



NOTES

- CHEMICAL CLEANING CONNECTIONS, VALVES, ETC. IF REQUIRED, ARE TO BE PROVIDED BY A.E. AS NECESSARY.
- SLOPE STEAM LINE DOWN ALL THE WAY FROM MAIN STEAM LINE TO POT JUST AHEAD OF TURBINE.
- FOR INSTRUMENTS WITHOUT RACK NUMBERS, BECHTEL IS TO DETERMINE METHOD OF MOUNTING.
- REFER TO SPECIFICATION 22A1427AB FOR INST REQUIREMENTS AND INST VALVE REQUIREMENTS BEYOND ROOT VALVES WHERE NO APED INST RACK DRAWINGS ARE PROVIDED.
- DESIGN PRESSURE AND TEMPERATURE TO BE ESTABLISHED BY BECHTEL BASED ON MAIN FEED PUMP SHUTOFF PRESSURE AND/OR RCS PUMP SHUTOFF PRESSURE AND FEEDWATER TEMP.
- EQUIPMENT VENT AND DRAIN QUANTITIES SHOWN ARE TO BE MODIFIED BY A.E. TO AGREE WITH VPP DATA FOR ACTUAL EQUIPMENT PURCHASED. PIPING HIGH POINT VENTS AND LOW POINT DRAINS TO BE ADDED BY A.E. AS NECESSARY.
- FOR G.E. SUPPLIED ITEMS SEE 2.3XG30 SECTION 1300.
- LOCATE VALVE 1301-26 AS CLOSE AS POSSIBLE TO PUMP SUCTION LINE FROM CONDENSATE STORAGE.
- 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.
- ALL AC INSTRUMENTATION POWERED FROM VITAL SERVICES AC SYSTEM. (EXCEPT PIP-1340-1, 30 PIP-1340-10, PIP-1340-4, AND 2S-1340-15 WHICH ARE POWERED FROM BATTERIES THROUGH INVERTERS DCAC-1340-16 AND DCAC-1340-26).
- FOR INTERLOCKING REQUIREMENTS, AND AUTO VALVE ACTUATION, SEE FUNCTIONAL CONTROL DIAGRAM, MFG 2-5, MFG 3-4 & MFG 4-5.
- REFER TO PIPING SPECIFICATION M-300 FOR PIPING MATERIALS, VALVE CLASSIFICATIONS AND INSTRUMENT PIPING STANDARDS.
- THE RCIC SYSTEM IS A CLASS 1 SYSTEM EXCEPT AS NOTED.
- 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).
- THIS DRAWING INCORPORATES REVISIONS 1,2,3,AND 4 TO GE-APED DRAWING 728971 SHIT 1.
- MO-1301-16 & 17, AO-1301-34 & 35 HAVE DUAL LIGHT INDICATION IN THE CONTROL ROOM.
- VALVES AO-1301-34 AND AO-1301-35 WERE PREVIOUSLY DESIGNATED AS C-1301-34 AND C-1301-35.
- 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.
- SPECTACLE FLANGE IN TURBINE EXHAUST TO BE TESTABLE WITH DOUBLE O-RINGS.
- LOCAL CONTROL SWITCH "HS" LOCATED ON ALTERNATE SHUTDOWN PANEL SHALL BE IN "REMOTE" TO OPERATE FROM CONTROL ROOM.
- OPERATION OF LOCAL CONTROL SWITCH IN ALTERNATE SHUTDOWN PANEL WILL INTERRUPT POSITION INDICATION IN CONTROL ROOM (SEE REFERENCE DRAWINGS).
- REFER TO FUNCTIONAL CONTROL DIAGRAMS, RCIC SYSTEM (SEE REFERENCE DRAWINGS).
- VESSEL SIDE OF VALVE MO-1301-49 WEDGE IS DRILLED. SEE VALVE ASSEMBLY DRAWING FOR DETAILS.
- EXISTING THREADED CAP SEAL WELDED PER FRN 97-01-58.
- RESTRICTING ORIFICE IS A 1 INCH COUPLING BLANK BORED TO 1/4".
- PERMANENT ACOUSTIC TRANSDUCERS ARE INSTALLED FOR CHECK VALVE. NON-INTRUSIVE TESTING (NIT) FRN 00-01-75.

SYSTEM INTENDED FUNCTION BOUNDARY

COMPONENTS SUBJECT TO AMR

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

	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	1360-16B	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	1360-84A	1360-88	1360-8C	1360-8D

FUNCTIONAL CONTROL DIAGRAM RCIC SYSTEM	M16 4-5	NUCLEAR BOILER FUNCTIONAL CONTROL DIA	M1A-15-7	E28 8/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
FUNCTIONAL CONTROL DIAGRAM RCIC SYSTEM	M16 3-4	NUCLEAR BOILER FUNCTIONAL CONTROL DIA	M1A-16-5	E27 8/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
FUNCTIONAL CONTROL DIAGRAM RCIC SYSTEM	M16 2-5	REACTOR WATER CLEAN-UP SYSTEM	M247	E35 8/98	REVISED PER DCN 03-15582	TER	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
TURBINE CONTROL	VP2059-4	RCIC SYSTEM	M246	E34 8/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
TURBINE OUTLINE DRAWING	VP2059-2	HIGH PRESSURE COOLANT INJECTION SYSTEM	M243, M244	E33 1/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
PROCESS INSTRUMENT PIPING & TUBING DESIGN SPECIFICATION	22A1427AB	RESIDUAL HEAT REMOVAL SYSTEM	M241 SH 1, 2	E32 5/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
NUCLEAR BOILER LEAK DETECTION DESIGN SPECIFICATION	22A1331	CONDENSATE AND DEMINERALIZED WATER STORAGE AND TRANSFER SYSTEM	M209	E30 8/98	REVISED FOR PR 97.3499 PER DCN 02921	CTS	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
INSTRUMENT AC VITAL SERVICE SYSTEM	E14	MAIN STEAM SYSTEM	M203 SH 1, 2	E29 8/98	REVISED FOR PR 97.3499 PER DCN 02921	TER	-	AEJ/DJL	SCALE	NONE	DESIGNED	GE/BECHTEL	DRAWN	B. MAHONY	E
TITLE OF REFERENCE DRAWINGS	DWG NUMBER	TITLE OF REFERENCE DRAWINGS	DWG NUMBER	NO DATE	REVISIONS										

P & ID
RCIC SYSTEM

M245

E35

0 4-14-05	NO.	DATE	DESCRIPTION	BY	ENG	CHK	APP
LRA-M-245-0							
LRA-M-245-0							
M-245-CALS-E35.CAL							