SIZE E

SYSTEM BB

M-43-1 SHT.2 OF 2

TABLE IV

VALVE NUMBERS	
LOOP 'A'	LOOP 'B'
V031, V032	V020, V021
V011, V012	V022, V023
V009, V010	V024, V025
V055,	V056
V176, V177	V172, V173
V178, V179	V174, V175
V208	V219
V209	V220
V210	V221
V211	V222
V212	V223
V213	V224
V214	V225
V215	V226
V216	V227
V217	V228
V218	V229

TABLE II

	COMPUTER INPUTS		FUNCTION
	LOOP 'A'	LOOP 'B'	(APPLY TO BOTH LOOPS 'A' & 'B')
△	D2903	D2906	RECIRC FLOW LIMIT
	D2980	D2921	RECIRC PUMP MOTOR HI VIBRATION
	D2922	D2923	RECIRC PUMP MOTOR OIL HI/LOW LEVEL
	D2924	D2925	RECIRC PUMP MOTOR LEAKAGE HI FLOW
	D2926	D2927	RECIRC PUMP SEAL STAGE HI/LO FLOW
	D2934	D2935	RECIRC PUMP MOTOR CLG WTR LEAK
△	D2936	D2937	RECIRC PUMP MTR WDG CLG WTR LO FLOW
△	D4114	D4115	RECIRC MG AIR FLOW
△	D2000	D2137	RECIRC PUMP P6/LVL TRIP
△	D2940	D2941	RECIRC PUMP ATWS TRIP IN TEST
	A2602	A2604	RECIRC PUMP MTR AXL
	A2601	A2603	RECIRC PUMP MTR IN'D
	A1795	A1797	RECIRC PUMP SUCT TEMP
	A1796	A1798	RECIRC PUMP SUCT TEMP

△ NOT SHOWN ON P&ID

TABLE V
TEMPERATURE ELEMENT IDENTIFICATION

TE Nº	TE Nº (VENDOR)	FUNCTION	COMPUTER INPUT
3820A	A1	AP201 MOTOR THRUST BEARING UPPER FACE	A2991
3821A	A2	AP201 MOTOR THRUST BEARING UPPER FACE (SPARE)	
3820B	A1	BP201 MOTOR THRUST BEARING UPPER FACE	A3001
3821B	A2	BP201 MOTOR THRUST BEARING UPPER FACE (SPARE)	
3822A	B1	AP201 MOTOR THRUST BEARING LOWER FACE	A2992
3823A	B2	AP201 MOTOR THRUST BEARING LOWER FACE (SPARE)	
3822B	B1	BP201 MOTOR THRUST BEARING LOWER FACE	A3002
3823B	B2	BP201 MOTOR THRUST BEARING LOWER FACE (SPARE)	
3824A	C1	AP201 MOTOR UPPER GUIDE BEARING	A2993
3825A	C2	AP201 MOTOR UPPER GUIDE BEARING (SPARE)	
3824B	C1	BP201 MOTOR UPPER GUIDE BEARING	A3003
3825B	C2	BP201 MOTOR UPPER GUIDE BEARING (SPARE)	
3826A	D1	AP201 MOTOR WINDING "A"	A2995
3827A	D2	AP201 MOTOR WINDING "A" (SPARE)	
3826B	D1	BP201 MOTOR WINDING "A"	A3005
3827B	D2	BP201 MOTOR WINDING "A" (SPARE)	
3828A	E1	AP201 MOTOR WINDING "B"	A2996
3829A	E2	AP201 MOTOR WINDING "B" (SPARE)	
3828B	E1	BP201 MOTOR WINDING "B"	A3006
3829B	E2	BP201 MOTOR WINDING "B" (SPARE)	
3830A	F1	AP201 MOTOR WINDING "C"	A2997
3831A	F2	AP201 MOTOR WINDING "C" (SPARE)	
3830B	F1	BP201 MOTOR WINDING "C"	A3007
3831B	F2	BP201 MOTOR WINDING "C" (SPARE)	
3832A	G1	AP201 MOTOR LOWER GUIDE BEARING	A2994
3833A	G2	AP201 MOTOR LOWER GUIDE BEARING (SPARE)	
3832B	G1	BP201 MOTOR LOWER GUIDE BEARING	A3004
3833B	G2	BP201 MOTOR LOWER GUIDE BEARING (SPARE)	
3834A	H1	AP201 NO. 2 SEAL CAVITY	A2998
3835A	H2	AP201 NO. 2 SEAL CAVITY (SPARE)	
3834B	H1	BP201 NO. 2 SEAL CAVITY	A3008
3835B	H2	BP201 NO. 2 SEAL CAVITY (SPARE)	
3836A	J1	AP201 NO. 1 SEAL CAVITY	A2999
3837A	J2	AP201 NO. 1 SEAL CAVITY (SPARE)	
3836B	J1	BP201 NO. 1 SEAL CAVITY	A3009
3837B	J2	BP201 NO. 1 SEAL CAVITY (SPARE)	

TABLE III

LINE NUMBERS	
LOOP 'A'	LOOP 'B'
1"-HBD-152	-153
1"-HBD-154	-155
1"-HBC-156	-157
1"-HBB-158	-159
1"-HBD-160	-161
1"-CCA-162	-163
1"-HBD-178	-179
1"-HBD-184	-185
1½"-HBD-194	-199
10"-HBD-195	-200
1½"-HBD-196	-201
6"-HBD-197	-202
6"-HBD-198	-203

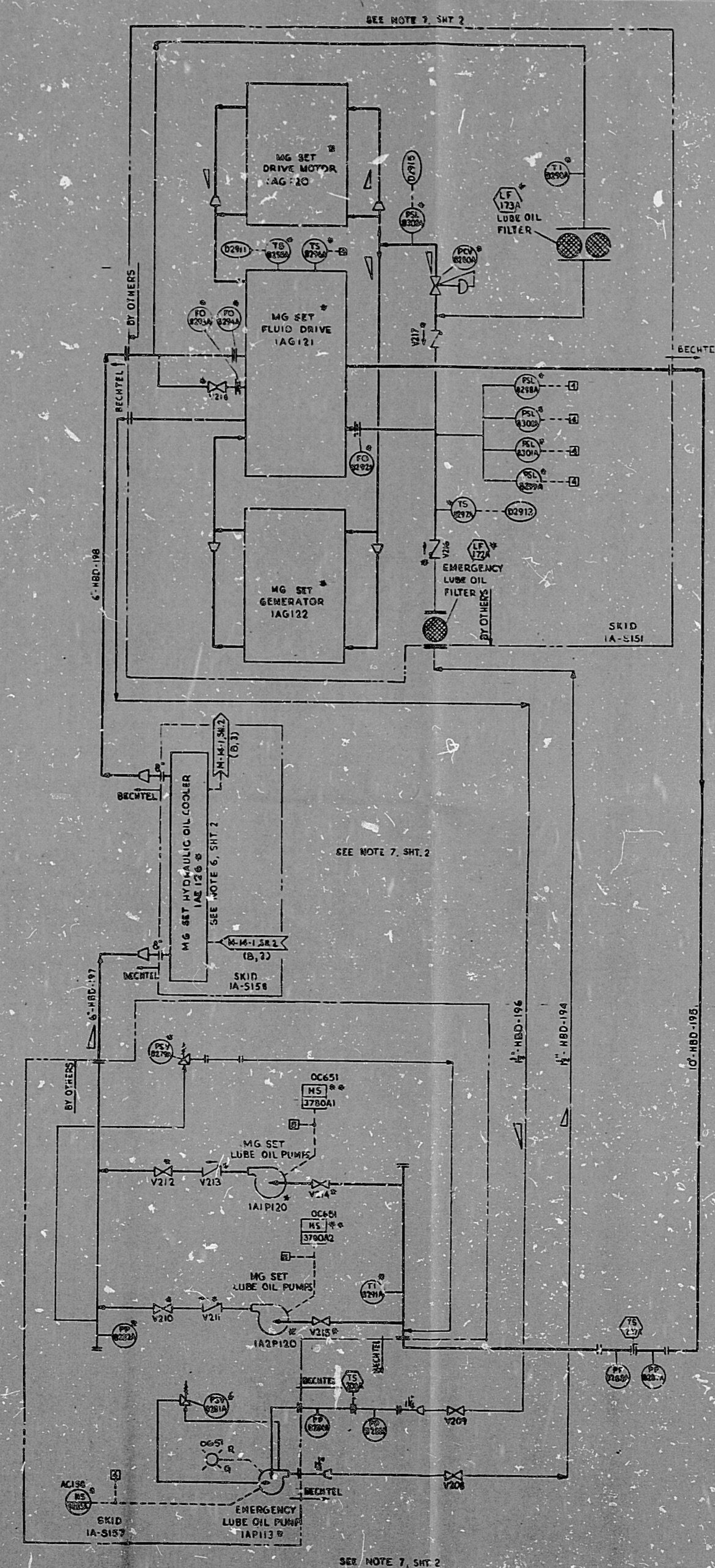
TABLE VI - RECIRC. PUMP INSTRUMENTATION

LOOP "A"		LOOP "B"	
INSTR. NO.	LOCATION	INSTR. NO.	LOCATION
VS S002A	AP 201	VS S002B	BP 201
HS S002A	OC 651	HS S002B	OC 651
LSH 3793A	AP 201	LSH 3793B	BP 201
LSL 3793A		LSL 3793B	
LSH 3794A		LSH 3794B	
LSH 3795A		LSH 3795B	
LSL 3795A		LSL 3795B	
FSH N002A		FSH N002B	
TE N023A	LOCAL	TE N023B	LOCAL
TE N035A		TE N035B	
TY K640A	OC 612	TY K640B	OC 612
TT N601A	OC 614	TT N601B	OC 614
TT N601C		TT N601D	
HV F023A	IN-LINE	HV F023B	IN-LINE
HS F023A	OC 651	HS F023B	OC 651
FSHL N007A	AP 201	FSHL N007B	BP 201
VT 7910A3		VT 7910B3	
VE 7910A3		VE 7910B3	
VT 7910A1		VT 7910B1	
VE 7910A1		VE 7910B1	
VSH 7910A1	OC 374	VSH 7910B1	OC 374
VY 7910A1		VY 7910B1	
VT 7910A2	AP 201	VT 7910B2	BP 201
VE 7910A2		VE 7910B2	
VT 7910A4		VT 7910B4	
VE 7910A4		VE 7910B4	
VSH 7910A4	OC 374	VSH 7910B4	OC 374
VY 7910A4		VY 7910B4	
VE 7938A	AP 201	VE 7938B	BP 201
VT 7938A	AP 201	VT 7938B	BP 201

M-42-1 SH.1 (G,7) ← SAME FOR BOTH LOOPS LOOSE PARTS MONITORING

TABLE VII

MG SET INSTRUMENT	COMPUTER INPUT	MG SET
TS 8295A	D2911	A
TS 8295B	D2912	B
TS 8297A	D2913	A
TS 8297B	D2914	B
PSL 8302A	D2915	A
PSL 8302B	D2916	B



NOTES:

1. STRAINERS SHOULD HAVE 80 MESH SCREENS AND SHOULD BE CLEANED FREQUENTLY DURING FLUSHING.
2. DELETED.
3. OIL COOLERS MUST BE LOCATED BELOW THE CENTERLINE HEIGHT OF THE FLUID DRIVE TO PREVENT THE DRAINING OR SYPHONING OF OIL FROM THE COOLER BACK INTO THE FLUID DRIVE.
4. OIL PIPING RUNS IN EXCESS OF 100 FEET FROM THE FLUID DRIVE MUST BE APPROVED BY G.E.
5. THE OIL PUMPS MUST BE LOCATED SUCH THAT THE SUCTION PIPING DOES NOT RISE HIGHER THAN THE OIL LEVEL IN THE FLUID DRIVE.
6. ALL BECHTEL SCOPE OIL PIPING CONNECTIONS ARE 150 LB R.F. FLANGES.
7. THE MG-SET AND ASSOCIATED EQUIPMENT AND INSTRUMENTATION SHOWN ARE FOR LOOP A, TYPICAL FOR LOOP B. TO FIND THE CORRESPONDING LOOP B TAG NUMBERS, REPLACE THE LETTER "A" WITH THE LETTER "B" UNLESS OTHERWISE SHOWN IN TABLES.
8. THIS P&ID CONTAINS SYSTEM BB - NUCLEAR BOILER & RECIRCULATION

No.	DATE	REVISIONS
2	2/19/82	REVISED PER REVISION LIST DESIGN FREEZE ISSUE
1	12/23/81	REVISED PER REVISION LIST; QTS
0	3/26/81	REVISED PER OF REVISIONS Q.T.S. ISSUE

SCALE NONE | DESIGNED R. McGEE | DRAWN A.L. ODEN

BECHTEL
SAN FRANCISCO

PUBLIC SERVICE ELECTRIC AND GAS COMPANY
HOPE CREEK GENERATING STATION

P & I.D
REACTOR RECIRCULATION SYSTEM

JOB No.	DRAWING No.	REV.	
10855	M-43-1 SH.2/2	2	Q

RIDS

8307260086