6129 - R14
3789 R14

47W855-1

REV NO	ECN/FCR	DATE	DRWN	DSGN	CHKD	RVWD	APPD	ISSD
18	6256, 6287, A							

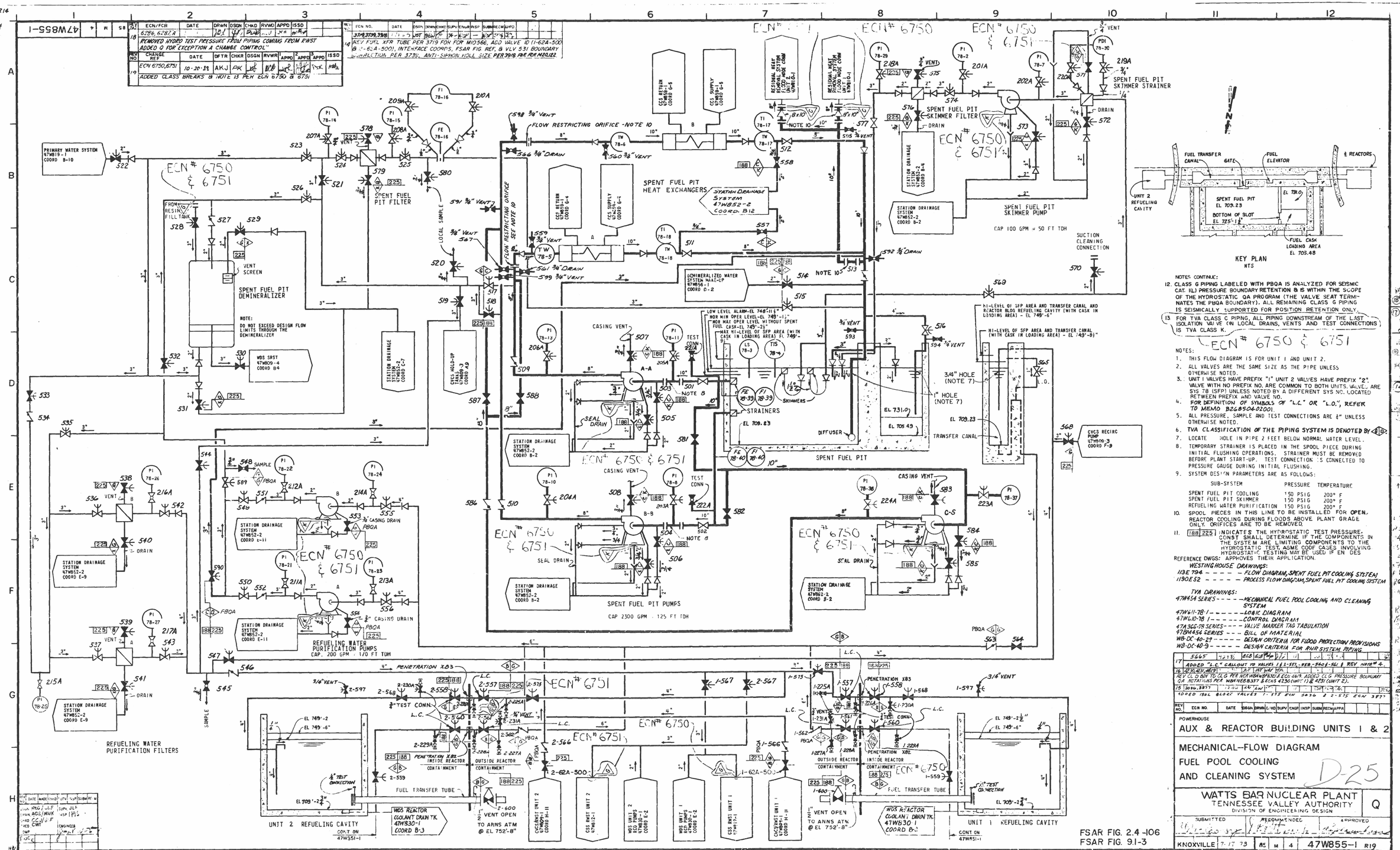
REMOVED HYDRO TEST PRESSURE FROM PIPING COMING FROM RWST
ADDED Q FOR "EXCEPTION A CHANGE CONTROL"

REV NO	CHANGE REF	DATE	DFTR	CHKR	DSGN	RVWR	APPD	2 APPD	3 APPD	ISSD
19	ECN 6750, 6751	10-20-83	AKJ	PK						

ADDED CLASS BREAKS & NOTE 13 PER ECN 6750 & 6751

REV NO	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPD
14	3749, 3798, 3988										

REV FUEL XFR TUBE PER 3719 FOR FOR MI0586, ADD VALVE 10 (1-628-500 & (1-628-5001, INTERFACE COORDS, FSAR FIG REF, & VLV 531 BOUNDARY CORRECTION PER 3735, ANTI-SIPHON HOLE SIZE PER 3918 FOR FOR M20122



KEY PLAN
NTS

NOTES CONTINUE:

12. CLASS G PIPING LABELED WITH PBQA IS ANALYZED FOR SEISMIC CAT. I(L) PRESSURE BOUNDARY RETENTION & IS WITHIN THE SLOPE OF THE HYDROSTATIC QA PROGRAM (THE VALVE SEAT TERMINATES THE PBQA BOUNDARY). ALL REMAINING CLASS G PIPING IS SEISMICALLY SUPPORTED FOR POSITION RETENTION ONLY.
13. FOR TVA CLASS C PIPING, ALL PIPING DOWNSTREAM OF THE LAST ISOLATION VALVE (IN LOCAL DRAINS, VENTS AND TEST CONNECTIONS) IS TVA CLASS K.

ECN # 6750 & 6751

NOTES:

1. THIS FLOW DIAGRAM IS FOR UNIT 1 AND UNIT 2.
2. ALL VALVES ARE THE SAME SIZE AS THE PIPE UNLESS OTHERWISE NOTED.
3. UNIT 1 VALVES HAVE PREFIX "1" UNIT 2 VALVES HAVE PREFIX "2". VALVE WITH NO PREFIX NO. ARE COMMON TO BOTH UNITS. VALVES ARE SYS 78 (SFP) UNLESS NOTED BY A DIFFERENT SYS NO. LOCATED BETWEEN PREFIX AND VALVE NO.
4. FOR DEFINITION OF SYMBOLS OF "L.C." OR "L.O.", REFER TO MEMO B26850-02001.
5. ALL PRESSURE, SAMPLE AND TEST CONNECTIONS ARE ¾" UNLESS OTHERWISE NOTED.
6. TVA CLASSIFICATION OF THE PIPING SYSTEM IS DENOTED BY (B).
7. LOCATE HOLE IN PIPE 2 FEET BELOW NORMAL WATER LEVEL.
8. TEMPORARY STRAINER IS PLACED IN THE SPOOL PIECE DURING INITIAL FLUSHING OPERATIONS. STRAINER MUST BE REMOVED BEFORE PLANT START-UP. TEST CONNECTION IS CONNECTED TO PRESSURE GAUGE DURING INITIAL FLUSHING.
9. SYSTEM DESIGN PARAMETERS ARE AS FOLLOWS:

SUB-SYSTEM	PRESSURE	TEMPERATURE
SPENT FUEL PIT COOLING	150 PSIG	200° F
SPENT FUEL PIT SKIMMER	150 PSIG	200° F
REFUELING WATER PURIFICATION	150 PSIG	200° F

10. SPOOL PIECES IN THIS LINE TO BE INSTALLED FOR OPEN REACTOR COOLING DURING FLOODS ABOVE PLANT GRADE ONLY. ORIFICES ARE TO BE REMOVED.
11. 188 225 INDICATES THE HYDROSTATIC TEST PRESSURE. CONST SHALL DETERMINE IF THE COMPONENTS IN THE SYSTEM ARE LIMITING COMPONENTS TO THE HYDROSTATIC TEST, ASME CODE CASES INVOLVING HYDROSTATIC TESTING MAY BE USED IF EN DES

REFERENCE DWGS: APPROVES THEIR APPLICATION.

WESTINGHOUSE DRAWINGS:
113E794 - - - - - FLOW DIAGRAM, SPENT FUEL PIT COOLING SYSTEM
113OE52 - - - - - PROCESS FLOW DIAGRAM, SPENT FUEL PIT COOLING SYSTEM

TVA DRAWINGS:
47W454 SERIES - - - - - MECHANICAL FUEL POOL COOLING AND CLEANING SYSTEM
47W611-78-1 - - - - - LOGIC DIAGRAM
47W610-78 1 - - - - - CONTROL DIAGRAM
47A366-78 SERIES - - - VALVE MARKER TAG TABULATION
47B454 SERIES - - - BILL OF MATERIAL
WB-DC-40-29 - - - - - DESIGN CRITERIA FOR FLOOD PROTECTION PROVISIONS
WB-DC-40-9 - - - - DESIGN CRITERIA FOR RWR SYSTEM PIPING

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPD
17	5665										

ADDED "L.C." CALLOUT TO VALVES 1(2-557, -558, -560 & -561 & REV NOTE 4.
16 (3090, 3977 REV CL D DUE TO CLG PER NCR WBN WBP830 & ECN 4679. ADDED CLG PRESSURE BOUNDARY CA NOTATIONS PER WBN NEB 3337 & ECNS 4230 (UNIT 1) & 4231 (UNIT 2).
15 (3090, 3977 ADDED 1(2-600 VALVES - SEE ECN 3930 & 2-575 ECN 3977

POWERHOUSE

AUX & REACTOR BUILDING UNITS 1 & 2

MECHANICAL—FLOW DIAGRAM FUEL POOL COOLING AND CLEANING SYSTEM

D-25

WATTS BAR NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED | RECOMMENDED | APPROVED

KNOXVILLE 7-17-73 | 85 M 4 | 47W855-1 R19

RECORD DRAWING AS CONSTRUCTED

FSAR FIG. 2.4-106
FSAR FIG. 9.1-3

THIS DRAWING IS UNDER CONFIGURATION CONTROL