SYSTEM DATA				
LP	X10 6 LB/HR	PSIG	°F	REMARKS
1	4.273	991	545	100% LOAD
1	Minimal	1092	557	NO LOAD
14	0.786	951	540	POWER RELIEF TO ATMOS
15	0.025	1092	557	WHEN IN OPERATION
16	0.93	1176	—	SEE NOTE-A
17	0.93	1190	—	SEE NOTE-A
18	0.93	1205	—	SEE NOTE-A
19	0.93	1220	—	SEE NOTE-A
20	0.93	1235	—	SEE NOTE-A

NOTE:
A. FLOW LISTED IS THE ASME RATED CAPACITY (90% ACTUAL AT 3% ACCUMULATION) IN LB. PER HOUR WHEN THE SAFETY VALVE IS FULL OPEN AT THE HIGHEST SET SAFETY VALVE SET PRESSURE (1235 PSIG). THE PRESSURES LISTED ARE THE INDIVIDUAL SAFETY VALVES SET PRESSURE.

TURBINE DRIVEN EFP AUTO-START SIGNAL
1. 2/3 LOW-LOW LEVEL SIGNALS IN ANY 2 STEAM GENERATORS
2. UNDERVOLTAGE ON BOTH ESF BUSSES
3. AMSAC

EMERGENCY CLOSURE OF MAIN STEAM ISOLATION VALVE & BYPASS VALVE
1. 2/3 HI CONTAINMENT PRESSURE.
2. 2/3 HI STEAM FLOW WITH 2/3 LO-LO AVG. PRIMARY COOLANT TEMPERATURE.
3. MANUAL-CONTROL ROOM. (A TRAIN HAS INDIVIDUAL SW PER VALVE & B TRAIN HAS COMMON S.W. FOR 3 VALVES.
4. 2/3 LOW STEAM PRESSURE.

MS ISOLATION VALVE RE-OPEN SIGNAL

MS ISOLATION VALVE TEST CLOSE SIGNAL G.A.I. DWG. 808-001

TO CONTROL & PROTECTION LOGIC (W) DWGS. 108D932 & 108D837

OPEN LIMIT SWITCH ACTUATOR WILL ISOLATE BD. SEE B-208-009.

MOISTURE COLLECTOR DR VALVE CLOSURE
MANUAL - CONTROL ROOM "A" TRAIN HAS INDIVIDUAL SW PER VALVE "B" TRAIN HAS COMMON SW FOR 5 VALVES

FEEDWATER CONTROL (W) DWG. 108D932, SHEETS 3,4,8 → A-6 -083 FW

TO SOLENOID VALVE CONTROL POWER DISCONNECT SWITCHES IN THE MCB OR IN TERM. CABINETS IN THE CABLE SPREADING ROOM.

(N) TO BE USED NEXT

NOTE:
B. TEMPORARY STRAINER FOR SYSTEM CLEAN UP, TO BE REMOVED AFTER FINAL FLUSH.

STEAM GENERATOR "A" XSG-2A-RC

STEAM GENERATOR "B" XSG-2B-RC

STEAM GENERATOR "C" XSG-2C-RC

REACTOR BUILDING

PEN. 428

PEN. 207

PEN. 202

IRC ORC

1.90 SPECIAL WALL THICKNESS (TYP 3 LOOPS)

DETAIL "C" (E-6)

DETAIL "A" (B-6)
DETAIL "B" (G-6)

ALL PORTIONS OF THE MAIN STEAM PIPING WITH A WALL THICKNESS GREATER THAN ¾" TO BE HYDROSTATICALLY TESTED WITH WATER AT A MINIMUM TEMPERATURE OF 120°F. THE REMAINING PORTIONS OF THE SYSTEM MAY BE TESTED WITH WATER AT A TEMPERATURE OF 60°F.

DESIGN DATA									
4	Ø	AMB	145	365	<1%	—	HNG		
3	1185	600	1284	600	<1%	1780	HNG		
2	Ø	AMB	1	215	<1%	——	RJS		
1	1185	600	1284	600	<1%	1480	HNG		
LP	PSIG	°F	PSIG	°F	DURATION	HYDRO PSIG	BY	CHKD	REMARKS
	NORMAL		UPSET						

NOTES:
1. PIPING WITHIN THESE FLAGS IS TO MEET ALL THE REQUIREMENTS EXCEPT FOR STAMPING, OF ASME CODE SECTION III CLASS 2 AND IS SPECIFICALLY INCLUDED IN THE SCOPE OF SPECIFICATION SP-544-044461-000
2. DOUBLE ROOT VALVES ARE USED ON MAIN STEAM.
3. MAIN STEAM SYSTEM (NUCLEAR) IS DESIGNED IN CONFORMANCE WITH ASME BOILER & PRESSURE VESSEL CODE SECTION III 1971 AND S-73 ADDENDA.
4. ALL INSTRUMENTS WITH 400 TAG SERIES NUMBERS ARE SUPPLIED BY (W).
5. ALL (S) STATUS LIGHTS INDICATE BOTH OPEN & CLOSED POSITIONS UNLESS OTHERWISE NOTED.
6. FOR HYDRAULIC CLEANING OPENINGS, SEE PHYSICAL PIPING DWG.
7. THE EMERGENCY FEEDWATER PUMP DRIVE TURBINE EXHAUST PIPING SHALL BE DESIGNED FABRICATED & INSTALLED IN ACCORDANCE WITH ASME B & PV CODE SECTION III CLASS 3 RULES, HOWEVER, THIS PIPING DOES NOT REQUIRE HYDROSTATIC TESTING & CODE STAMPING. PIPING IS CLASSIFIED 2a, TECHNICAL REQUIREMENTS ARE DISCUSSED IN TRP-13.
8. O. R. PER TRP-13, SECTION 8. PIPING CONTROLLED FOR BREAK ELIMINATION ANALYSIS.
9. MANUAL CONTROL CIRCUITRY FOR 2801A/B/C INTERLOCKED WITH 2869A/B/C OPEN LIMIT SWITCH CONTACT TO ENSURE 2869A/B/C FULL OPEN PRIOR TO 2801A/B/C OPENING. TRAIN A ONLY

THIS IS A NUCLEAR SAFETY RELATED DOCUMENT. NO DEVIATION SHALL BE INITIATED OR PERFORMED WITHOUT PRIOR DOCUMENTATION AND WRITTEN APPROVAL

ESSENTIAL

NO.	DATE	BY	REVISION	CKD. BY	APPROVAL
39	04/15/05	JTS	REVISED PER ECR-70670	RHM	BDL
38	08/01/03	JMR	CADD ENHANCED PER ECR-50239	MGR	DDJ
37	07/01/03	DDJ	REVISED PER MRF-90102	MGR	PRB
42	04/27/2021	CMS	REVISED PER ECR-72756	chk	GFK
41	03/18/2020	CMS	REVISED PER ECR-72666	chk	GFK
40	06/07/17	JMR	REVISED PER ECR-50828	RHM	NIA

FSAR FIGURE 10.3-1

SOUTH CAROLINA ELECTRIC & GAS COMPANY

VIRGIL C. SUMMER NUCLEAR STATION

PIPING — SYSTEM FLOW DIAGRAM

MAIN STEAM (NUCLEAR)

SCE&G A SCANA COMPANY — DESIGN ENGINEERING — V. C. SUMMER NUCLEAR STATION JENKINSVILLE, S. C.

MADE	CHECKED	LE APPROVAL
1. RHM	2. MGR	3. JEW

SCALE NO SCALE — D-302-011 — 42

LE DRAWING NUMBER — SHT. NUMBER — REV

1/4"= 1'-0" (0' 5' 10' 15' 20')