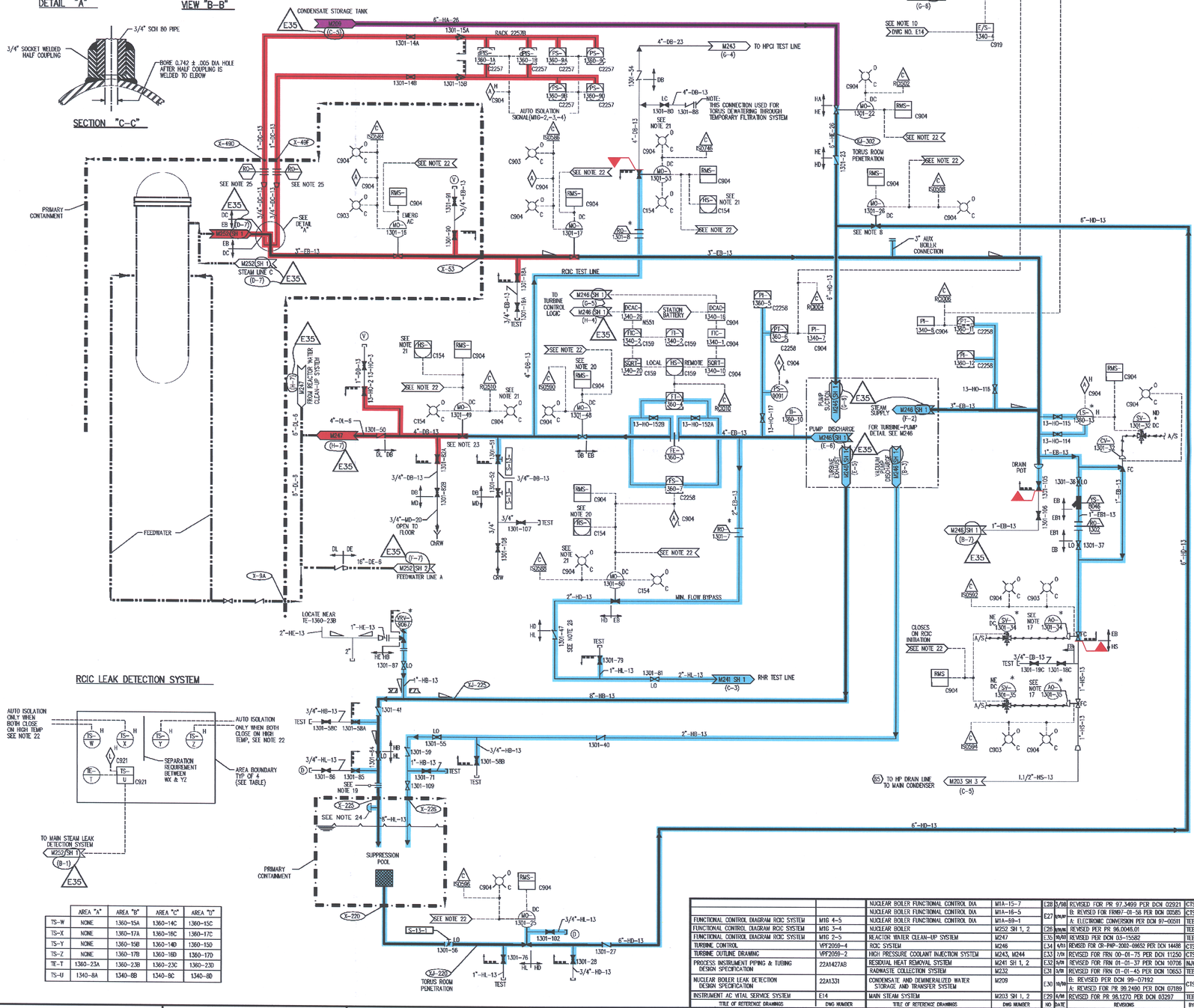




NOTES

1. CHEMICAL CLEANING CONNECTIONS, VALVES, ETC. IF REQUIRED, ARE TO BE PROVIDED BY A.E. AS NECESSARY.
2. SLOPE STEAM LINE DOWN ALL THE WAY FROM MAIN STEAM LINE TO POT JUST AHEAD OF TURBINE.
3. FOR INSTRUMENTS WITHOUT RACK NUMBERS, BECHTEL IS TO DETERMINE METHOD OF MOUNTING.
4. REFER TO SPECIFICATION 22A1427AB FOR INST REQUIREMENTS AND INST VALVE REQUIREMENTS BEYOND ROOT VALVES WHERE NO APED INST RACK DRAWINGS ARE PROVIDED.
5. DESIGN PRESSURE AND TEMPERATURE TO BE ESTABLISHED BY BECHTEL BASED ON MAIN FEED PUMP SHUTOFF PRESSURE AND/OR RCIC PUMP SHUTOFF PRESSURE AND FEEDWATER TEMP.
6. EQUIPMENT VENT AND DRAIN QUANTITIES SHOWN ARE TO BE MODIFIED BY A.E. TO AGREE WITH VPF DATA FOR ACTUAL EQUIPMENT PURCHASED. PIPING HIGH POINT VENTS AND LOW POINT DRAINS TO BE ADDED BY A.E. AS NECESSARY.
7. FOR G.E. SUPPLIED ITEMS SEE 23A5530 SECTION 1300.
8. LOCATE VALVE 1301-26 AS CLOSE AS POSSIBLE TO PUMP SUCTION LINE FROM CONDENSATE STORAGE.
9. REQUIRED TOTAL RESERVE STORAGE FOR RCIC AND HPCI SYSTEM = 75,000 GALLONS. THIS AMOUNT OF STORAGE SHALL BE CAPABLE OF BEING ISOLATED FROM SERVING OTHER SYSTEMS.
10. ALL AC INSTRUMENTATION POWERED FROM VITAL SERVICES AC SYSTEM. (EXCEPT FIC-1340-1, 50 RIT-1340-10, FI-1360-4, AND ES-1340-15 WHICH ARE POWERED FROM BATTERIES THROUGH INVERTERS DCAC-1340-16 AND DCAC-1340-26).
11. FOR INTERLOCKING REQUIREMENTS, AND AUTO VALVE ACTUATION, SEE FUNCTIONAL CONTROL DIAGRAM, M1G 2-5, M1G 3-4 & M1G 4-5.
12. REFER TO PIPING SPECIFICATION M-300 FOR PIPING MATERIALS, VALVE CLASSIFICATIONS AND INSTRUMENT PIPING STANDARDS.
13. THE RCIC SYSTEM IS A CLASS 1 SYSTEM EXCEPT AS NOTED.
14. ALL EQUIPMENT AND INSTRUMENTATION, ARE PROVIDED BY GE UNLESS DESIGNATED BY * (BECHTEL PROVIDED). ALL PIPING AND VALVING IS PROVIDED BY BECHTEL UNLESS DESIGNATED BY Ⓖ (GE-APED PROVIDED)
15. THIS DRAWING INCORPORATES REVISIONS 1,2,3,AND 4 TO GE-APED DRAWING 729E971 SHT 1.
16. MO-1301-16 & 17, AO-1301-34 & 35 HAVE DUAL LIGHT INDICATION IN THE CONTROL ROOM.
17. VALVES AO-1301-34 AND AO-1301-35 WERE PREVIOUSLY DESIGNATED AS CV-1301-34 AND CV-1301-35.
18. CHECK VALVES 1301-41 & 1301-64 ARE TO BE LOCATED SUCH THAT THE PIPING IS SLOPED FROM VALVE 1301-41 TO TORUS FOR PROPER DRAINAGE.
19. SPECTACLE FLANGE IN TURBINE EXHAUST TO BE TESTABLE WITH DOUBLE O-RINGS.
20. LOCAL CONTROL SWITCH "HS" LOCATED ON ALTERNATE SHUTDOWN PANEL SHALL BE IN "REMOTE" TO OPERATE FROM CONTROL ROOM.
21. OPERATION OF LOCAL CONTROL SWITCH IN ALTERNATE SHUTDOWN PANEL WILL INTERRUPT POSITION INDICATION IN CONTROL ROOM.
22. REFER TO FUNCTIONAL CONTROL DIAGRAMS, RCIC SYSTEM (SEE REFERENCE DRAWINGS).
23. VESSEL SIDE OF VALVE MO-1301-49 WEDGE IS DRILLED. SEE VALVE ASSEMBLY DRAWING FOR DETAILS.
24. EXISTING THREADED CAP SEAL WELDED PER FRN 97-01-58.
25. RESTRICTING ORIFICE IS A 1 INCH COUPLING BLANK BORED TO 1/4".
26. PERMANENT ACOUSTIC TRANSDUCERS ARE INSTALLED FOR CHECK VALVE. NON-INTRUSIVE TESTING (NIT) FRN 00-01-75.

RCIC LEAK DETECTION SYSTEM

	AREA "A"	AREA "B"	AREA "C"	AREA "D"
TS-W	NONE	1360-15A	1360-14C	1360-15C
TS-X	NONE	1360-17A	1360-16C	1360-17C
TS-Y	NONE	1360-15B	1360-14D	1360-15D
TS-Z	NONE	1360-17B	1360-16D	1360-17D
TE-T	1360-23A	1360-23B	1360-23C	1360-23D
TS-U	1340-8A	1340-8B	1340-8C	1340-8D

COMPONENTS SUBJECT TO AMR

- REACTOR CORE ISOLATION COOLING SYSTEM AMRM-06
- CONDENSATE STORAGE SYSTEM AMRM-27
- REACTOR COOLANT SYSTEM PRESSURE BOUNDARY AMRM-33

SYSTEM INTENDED FUNCTION BOUNDARY

TITLE OF REFERENCE DRAWINGS	DWG NUMBER	TITLE OF REFERENCE DRAWINGS	DWG NUMBER
		NUCLEAR BOILER FUNCTIONAL CONTROL DIA	M1A-15-7
		NUCLEAR BOILER FUNCTIONAL CONTROL DIA	M1A-16-5
FUNCTIONAL CONTROL DIAGRAM RCIC SYSTEM	M1G 4-5	NUCLEAR BOILER FUNCTIONAL CONTROL DIA	M1A-59-1
FUNCTIONAL CONTROL DIAGRAM RCIC SYSTEM	M1G 3-4	NUCLEAR BOILER	M252 SH 1, 2
FUNCTIONAL CONTROL DIAGRAM RCIC SYSTEM	M1G 2-5	REACTOR WATER CLEAN-UP SYSTEM	M247
TURBINE CONTROL	VPF2050-4	RCIC SYSTEM	M246
TURBINE OUTLINE DRAWING	VPF2050-2	HIGH PRESSURE COOLANT INJECTION SYSTEM	M243, M244
PROCESS INSTRUMENT PIPING & TUBING DESIGN SPECIFICATION	22A1427AB	RESIDUAL HEAT REMOVAL SYSTEM	M241 SH 1, 2
		RADWASTE COLLECTION SYSTEM	M232
NUCLEAR BOILER LEAK DETECTION DESIGN SPECIFICATION	22A1331	CONDENSATE AND DEMINERALIZED WATER STORAGE AND TRANSFER SYSTEM	M209
INSTRUMENT AC VITAL SERVICE SYSTEM	E14	MAIN STEAM SYSTEM	M203 SH 1, 2

NO	DATE	REVISIONS	BY	ENG CHK	APP
E28	3/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	–	AEJ DLJ
		B: REVISED FOR FRN97-01-58 PER DCN 00585	CTS	–	AJB DLJ
E27	4/96	A: ELECTRONIC CONVERSION PER DCN 97-00511	TEB	–	AJB DLJ
E26	10/96	REVISED PER PR 96.00445.01	TEB	ART	SME ETA
E35	99/00	REVISED PER DCN 03-15582	TEB	–	AEJ MJB
E34	6/03	REVISED FOR CR-PHP-2002-09652 PER DCN 14498	CTS	–	TEB MJB
E33	7/01	REVISED FOR FRN 00-01-75 PER DCN 11250	CTS	–	AEJ DLJ
E32	5/01	REVISED FOR FRN 01-01-37 PER DCN 10706	N/H	–	AEJ DLJ
E31	5/01	REVISED FOR FRN 01-01-45 PER DCN 10653	TEB	–	AEJ DLJ
E30	10/00	B: REVISED PER DCN 99-07192	CTS	–	AEJ DLJ
		A: REMSED FOR PR 99.2490 PER DCN 07189		–	AEJ DLJ
E29	6/00	REVISED FOR PR 98.1270 PER DCN 03297	TEB	–	AJB DLJ

SCALE: NONE — DESIGNED GE/BECHTEL — DRAWN D MALHOIT — E

BOSTON EDISON

PILGRIM STATION NO. 820

BOSTON EDISON COMPANY

TITLE: P & ID RCIC SYSTEM

Q / Non Q — DRAWING NO. M245 — REV E35

41100-1947

FSAR FIGURE 4.7-1 (REV 16)

NO.	DATE	DESCRIPTION	BY	ENG CHK	APP
0	4-14-05	REVISIONS			

LRA-M-245-0

CAD FILE: LRA-M-245_E35.DGN

MASTER FILE: M-245-CALS_E35.CAL

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