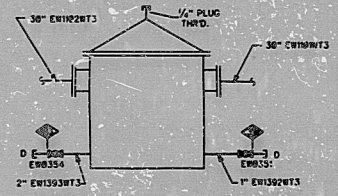


ECW SUPPLY
 ECW RETURN
 Standby Diesel Generator
 Essential Chillers
 Component Cooling Water Heat Exchanger
 Component Cooling Water Pump Supplementary Cooler
 ECW Pump Lube Water

This P&ID is typical
 of all the ECW Trains

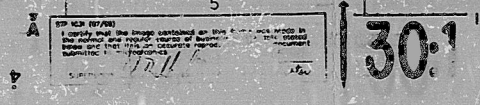


- NOTES:
1. THE CROSS THE VALVES BETWEEN ECW TRAINS SHALL BE MAINTAINED LOCKED CLOSED. THEY SHALL ONLY BE USED FOR THE PURPOSE OF FILLING OR DRAINING.
 2. INSTRUMENT TAKEOFF PIPE AND FITTINGS TO AND INCLUDING THE ROOT VALVE SHALL CONFORM TO THE MAIN LINE SPEC.
 3. LOCATE FLANGES OUTSIDE INSIDE STRUCTURE.
 4. ALL INSTRUMENTS ON THIS P&ID ARE SEPARATE 110V GROUP UNLESS OTHERWISE DESIGNATED.
 5. PERMITS 1404 & 1410'S ARE CONNECTED TO THE ECW SELF-CLEANING STRAINERS.
 6. DELETED.
 7. FOR DESCRIPTION OF EXPANSION JOINTS REFER TO EQUIPMENT UNDER ENGINEERING REPORT NO. 0477024000.
 8. THE COMPRESSOR UNLOADING SYSTEM HAS NO OPERATIONAL FUNCTION. ITS PURPOSE IS TO MONITOR FOR CORROSION PRODUCTS IN THE CO SYSTEM.
 9. FOR ECW VENT VALVES ON CHILLERS SEE REF. P&ID 541000000.
 10. DELETED.
 11. FOR CHILLER DETAIL SEE RESPECTIVE P&ID. P&ID 540000000 ITEM 10, P&ID 540000000 ITEM 10, P&ID 540000000 ITEM 10, P&ID 540000000 ITEM 10, P&ID 540000000 ITEM 10.
 12. DELETED.
 13. DELETED.
 14. DELETED.
 15. DELETED.
 16. FOR COLD WEATHER OPERATION THIS VALVE TO BE IN THE CLOSED POSITION.
 17. THE COOLING SYSTEM (OCC 302000000) IS FUNCTIONALLY CATEGORIED AS A TRIP SYSTEM. THE TRIP SIGNALING OF THE TRIP IS INSTALLED AT THE INSULATING FLANGE WITH A 1/2" THICK RED INSULATING FACE GASKET ON THE TRIP SIDE OF THE INSULATING GASKET IS NOT TO BE USED. INSULATING PAPER AND SLEEVES ARE REQUIRED TO THE INSIDE OF THE FLANGE SHALL BE METAL TO METAL WITH THE BLIND PLATE.

NO.	ISSUE DATE	REVISION	BY	CHK	RE	DV	HA	SE	PE	NO.	ISSUE DATE	REVISION	BY	CHK	RE	DV	HA	SE	PE	
4	3-16-95	INCORP. PCF 177631A AND EDITORIAL																		
3	2-18-94	INCORP. MOON 93448-02 AND EDITORIAL																		
2	1-20-94	INCORP. MOON 13849-30																		
1	1-15-94	INCORP. PCF 30826A AND PCF 30827A AND COI: MO-1842																		
0	11-15-93	THIS DRAWING AND DRAWINGS 54289F0503B W/SH 2 AND 54289F0503B W/SH 3 SUPERSEDE DRAWING 54289F0503B W/SH 1																		

HOUSTON LIGHTING & POWER COMPANY
 SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

ANSTEC APERTURE CARD
 PIPING AND INSTRUMENTATION DIAGRAM
 ESSENTIAL COOLING WATER SYSTEM
 TRAIN 1A
 SCALE: 1" = 30'-0"
 NO. 5R289F0503B #1 SH 1-6
 DATE: 06/09/92
 REV. 1



X 9601020294

PDR RIDS

9601110088

