ESSENTIAL INSTRUMENT AIR

NOTES:

1. SEE DRAWING M220 SHEET 1 FOR NOTES.
2. SEE VENDOR MANUAL #VD461 G.E. DRAWING #125C7813.
3. REMOVED VALVE INTERNALS PER PDC 89-52.

TO K-117 BACK-UP DIESEL AIR COMPRESSOR — M220 SH 1 (B-8) — PI-4352 C1, PT-4352, PS-4385 EL, PS-4319, 31-HO-523, 31-HO-88

E69 FROM INSTRUMENT AIR FILTERS — M220 SH 1 (G-1) — 4"-JA-31

HE-4363

TURBINE GENERATOR PRE-ACTION VALVE — M218 SH 7 (E-6) — 31-HO-151A

HYDROGEN SEAL OIL DELUGE VALVES — M218 SH 1 (D-3) — 1"-JA-31 — 31-HO-151

HYDROGEN COOLER TEMPERATURE CONTROLS — M216 SH 4 (E-3) — 1"-JA-31 — 31-HO-343, 31-HO-342 — 31-HO-152

TO REMOTE SHAFT VOLTAGE TEST MECHANISM — SEE NOTE 2 — 1/4" COPPER TUBING — 31-HO-2154, 31-HO-2153 — 1"-JA-31 — 31-HO-178

TURNING GEAR ACTUATION — M2172 SH 3 (E-8) — 1/4" COPPER TUBING

STATOR WINDING COOLING WATER SYSTEM — M227S (C-6) — 1"-JA-31 — 31-HO-153

CONDENSER WATER BOX VENT VALVES — M211 (D,E,F & H-6) — 1"-JA-31 — 31-HO-154

SCAVENGER PUMP SEAL WATER COOLER ISOLATION VALVES — M216 SH 4 (F-8) — 1"-JA-31 — 31-HO-155

ETS HYDROGEN INJECTION — M257 (F-8) — 3/4"-HA-31 — 31-HO-487 — HA — JA

FIRE SYSTEM MAIN DELUGE VALVES — M218 SH 5 (F-7) — 1"-JA-31 — 31-HO-156

OFF GAS OXYGEN INJECTION MODULE K004 — M289 SH 2 (D-8) — 3/4"-HA-31 — 31-HO-F073 — HA BY GE — JA BY BECO — 3/4"-JA-31

INSTRUMENT AIR SUPPLY TO RECOMBINER ROOM — M254 SH 4 (A-7) — 2"-JA-31 — 31-HO-160

REACTOR BUILDING WALL COL H

3"-JA-31 — 31-HO-184

M227 SH 2 FROM NITROGEN MAKEUP SUPPLY (H-6) — 2"-HE-9 — 31-HO-101 LO — SEE NOTE 3 — 31-HO-61 — 2"-HE-9 — FROM NITROGEN MAKEUP SYSTEM M227 SH 2 (B-4)

TORUS VENT VALVES AO-5025 AND AO-5040A AND B (INSIDE DRYWELL) AO-5040C AND D (OUTSIDE DRYWELL) AO-5040E (IN TORUS AREA) — M227 SH 1 (B-6)

DRYWELL SUMP ISOLATION VALVES AO-7077A AND AO-7077B (FLOOR DRAINS) — M232 (D-5) — 2"-JA-31 — 31-HO-161

PI-4348 C7, PI-4339, PT-4348 C7, FS-4354, C904, 31-HO-227, 31-HO-39, 2"-JA-31, 1"-JA-31, 31-CK-163, 31-HO-162, LC, S-3H-1

3" X 1" RED. — 31-HO-208 — 1" — M232 (G-3) — 31-HO-289 — TO AO-7374A AND AO-7374B

DRYWELL SUMP ISOLATION VALVES AO-7011A AND AO-7011B (EQUIP DRAINS) AND AO-4356 (THIS DRAWING) — 1"-HCB-31 — 1"-JA-31 — M232 (H-5) — 31-HO-164 — HCB — JA

3"-HCB-31 — AO-4358, SV-4358, HS-, C7, ND, FO, ED, A/S, PC-4356, C, O, C904, FS0742

1"-HCB-31 — 31-HO-165 — (b)

1"-HCB-31 — 31-HO-166 — TEST

31-CK-167 — CSTL HCB — X-22 — 3" CARBON STEEL/COPPER TRANSITION

1/2" THREADED PLUG — 1/2"-JA-31 — 31-HO-208, 31-HO-209

TO MAIN STEAM RELIEF VALVE (RV-203-3A) & ACCUMULATOR T-221A — M252 SH 1 (G-7) — 1"-JA-31 — 31-HO-210 — 1/2" THREADED PLUG — 31-HO-211 — 1/2"-JA-31

TEST — 1"-JA-31 — 31-HO-202 — 3"-JA-31 — 2"-JA-31 — 31-HO-220

TEST — 31-HO-266 — 1"-JA-31 — 31-HO-228 — 31-HO-201

TO DRYWELL EQUIPMENT & FLOOR DRAIN SUMPS — M232 (C-5), (F-5) — 1"-JA-31 — 31-CK-268 — 31-HO-267

TO INBOARD MAIN STEAM ISOLATION VALVES & ACCUMULATORS (T-220A, B, C, & D) — M252 SH 1 (H-6), (F-6), (E-6), (C-6) — 2"-JA-31 — 31-HO-213

TO MAIN STEAM RELIEF VALVE (RV-203-3D) & ACCUMULATOR T-221D — M252 SH 1 (F-7) — 1"-JA-31 — 31-HO-207

TO MAIN STEAM RELIEF VALVE (RV-203-3G) & ACCUMULATOR T-221C — M252 SH 1 (A-7) — 1"-JA-31 — 31-HO-219

1/2" THREADED PLUG — 31-HO-216 — 1/2"-JA-31 — 31-HO-215

TO REACTOR HEAD VENT VALVES — M252 SH 2 (G-3) — 31-HO-47 — 1/2"-JA-31

TO REACTOR HEAD VENT VALVES — M252 SH 2 (G-3) — 31-HO-46 — 1/2"-JA-31

TO REACTOR SAMPLE SYSTEM VALVE SV-220-44 — M252 SH 2 (E-6) — 31-HO-221 — 1/2"-JA-31

TO REACTOR SEAL DRAIN VALVES SV-220-52 — M252 SH 2 (H-6) — 31-HO-220 — 1/2"-JA-31

1"-JA-31 — 31-HO-218 — M252 SH 1 — TO MAIN STEAM RELIEF VALVE (RV-203-3B) & ACCUMULATOR T-221B (C-7)

1/2"-JA-31 — 31-HO-284 — 3/4"-JA-31 — M252 SH 1 — TO INBOARD MAIN STEAM ISOLATION VALVES CONTROL SYSTEM (STEAM LINES A, B, C, & D) (H-6), (F-6), (E-6), (C-6)

31-HO-478

TO INERTING SYSTEM VALVES AO-5040A, AO-5040B, AO-5040C AND AO-5040D — M227 SH 1 (D-7, D-8, E-8, E-7)

TO RBCCW CONTROL VALVES AND INSTRUMENTATION — 31-HO-382

REACTOR PRESSURE BOUNDARY LEAK DETECTION SYSTEM PANEL C19A — M239 SH 1 (F-5) — 1.1/2"-CU — NORTH OF DRYWELL RB EL. 23'-0" — 31-HO-304

TO VALVE STATION - NORTH WALL OF 'B' RHR VALVE ROOM

NITROGEN PURGE SUPPLY BLOCK VALVES — M227 SH 2 (G-6) — 1" — 31-HO-306 — 31-HO-303 — 2" — 31-HO-302

CRD SCRAM VALVES AND FLOW CONTROL VALVES — M250 SH 1 (G-8) — 31-HO-311 — 2"-JA-31 — 2" X 1" — 31-HO-310 — 31-HO-307

TO EAST CRD AREA

REACTOR PRESSURE BOUNDARY LEAK DETECTION SYSTEM PANEL C19B — M239 SH 1 (G-2) — 1.1/2"-CU

NITROGEN RECIRCULATION COMPRESSOR VALVES — M227 SH 2 (D-5) — 31-HO-309

31-HO-239

TO "B" TRAIN LEVEL CONTROL VALVES — 31-HO-580, 31-HO-574, 31-HO-573 — 1"-JA-31 — 31-HO-578 — 31-HO-598 TO HEATER LEVEL CONTROL VALVES & BTVs

TO "A" TRAIN LEVEL CONTROL VALVES — 31-HO-557, 31-HO-565, 31-HO-595, 31-HO-596, 31-HO-570, 31-HO-561, 31-HO-562, 31-HO-558, 31-HO-563, 31-HO-564, 31-HO-571, 31-HO-599, 31-HO-597

TO VACCUM BREAKER HEATER CONTROL VALVES, CONDENSER PP MIN. FLOW VALVES — 3/4"-JA-31

TO TURBINE DECK EL 51'

TO MOIST. SEP. DRAIN TANK 103A LEVEL CONTROL

TO MOIST. SEP. DRAIN TANK 103D LEVEL CONTROL

TO HEATER HI LEVEL DUMPS & HI-P MIN. FLOW VALVES

TO MOIST. SEP. DRAIN TANK 103B LEVEL CONTROL

TO CIV CLOSURE BLOCK VALVE

TO MOISTURE SEP. DRAIN TANK LEVEL CONTROL VALVES

TO MOISTURE SEP. DRAIN TANK LEVEL CONTROL VALVES

TO TURBINE FRONT STANDARD

TO MECH. VAC. PP ROOM/SV/CIV TEST CLOSURE BLOCK VALVE

WEST WALL OF CONDENSER BAY

TO 'B' RHR & HPCI MIN. FLOW VALVE — M228 SH 1 (C-5), (E-5) — 31-HO-559 — 1" — 31-HO-576 — M210 (H-5) — TO AO-3750

M208 SH 1 (G-3), (H-4) — FEEDWATER CONTROL SYSTEM

TO OUTBOARD MAIN STEAM ISOLATION VALVE CONTROL SYSTEM, STEAM LINE "A" — M252 SH 1 (H-6)

TO OUTBOARD MAIN STEAM ISOLATION VALVE CONTROL SYSTEM, STEAM LINE "B" — M252 SH 1 (F-6)

TO OUTBOARD MAIN STEAM ISOLATION VALVE CONTROL SYSTEM, STEAM LINE "C" — M252 SH 1 (E-5)

TO OUTBOARD MAIN STEAM ISOLATION VALVE CONTROL SYSTEM, STEAM LINE "D" — M252 SH 1 (C-5)

1"-JA-31 — 31-HO-339 — 31-HO-231

31-HO-174 — 3/4"-JA-31 — 31-HO-182 — 31-CK-181 — 1/2" COPPER INSTRUMENT TUBING — M227 SH 2 (H-6) — FROM NITROGEN MAKE-UP SUPPLY

TO OUTBOARD MAIN STEAM ISOLATION VALVE AND ACCUMULATOR T-220E — M252 SH 1 (H-4) — 2"-JA-31

TO OUTBOARD MAIN STEAM ISOLATION VALVE AND ACCUMULATOR T-220F — M252 SH 1 (F-4) — 2"-JA-31

TO OUTBOARD MAIN STEAM ISOLATION VALVE AND ACCUMULATOR T-220G — M252 SH 1 (E-4) — 2"-JA-31

TO OUTBOARD MAIN STEAM ISOLATION VALVE AND ACCUMULATOR T-220H — M252 SH 1 (C-4) — 2"-JA-31

31-HO-175 — 31-HO-285

2"-JA-31 — 31-HO-183 — 2"-JA-31 — 31-HO-159 — M254 SH 4 (A-7) — INSTRUMENT AIR SUPPLY RETENTION BUILDING

CONDENSATE MAKEUP AND REJECTION VALVES — M227 SH 1 (F-8) — 31-HO-220

M216 SH 1 (D-4) — TURBINE BUILDING COOLING WATER HEAT EXCHANGER BYPASS CONTROL VALVE TV-4181

M215 SH 1 (D-7) — REACTOR BUILDING COOLING WATER HEAT EXCHANGER BYPASS CONTROL VALVE TV-3836

1"-JA-31 — 31-HO-232

1"-JA-31 — 31-HO-344

2"-JA-31 — 31-HO-284A

4"-JA-31

REACTOR BUILDING COOLING WATER HEAT EXCHANGER BYPASS CONTROL VALVE TV-3835 — M215 SH 3 (G-3) — 1"-JA-31 — 31-HO-233 — 31-HO-234

2"-JA-31 — 31-HO-235 — 31-HO-236 — MANHOLE — 31-HO-237

1"-JA-31 — 31-HO-541 — 31-HO-540

3/4"-HA-31 — 31-HO-F056 — M289 SH 1 (H-5) — ELECTROLYTIC GAS GENERATOR BUILDING — IF — JA BY BECO — HA BY GE

1"-JA-31 — M21D (E-3) — OFF GAS STACK ISOLATION VALVE AO-3751

31-HO-242 — 1"-JA-31 — 31-HO-241 — (C-5) — M218 SH 8 (M215 SH 1) — MG SET OIL PUMP DELUGE VALVE AND RBCCW TO MG SET VALVES

1"-JA-31 — 31-HO-243 — SYSTEM DEACTIVATED PER NED 89-056

1"-JA-31 — 31-HO-244 — SYSTEM DEACTIVATED PER NED 89-056

1"-JA-31 — 31-HO-245 — 1/2" — 31-HO-530 — M294 — TO C-80 STANDBY GAS TREATMENT SYSTEM

1" — M294 AO-N135, AO-N136 (C-3), (C-5) — TO SBGT DAMPERS (DISCONNECTED)

1"-JA-31 — 31-HO-246 — 31-HO-247 — TEST CONNECTION REACTOR BUILDING EL. 64'-0" FANROOM

TEST CONNECTION TURBINE BUILDING EL. 51'-0" BETWEEN FEED PUMPS P-103A AND P-103B — 3/4"-HA-31 — 31-HO-F063 — M289 SH 2 (C-3) — ELECTROLYTIC VENT/HYDROGEN INJECTION MODULE K003 — IF — JA BY BECO — HA BY GE

1"-JA-31 — 31-HO-250 — SYSTEM DEACTIVATED PER NED 89-056

1.1/2"-JA-31 — 31-HO-248 — M252 SH 2 (E-7) — TO AO-220-45

1.1/2"-JA-31 — 31-HO-249 — M248 SH 1 & 2 (M247 C-7) — REACTOR WATER CLEAN UP SYSTEM VALVES AND INSTRUMENTS

31-HO-547 — M248 SH 1 (C-8) — TO AO-8702 COND. TRANFER TO SPENT RESIN DRAIN

1"-JA-31 — 31-HO-253 — (D)

1"-JA-31 — 31-HO-251 — M216 SH 1 (H-1) — TURBINE BUILDING COOLING WATER HEAD TANK, T-104 MAKE-UP VALVE

1"-JA-31 — 31-HO-254 — M283 (B-7) — DRYWELL ISOLATION VALVES (EXTERNAL)

2"-JA-31 — CAP (D-5) — 1"-JA-31 — M248 SH 1 (M248 SH 2) (C-5) — RWCU HOLDING PUMP ROOM

1"-JA-31 — 31-HO-257 — M248 SH 1 (E-8) (H-7) — CLEAN-UP FILTER DEMINERALIZER SYSTEM

(D) — 1"-JA-31 — 31-HO-269

31-HO-258 — M215 SH 1 & 2 (C-8) (G-1) — REACTOR BUILDING COOLING WATER HEAT TANK, T-207A/B MAKE-UP

31-HO-261 — 1" — 2"-JA-31 — 31-HO-260 — 1" — 31-HO-262 — 1"-JA-31 — JA — 31-HO-548

REACTOR BUILDING COOLING WATER HEAD TANK, T-207B MAKE-UP — M215 SH 2 (H-1) — 1"

STANDBY LIQUID CONTROL INSTRUMENT PANEL — M249 (G-6) — 1/2" — 31-HO-72

			E65	7/01	REVISED FOR PR 01.2724PER DCN 11284	CTS	–	AEJ	DLJ	SCALE NONE	DESIGNED BECO	DRAWN C T SURETTE	E
			E64	7/01	REVISED FOR PR 00.0703 PER DCN 11177	TEB	–	CTS	DLJ				
			E63	6/01	REVISED PER DCN 01-10487	CTS	–	AEJ	DLJ	BOSTON EDISON	PILGRIM STATION NO. 600		
			E62	12/00	REVISED FOR PR 00.0884 PER DCN 09573	CTS	–	AJB	DLJ		BOSTON EDISON COMPANY		
			E61	8/00	REVISED PER DCN 00-08445	TEB	–	AJB	DLJ				
			E60	5/00	REVISED FOR PR 00.0507 PER DCN 08293	CTS	–	AJB	DLJ	TITLE	P & ID		
			E59	3/00	B: REVISED FOR PR 00.0721 PER DCN 07850	CTS	–	AJB	DLJ		COMPRESSED AIR SYSTEM		
					A: REVISED FOR PR 00.0746 PER DCN 07848		–	AJB	DLJ		ESSENTIAL INSTRUMENT AIR		
			E89	5/04	REVISED FOR PDC 02-50 PER DCN 15915	TEB	–	LCC	DLJ				
			E68	9/03	REVISED PER DCN 03-15404	TEB	–	AEJ	WJB	Q	DRAWING NO.		REV
			E67	4/03	REVISED PER DCN 03-14564	TEB	–	MJW	WJB	Non Q	M220 SH 3		E69
			E66	8/01	REVISED FOR PR 00.0704 PER DCN 11202	TEB	–	PKC	RMP				
TITLE OF REFERENCE DRAWINGS		DWG NUMBER	NO	DATE	REVISIONS	BY	ENG	CHK	APP				

41100-3502 FSAR FIGURE 10.11-1 (REV 16) N:\ACAD\MECH\P&ID\M220SH3.DWG

SYSTEM INTENDED FUNCTION BOUNDARY

COMPONENTS SUBJECT TO AMR

INSTRUMENT AIR SYSTEM AMRM-16

NO	DATE	DESCRIPTION	BY	ENG	CHK	APP
0	2-24-05	REVISIONS				

LRA-M-220-SH-03-0

CAD FILE: LRA-M-220-SH-03_E69.DGN

RASTER FILE: M220SH3-CALS_E69.CAL

D-23