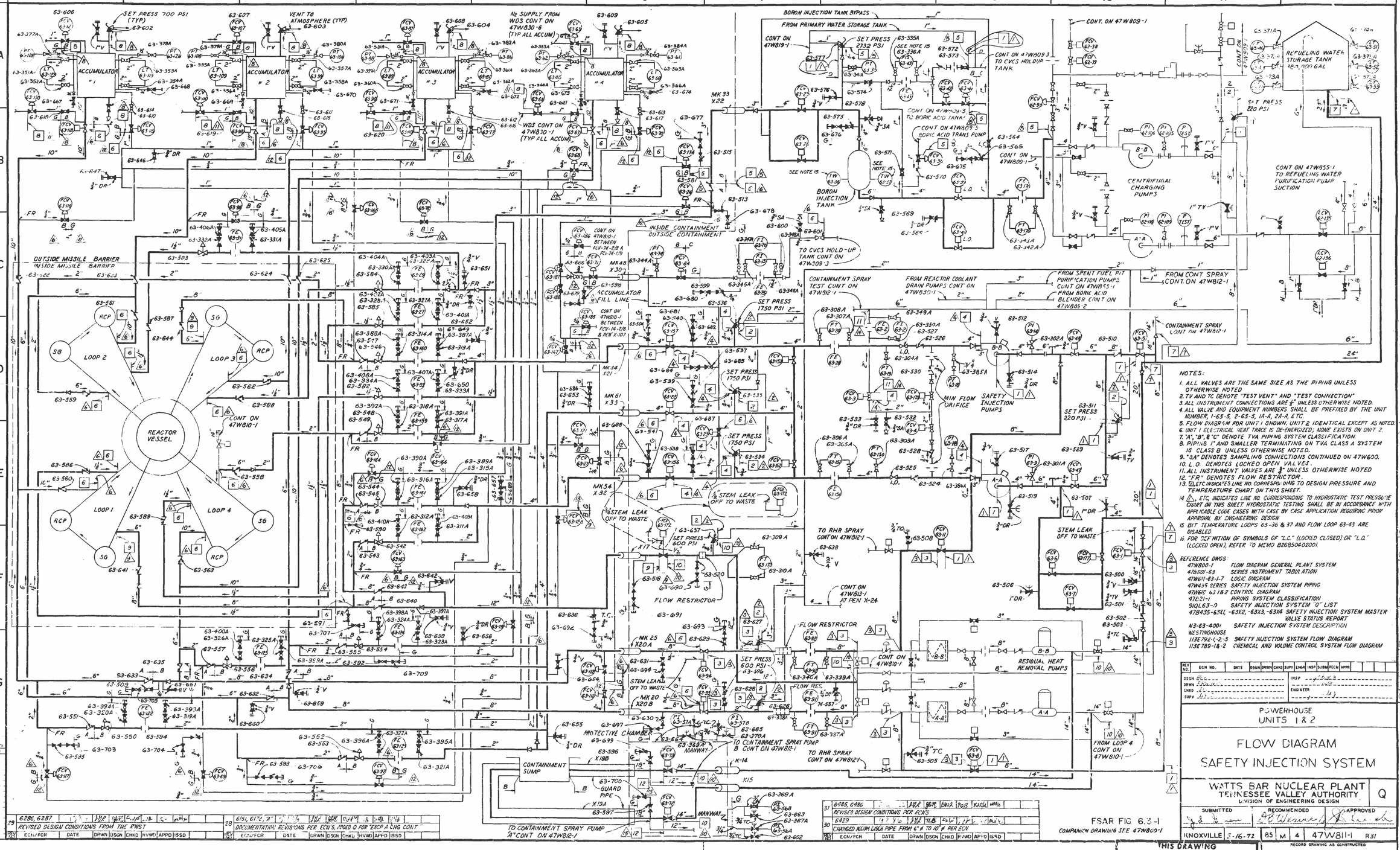

PRESS TEMP DESIGN DATA		
LINE MX NO	PRESS (PSIG)	TEMP (°F)
1	(150)	200
2	115	200
3	(600)	400
4	1750	200
5	2800	200
6	2580	650
7	100	150
8	875	200
9	2485	650
10	600	400
11	150	100
12	50	190

PIPING
FIRST NO. USED
500
OPEN NO.S
531, 566, 567, 579, 580, 645, 646, 523, 522, 516, 521, 667
LAST NO. USED
709

INSTRUMENT ROOT VALVES
FIRST NO. USED
301A
OPEN NO.S
LAST NO. USED
410A

LINE HYDROSTATIC TEST MK NO	PRESSURE (PSIG)
1	188
2	144
3	150
4	2188
5	3000
6	3225
7	125
8	1094
9	3107
10	750
11	1313
12	3670
13	3728
14	188
15	63

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

NOTES:

1. ALL VALVES ARE THE SAME SIZE AS THE PIPING UNLESS OTHERWISE NOTED
2. TV AND TC DENOTE "TEST VENT" AND "TEST CONNECTION"
3. ALL INSTRUMENT CONNECTIONS ARE ¼" UNLESS OTHERWISE NOTED.
4. ALL VALVE AND EQUIPMENT NUMBERS SHALL BE PREFIXED BY THE UNIT NUMBER, 1-63-5, 2-63-5, 1A-A, 2A-A, ETC.
5. FLOW DIAGRAM FOR UNIT 1 SHOWN. UNIT 2 IDENTICAL EXCEPT AS NOTED.
6. UNIT 1 ELECTRICAL HEAT TRACE IS DE-ENERGIZED; NONE EXISTS ON UNIT 2.
7. "A", "B", & "C" DENOTE TVA PIPING SYSTEM CLASSIFICATION.
8. PIPING 1" AND SMALLER TERMINATING ON TVA CLASS A SYSTEM IS CLASS B UNLESS OTHERWISE NOTED.
9. "SA" DENOTES SAMPLING CONNECTIONS CONTINUED ON 47W600.
10. L.O. DENOTES LOCKED OPEN VALVES.
11. ALL INSTRUMENT VALVES ARE ½" UNLESS OTHERWISE NOTED
12. "FR" DENOTES FLOW RESTRICTOR.
13. ⊡, ETC INDICATES LINE NO. CORRESPONDING TO DESIGN PRESSURE AND TEMPERATURE CHART ON THIS SHEET.
14. △, ETC, INDICATES LINE NO. CORRESPONDING TO HYDROSTATIC TEST PRESSURE CHART ON THIS SHEET. HYDROSTATIC TESTING SHALL BE IN ACCORDANCE WITH APPLICABLE CODE CASES WITH CASE BY CASE APPLICATION REQUIRING PRIOR APPROVAL BY ENGINEERING DESIGN.
15. BIT TEMPERATURE LOOPS 63-36 & 37 AND FLOW LOOP 63-43 ARE DISABLED
16. FOR DEFINITION OF SYMBOLS OF "L.C." (LOCKED CLOSED) OR "L.O." (LOCKED OPEN), REFER TO MEMO B26850-02001.

REFERENCE DWGS:

47W800-1	FLOW DIAGRAM GENERAL PLANT SYSTEM
47A501-63	SERIES INSTRUMENT TABULATION
47W611-63-1-7	LOGIC DIAGRAM
47W635 SERIES	SAFETY INJECTION SYSTEM PIPING
47W610-63 1&2	CONTROL DIAGRAM
47A621-1	PIPING SYSTEM CLASSIFICATION
910L63-0	SAFETY INJECTION SYSTEM "Q" LIST
47B835-63X1, -63X2, -63X3, -63X4	SAFETY INJECTION SYSTEM MASTER VALVE STATUS REPORT
N3-63-4001	SAFETY INJECTION SYSTEM DESCRIPTION
WESTINGHOUSE 113E792-1,-2-3	SAFETY INJECTION SYSTEM FLOW DIAGRAM
113E789-1&-2	CHEMICAL AND VOLUME CONTROL SYSTEM FLOW DIAGRAM

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPR
29	6286, 6287										
REVISED DESIGN CONDITIONS FROM THE PWST											
28	6151, 6172, 7										
DOCUMENTATION REVISIONS PER ECN'S, ADDED Q FOR "EXCP A CHG CONT"											
31	6485, 6486										
REVISED DESIGN CONDITIONS PER ECN'S											
30	6429										
CHANGED NOMIN LISCH PIPE FROM 6" # TO 10" # PER ECN											

FSAR FIG 6.3-1

COMPANION DRAWING SEE 47W800-1

POWERHOUSE
UNITS 1 & 2

FLOW DIAGRAM
SAFETY INJECTION SYSTEM

WATTS BAR NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED | RECOMMENDED | APPROVED

KNOXVILLE 5-16-72

85 M 4 47W811-1 R31

RECORD DRAWING AS CONSTRUCTED

THIS DRAWING IS UNDER CONFIGURATION CONTROL

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