LINE MK NUMBER	HYDROSTATIC TEST PRESSURE (PSIG)
1	2∪3
2	315
3	188
4	275

FOR PIPING ONLY. LIMITING COMPONENTS TO BE DETERMINED BY FIELD.

NOTES:

1. FOR ADDITIONAL NOTES, SEE SH 1.
2. SHEETS 2 & 6 ARE FLOW FOR UNIT 1 AND FOR UNIT 2 WITH THE EXCEPTIONS NOTED.
3. PIPING ON SHEETS 2 THRU 6 IS TVA CLASS B, C, D, G, OR L.
4. CLASS CHANGES ARE SHOWN IN THE TYPICAL MANNER B | C
5. PIPING SHOWN IN THIS MANNER ∿∿ IS ELECTRICALLY HEAT TRACED.
6. ALL PIPING SHOWN ON SHEETS 2 THRU 6 IS DESIGNED FOR 150PSIG AND 200°F OR 2" DIAMETER AND SMALLER, AND FOR 210PSIG AND 300°F OR 3" DIAMETER AND LARGER.
7. DESIGN PRESSURE AND TEMPERATURE FOR INDIVIDUAL TANKS AND COMPONENTS IS GIVEN IN THE VICINITY OF THE ITEM.
8. THE OPERATING TEMPERATURE FOR ALL HEAT TRACED PIPING AND EQUIPMENT IS 165°F. ALL OTHER PIPING AND EQUIPMENT WILL OPERATE AT AMBIENT TEMPERATURE.
9. VALVES SHOWN IN THIS MANNER ⊣⊢ ARE PROVIDED WITH EXTENSION STEM VALVE OPERATORS.
10. ARROW BLOCKS INDICATE LOCATION OF INTERFACES ON THIS SERIES OF DRAWINGS AND ON OTHER RELATED DRAWINGS.
11. ALL WELDS AND WELD INSPECTIONS ON THE 3" SPENT RESIN PIPING CARRYING DEPLETED RESIN TO THE SPENT RESIN STORAGE TANK ARE TO BE TVA CLASS "D". (EXCEPT THE EMBEDDED PORTION WHICH REQUIRES WELDS TO BE RADIOGRAPHED)
12. △1, ETC., INDICATES LINE NO. CORRESPONDING TO HYDROSTATIC TEST PRESSURE CHART ON THIS SHEET. HYDROSTATIC TESTING TO BE IN ACCORDANCE WITH APPLICABLE CODE CASES WITH CASE BY CASE APPLICATION REQUIRING PRIOR APPROVAL BY ENGINEERING DESIGN.
13. ALL CLASS "G" PIPING IS SEISMICALLY SUPPORTED AND NON QA UNLESS OTHERWISE NOTED. WHERE NOTED, CLASS "G" PIPING IS TO BE HYDROSTATICALLY TESTED WITHIN THE QA PROGRAM.
14. ALL WELDING TO AND INSPECTION AND DOCUMENTATION OF THE VENT CONDENSER, DISTILLATE COOLER AND EVAP. CONDENSER SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS FOR TVA CLASS "C".
15. WHERE THIS NOTE IS REFERENCED, ALL FIELD FABRICATION, ASSEMBLY, EXAMINATION AND TESTS FOR PIPING SYSTEMS PERFORMED AFTER ISSUANCE OF R-10 OF THIS FLOW DIAGRAM AND ALL WORK REQUIRED BY ECN 3815 SHALL BE WITHIN THE REQUIREMENTS OF GENERAL CONSTRUCTION SPECIFICATION NO. G-69.
16. DOWNGRADE TO NON NUCLEAR SAFETY CLASS AT THIS POINT IS BASSED ON AN EXISTING STATIC LEG IN THE PIPING CONFIGURATION. SEE EN DES CALCS BRS DOWNGRADE (NEB840426-700) PRIOR TO ANY PIPING CONFIGURATION REVISION.
17. ALL PIPING DOWNSTREAM OF THE LAST ISOLATION VALVE ON LOCAL DRAINS, VENTS AND TEST CONNECTIONS IS TVA CLASS G UNLESS OTHERWISE NOTED. THIS NOTE APPLIES TO SHEETS 2 THROUGH 6 ONLY.

CHARGING PUMP SUCTION SH 1 COOR E10
VOLUME CONTROL TANK 1A-A SH 2 COOR C11
CHARGING PUMP SUCTION SH 1 COOR E11
CHARGING PUMP SUCTION SH 1 COOR E9
CONTAINMENT SPRAY 47W812-1
CVCS HOLDUP TANK SH 3 COOR B10/B8
BORIC ACID TANK SH 5 COOR F10/F1
CHARGING PUMP SUCTION SH 1 COOR F10
PRIMARY WATER 47W819-1 COOR E5/C5
BORIC ACID BLENDER
DESIGN PRES-150PSIG
DESIGN TEMP-250°F
LOCAL SAMPLE
TEMPORARY CONNECTION
CHEMICAL MIXING TANK
DESIGN PRES 150PSIG
DESIGN TEMP 200°F
TRITIATED DRAIN
ORIFICE DESIGN PRES-150PSIG DESIGN TEMP-200°F
LETDOWN HEAT EXCHANGER SH 1 COOR A12
REACTOR COOLANT FILTER SH 1 COOR A12
RESIN FILL TANK
DESIGN PRES-ATM
DESIGN TEMP-AMBIENT
FLEXIBLE HOSE
PRIMARY WATER 47W819-1 COOR D10/B8
VENT SH 2 COOR G2
RESIN FILL
MIXED BED DEMINERALIZER IA
DESIGN PRES-300PSIG
DESIGN TEMP-250°F
MIXED BED DEMINERALIZER IB
DESIGN PRES-300PSIG
DESIGN TEMP-250°F
PRIMARY WATER 47W819-1 COOR E6
RESIN DISCHARGE SH 2 COOR F2
DRAIN SH 2 COOR G3
VENT SH 2 COOR F2
CATION BED DEMIN
DESIGN PRES-300PSIG
DESIGN TEMP-250°F
PRIMARY WATER 47W819-1 COOR E6/C6
COMPANION DRAWINGS: 47W809-1 THRU 6
CATION BED DEMINERALIZER SH 2 COOR H7
MIXED BED DEMIN 1A SH 2 COOR F7
MIXED BED DEMIN 1B SH 2 COOR F10
SPENT RESIN STORAGE TANK 47W830-3 COOR F5/F6
SPENT RESIN DISCH HEADER
VENT-MIXED BED DEMIN 1-A SH 2 COOR E7
VENT-CATION BED DEMIN 1A SH 2 COOR G7
VENT-MIXED BED DEMIN 1-B SH 2 COOR E8
DRAIN-MIXED BED DEMIN 1-B SH 2 COOR F8
DRAIN-MIXED BED DEMIN 1-A SH 2 COOR E6
DRAIN-CATION BED DEMIN 1A SH 2 COOR H5
TRITIATED DRAIN COLLECTOR TANK 47W852-2 COOR C4/C9

ADMIN			EHP	LSC	WW	NR	NR	NR			
10 M-22846-A	5-17-76										
DRAWING ENHANCED FOR LEGIBILITY. REVISED PER DCA M22846-178-0.											
SH CHANGE REF	DATE	DFTR	CHKR	DSGN	RVWR	1 APPD	2 APPD	3 APPD	ISSD		

AUXILIARY BUILDING UNIT 1 & 2

FLOW DIAGRAM
CHEMICAL AND VOLUME CONTROL SYSTEM AND BORON RECOVERY SYSTEM

WATTS BAR NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED
*	*	*

KNOXVILLE 5-17-73 | 85 | M | 4 | 47W809-2 | R16

RECORD DRAWING AS CONSTRUCTED

* FOR ORIGINAL SIGNATURES, SEE MICROFILM COPY

FSAR FIG. 9.3-15 SH 2

D-08

SCANNED DOCUMENT
THIS IS A SCANNED DOCUMENT MAINTAINED ON THE WBN* OPTIGRAPHICS SCANNER DATABASE