



- NOTES:
- AIR CONDITIONING SYSTEM CODE NO. 31. SYSTEM IDENTIFICATION SYMBOLS SHOWN THIS ARE ABBREVIATED FORMS OF 0-P1-31-304 UNLESS OTHERWISE NOTED.
  - NUMBERS SHOWN WITH  $\Delta$  INDICATE WATER FLOW IN C.W.
  - FOR SYSTEM DESCRIPTION OF CONTROL BUILDING HEATING, VENTILATING, AIR CONDITIONING AND AIR CLEANUP SYSTEM, SEE N3-30CB-4002.
  - PIPING DESIGN PRESSURE AND TEMPERATURE ARE 85 PSIG AND 110°F. HYDROSTATICALLY TEST SYSTEM AT 1.50 X 65 PSIG.
  - HYDROSTATIC TEST PRESSURE DATA IS HISTORICAL INFORMATION AND NO LONGER MAINTAINED AS DESIGN OUTPUT.
  - PUMP HEAD PRESSURE SHALL BE CHECKED VS MEASURED FLOW IN PUMP CIRCUIT, AND BALANCING VALVE ON PUMP DISCHARGE SHALL BE USED TO THROTTLE FLOW TO GET THE TOTAL DESIGN FLOW RATE.
  - FOR IDENTIFICATION OF SYMBOLS REFER TO "INSTRUMENTATION SYMBOLS AND IDENTIFICATION."
  - HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH APPLICABLE CODE CASES WITH CASE BY CASE APPLICATION REQUIRING PRIOR APPROVAL BY NUCLEAR ENGINEERING.
  - ALL CHILLED WATER PIPING ON THIS DRAWING IS TWA CLASS M SEISMIC CATEGORY I UNLESS OTHERWISE NOTED.
  - ALL STEAM PIPING IS TWA CLASS G SEISMIC CATEGORY I (L).
  - THE DESIGN FLOW RATES SHOWN ON THIS FLOW DIAGRAM ARE THE MINIMUM ALLOWABLE. FLOW RATES MAY BE A MAXIMUM 17% ABOVE THE DESIGN FLOW RATE.
  - ALL DRAIN AND VENT LINES FOR SHUTDOWN BOARDROOM AND MAIN CONTROL ROOM CHILLED WATER SYSTEMS SHALL BE SUPPORTED USING CATEGORY I CRITERIA THROUGH THE PRESSURE BOUNDARY OR THE FIRST NORMALLY CLOSED MISC VALVE REPORT-005 FOR DA VALVE AND DAMPER MARKER TABULATIONS SEE WATTS BAR NUCLEAR PLANT MISC VALVE REPORT-005 FOR DA VALVE AND DAMPER MARKER TABULATIONS SEE 478920-31X1 THRU 478920-31X4.
  - DESIGN CRITERIA/SYSTEM DESCRIPTION REFERENCE DOCUMENTS (USE THE LATEST REVISION ON ALL WORK UNLESS OTHERWISE SPECIFIED. SEE THE LATEST REVISION OF THE 4781 SERIES DRAWINGS "PIPING SYSTEM CLASSIFICATION."); N3-30-CB-4002-----HVAC CONTROL BUILDING CENTER-HABITABILITY AND ENVIRONMENTAL CONTROL SYSTEM.
  - DEMINEALIZED WATER PIPING (MAKE-UP TO CHILL WATER SYS) IS SEISMIC CATEGORY I(L) AS IDENTIFIED ON THE DRAWING.

NOTE:  
MCR CHILLER OIL PUMP RELIEF VALVE 0-RV-031-602A IS SHOWN AS ITEM 5 ON CONTRACT 75K35-83119-2, DWG D9-SCH(X)526). SET PRESSURE IS 53 PSIG PER VTD-0270-0140, PG 10.

EL 755.0 MAIN CONTROL ROOM AIR-CONDITIONING SYSTEMS A-A & B-B  
(ONE SYSTEM IS STANDBY)

NOTE:  
MCR CHILLER OIL PUMP RELIEF VALVE 0-RV-031-602B IS SHOWN AS ITEM 5 ON CONTRACT 75K35-83119-2, DWG D9-SCH(X)526). SET PRESSURE IS 53 PSIG PER VTD-0270-0140, PG 10.

- REFERENCE DRAWINGS:
- 478601-31-----INSTRUMENT TABULATION
  - 478611-31-----LOGIC DIAGRAM
  - 478656-4-----AIR FLOW DIAGRAM
  - 478610-31-----CONTROL DIAGRAM
  - 478920-31X1 THRU -31X4-----MASTER VALVE STATUS REPORT
  - 478655-103-----MECHANICAL STRESS ANALYSIS PROBLEM BOUNDARY AIR CONDITIONING CHILLED WATER

- COMPANION DRAWINGS:
- 47865-7-----CHILLED WATER FLOW DIAGRAM
  - 478656-1-----DMNRLZ WATER FLOW DIAGRAM
  - 478645-2-----ERCW FLOW DIAGRAM

FSAR FIG 9.4.2

ISSUED BY:  
S.E. GIBSON FOR WSR

19	ADMIN	JKA	GJB	DLO	6-10-03
CORRECTED COORDINATE FLAGS PER ADMIN (T71 030610 800) IDENTIFIED BY DD #03-0017.					
REV	CHANGE REF	PREPARED	CHECKER	APPROVED	DATE
SCALE: NTS				EXCEPT AS NOTED	
PROJECT FACILITY POWERHOUSE UNITS 1 & 2					
TITLE FLOW DIAGRAM AIR CONDITIONING CHILLED WATER					
1	WATTS BAR NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY				Q
DESIGN		INITIAL ISSUE		ENGINEERING APPROVAL	
DRAFTER C.N. CLABOUGH	CHECKER STEVE MINOR	RD ISSUE PER WBEP 5.17 & R1WS 826 '90 0313 376		1 ROBERT P LEU	
DESIGNER M.L. CHAPMAN	REVIEWER H. BENNINGHOFF	DATE 6/14/90		2 ROBERT P LEU	
DATE		85	M	3 F.A. KOONTZ	
1-47865-3 R19					

CAD MAINTAINED DRAWING

CONFIGURATION CONTROL DRAWING