  - 1-47860-1 - - - GENERAL PLANT SYSTEM FLOW DIAGRAM
  - 1-478610-1, 2, & 3 - - - COMPONENT COOLING SYSTEM CONTROL DIAGRAM
  - 478611-70-1, 2, & 3 - - - COMPONENT COOLING SYSTEM LOGIC DIAGRAM
  - 478601-70 SERIES - - - SERIES INSTRUMENT TABULATION
  - 308817 SERIES - - - SERIES INSTRUMENT SYMBOLS AND IDENTIFICATION
  - 47855-100 SERIES - - - STRESS ANALYSIS PROBLEM BOUNDARY
  - 1-478610-90-2 - - - RADIATION MONITORING SYSTEM CONTROL DIAGRAM
- LEGEND:
- 1/2" NPT PLUG OR CAP TYPE DRAIN
  - TC - - - - - 1/2" TEST CONNECTION
  - TV - - - - - 1/2" TEST VENT
  - (FCV) 70-75 - - - - - FCV
  - PD - - - - - PD - SEE NOTE 15
  - ☒ - - - - - CLEAN UP STRAINER (SEE NOTE 9)
  - INDICATES MATCH NUMBER

TABLE A  
CCS PUMP SEAL/VENT VALVE CID NOS.

VALVE	PUMP 1A-A	PUMP 1B-B	PUMP C-S	PUMP 2A-A	PUMP 2B-B
A	1-VTV-70-809A	1-VTV-70-813B	0-VTV-70-817	2-VTV-70-809A	2-VTV-70-813B
B	1-VTV-70-811A	1-VTV-70-815B	0-VTV-70-819	2-VTV-70-811A	2-VTV-70-815B
C	1-1SV-70-808A	1-1SV-70-812B	0-1SV-70-816	2-1SV-70-808A	2-1SV-70-812B
D	1-1SV-70-810A	1-1SV-70-814B	0-1SV-70-818	2-1SV-70-810A	2-1SV-70-814B

FSAR FIG. 9.2-19

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