

**ELECTRICAL AND TEMPERATURE TEST REPORT
OF A 7.5 KVA CVS TRANSFORMER**

Sola Electric Catalog No. 23-28-275

For Use In

**Vogtle Nuclear Power Generating Plant
Burke County, Georgia**

Prepared By: Paul Georgian
Approved By: Gary Mager

Dated: May 22, 1986
Dated: May 22, 1986

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	520/480/380	(Output Short Ckt.)		40	
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Units modified from the above tests by replacing the top cover plates without air holes with plates that have air holes.

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1.0 INTRODUCTION

This report was prepared by Sola Electric for Bechtel Power Corporation to provide electrical and temperature data in the transformer wiring compartment and on field-installed wires of a standard line 7.5 KVA CVS transformer, Sola Electric Catalog No. 23-28-275.

Test data is to be evaluated and used to provide sufficient evidence that the 23-28-275 test unit will produce equivalent temperatures in the wiring compartment and on field wires as the similar Class 1E Seismic Model CVS transformer (7.5 KVA), Sola Electric Catalog No. 923-28-275. A comparison chart lists the differences between each model.

Both models are currently installed at the Vogtle Nuclear Power Generating Plant. One (1) 23-28-275 unit and 50 feet of the field wiring cable have been sent to Sola Electric and will be used as the test unit for this report.

Test Unit Data

Catalog No. 23-28-275

Serial No. 1980F (80F)

Spec. No. X3AA04

P.O. Item No. 4

Equipment Tag No. 2-1807-Y3-RX1

Reference Nos. PAV3718 and PAV2-132

Cable Data

Three (3) insulated stranded conductors with outer jacket insulation. No. 6 AWG, CU cable, Code 83C, 7008868, The Okonite Co., PLT. #7, EP/HYP 1981 600V.

2.0 COMPARISON CHART

**Comparison Between Cat. Nos. 23-28-275 and 923-28-275
(Comparison of Core/Coil Assemblies)**

Top Level Catalog No.	Class 1E Seismic Unit Cat. No. 923-28-275	Tested Standard Unit Cat. No. 23-28-275
Electrical Ratings	Identical	Identical
Transformer C/C Assy. (T2) Transformer C/C No. (T1) (T3) Transformer C/C No. (See Note 1)	3 required 923-26-250-0E 923-26-250-1E	3 required 23-26-250-2E 23-26-250-3E
Lamination (Core) P/N Lamination Material (See Note 2)	11150-2 26 ga., M36, CRS Fully processed	11150-4 26 ga., M36, CRS Semi-processed AAS
Transformer Core Stack Size	4.69 inches	4.69 inches
Coil P/N used in C/C Assy. (T1) (T2) (T3) "A" Coil "B" Coil (See Note 3) "C" Coil	 23-26-250-A4 23-26-250-B3 23-26-250-C3	 23-26-250-A4 23-26-250-B5 23-26-250-C3
C/C Insulation Materials	Identical	Identical
C/C Impregnation	Identical	Identical
C/C AC Capacitors	Identical	Identical

Notes:

- (T2) C/C assembly is identical to the (T1) and (T3) assemblies except for the terminal block mounted in the (T2) wiring compartment.
- laminations are identical except that -2 is a fully-processed material which has lower core loss and the c/c temperatures will be typically (5 to 10°C) cooler than the -4 lamination.
- The "B" coils have different coil magnet wire sizes as follows:
 -B3 has size 9 AWG round copper and -B5 has 8 AWG round copper
 -B3 coil temperatures will be typically (5 to 10°C) hotter than the -B5.

2.0 COMPARISON CHART (Cont.)

Completed Transformer Construction Comparison Data (Ref.: Assembly Drawings 23-28-275 and 923-28-275)

The overall transformer construction is identical for both units which includes the wiring compartment housings, covers, mounting channels, and terminal blocks except as follows:

4. The 23-28-275 uses one (1) wiring terminal block for both input and output terminations. The 923-28-275 uses two (2) terminal blocks, one for input and one for output wiring with a small metal barrier strip between them to separate the high and low voltage circuits.
5. The 923-28-275 has a rubber pad mounted underneath the AC capacitors.

3.0 TEST PROCEDURE

Transformer and cable are to be tested in a suitable environmental chamber at temperatures of 104°F (40°C) and 122°F (50°C). Temperatures will be measured with a suitable temperature-indicating meter with thermocouple wires attached to the surface of the components being measured. Thermocouple wires that are measuring the ambient temperatures are in free air and are not in contact with any surface.

Each test condition shall continue until such time as temperatures stabilize.

Transformer shall be mounted to simulate wall mounting with the wiring compartment orientated at the top with the input cable entering on the left side and the output cable entering on the right side of the unit.

Transformer Standard Ratings

Input Voltage Range: 380-520, 480 V nominal

Output Voltage: 120

Output Current: 6.25 amps

VA: 7500

Power Factor: Unity (1.0)

Ambient: 50°C

Tests will be performed under the following test conditions with the input/output electrical and temperature data recorded as appropriate for each test.

Test No.	1	2	3*	4	5	6*
Input Volts	380	520	520	380	520	520
Output Volts	120	120	Short Ckt.	120	120	Short Ckt.
Output Amps	62.5	62.5	Short Ckt.	62.5	62.5	Short Ckt.
Power { Lagging Factor } Unity	0.90 1.0	0.09 1.0	—	0.90 1.0	0.90 1.0	—
Ambient Temp.	50°C	50°C	50°C	40°C	40°C	40°C

*Short Circuit: Temperatures will be measured at 520 V and the input/output currents will be measured at 520/480/380 V.

Additional test conditions will be performed if deemed necessary.

4.0 SUMMARY

Test unit Catalog No. 23-28-275 and the similar Class 1E Seismic Unit Catalog No. 923-28-275 are electrically and mechanically identical except as noted in the comparison chart on page 2. The temperature measurements would be slightly cooler on the 923-28-275 unit due to the lamination core material as described in Note 2 of the comparison chart.

Unity power factor tests generated higher temperatures than the 0.9 lagging power factor tests.

Tests were conducted at the lower (380 V) and higher (520 V) input voltage range limits because these are points which will see the highest temperatures at certain conditions. Low line has the highest primary current, high line has the highest capacitor current under load and the highest output short circuit current.

The summary test log sheets on pages 6-9 list the final test results of each test condition.

Thermocouple nos. 16 and 20 are live electrical conductor strands and unit power must be turned off to avoid being shocked. Subsequently, temperatures are lower than the conductor jacket temperatures nos. 15 and 19.

Test conditions 2A/2B through 8A/8B are the normal unit construction with no air holes in the top cover plates (ref.: photographs on page 37). Wiring compartment temperatures are above 90°C (194°F). Additional tests 9A/9B through 13A/13B were conducted with air vent holes in cover plates which helps reduce the wiring compartment temperatures about 6-10°C.

SOLA ELECTRIC TEST REPORT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: MARSHALL UHL

Approved By: PAUL GEORGIAN

Date: (MAY 16, 1986 Ref)

Prog. Tested At: 60 Hz

C/C Assm. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Capacitors: 7X 8.0 mfd. @ 660 VAC (EACH CAP ASSM.)

Lamination: 11150-4

Stack Size: 4.69

Rev.: 050

SUMMARY TEST LOG: (FINAL RESULTS OF EACH TEST CONDITION) (ORIGINAL TOP COVER PLATE WITHOUT AIR VENT HOLES)

TEST LINE NO.	PRIMARY (HI-HV)				SECONDARY (X1-X2)					CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (OC)									
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	HAR-MONICS	Volts	Amps	1 2 3 4 5 6 7 8 9 10 11											
(2-4)	(100% LOAD) (0.9 LAG. P.F.) (50°C AMBIENT)											(ORIGINAL TOP COVER PLATE WITHOUT AIR HOLES)										
16	383.3	18.55	7075	112.59	62.6	6400	90%	2.04%	555	11.8	4:00	50	49	109	142	140	136	136	144	126	125	71
35	519.4	14.65	7290	113.92	63.2	6520	90%				2:00	51	51	117	142	139	140	150	160	140	136	74
51	521.0	18.60	910	219	100.9	(SHORT CIRCUIT)			88.2	2.07	11:30	50	49	112	154	157	177	160	199	133	105	71
(5)	(100% LOAD) (UNITY (40) P.F.) (50°C AMBIENT)																					
71	380.6	21.7	8085	117.96	61.18	7216	1.0	1.83%	573	12.33	11:00	48	47	118	164	162	152	157	172	140	134	73
81	521.7	16.7	8100	117.34	61.0	7140	1.0	3.20%	605	13.98	4:00	48	46	124	136	152	150	170	187	152	146	76
(6-7)	(100% LOAD) (0.9 P.F.) (40°C AMBIENT)																					
101	381.1	18.85	7140	112.34	63.8	6440	.898	2.15%	564	10.98	4:00	41	40	100	134	132	128	127	134	116	114	61
115	523.2	15.0	7460	113.93	64.8	6660	.902	2.40%	565	10.95	11:30	42	41	100	135	132	134	142	152	132	128	63
124	524.1	18.65	905	220	102.7	(SHORT CIRCUIT)			88.0	2.09	3:00	44	43	102	145	148	169	152	192	125	97	65
(8-9)	(100% LOAD) (UNITY (40) P.F.) (40°C AMBIENT)																					
128	382.4	22.05	8255	118.20	62.4	7380	1.0	1.83%	587	11.26	11:00	40	38	110	157	155	146	150	165	132	126	65
142	526.3	17.25	8415	117.71	63.2	7420	1.0	3.05%	632	11.06	3:30	39	37	117	150	147	145	164	182	145	138	67
(10-10)	(100% LOAD) (0.9 P.F.) (50°C AMBIENT)											(NEW COVER TOP WITH AIR VENT HOLES) (REF. LINES 16, 35, 51) WITHOUT HOLES)										
153	374.6	19.35	7185	112.82	62.0	6460	.923	2.08%	563	10.88	8:05	52	50	108	145	142	133	136	144	124	122	75
163	527.7	15.10	7545	114.41	62.8	6680	.929	2.53%	617	10.97	12:30	50	48	113	140	136	134	148	157	136	131	74
180	520.4	18.35	871	216	101.8	(SHORT CIRCUIT)			87	2.3	5:00	50	49	106	147	148	165	153	191	126	98	73

SOLA ELECTRIC TEST REPORT

C/C Assem. No.: 2X 23-26-250-2E
 Capacitors: 7X8.0MFD @ 660VAC (C/C ASSEMBLY)
 Laminations: 11150-4
 Stack Size: 4.69
 Rev.:
 Type Tests: TEMPERATURE TEST ON COMPLETE UNIT
 Tested By: MARSHALL UHL
 Approved By: PAUL GEORGIAN
 Date: (MAY 16, 1986 REF)
 Equip. TAG. NO. 2-1807-V3-RX1
 GEORGIA POWER CO.
 VOGTLE ELECTRIC GENERATING PLANT
 Type of Units: CVS TRANSFORMER
 Catalog No.: 23-28-275 (SPECIAL)
 Serial No.: 1980 F
 Freq. Tested At: 60 HZ.

SUMMARY TEST LOG: FINAL RESULTS OF EACH TEST CONDITION (ORIGINAL TOP COVER PLATE WITH AIR VENT HOLES)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (OC)																REMARKS			
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		28	29	30
(TEST 2-4)	(100% LOAD) (0.9 VAC P.F.) (50°C AMB) (ORIGINAL TOP COVER PLATE WITHOUT AIR HOLES)																			
16	107	99	100	103	103	101	102	109	106	101	102	99	93	98	101				(INVT 283V.)	
35	118	103	105	108	108	107	108	116	113	106	108	101	95	105	107				(519.4V)	
51	124	106	107	114	111	123	127	137	130	112	123	95	91	116					(52.7V SHUNT CIRCUIT)	
(TEST 5)	(100% LOAD) (UNITY (1.0) P.F.) (50°C AMB)																			
71	119	108	110	114	-	109	109	119	-	111	112	104	99	110	109	129		116	(INVT 380.6)	
81	131	110	112	117	114	113	113	123	119	114	116	105	98	113	112	131	113	122	(521.7)	
(TEST 6-7)	(100% LOAD) (0.9 P.F.) (40°C AMB)																			
101	98	90	91	95	94	92	93	101	98	92	94	89	84	87	90	106	93	96	92	(581.1)
115	109	97	97	101	-	100	100	108	-	99	101	94	87	97	98	114	103	99	103	(523.2)
124	124	99	100	107	104	116	119	132	127	106	117	86	83	107	119	124	106	91	105	(524.7V SHUNT CIRCUIT)
(TEST 8)	(100% LOAD) (UNITY (1.0) P.F.) (40°C AMB)																			
128	111	101	102	107	-	101	101	111	-	104	105	96	91	100	100	121	108	104	106	(382.4V)
142	121	104	105	111	108	106	105	115	112	108	109	99	92	106	104	124	113	106	113	(576.3V)
(TEST 9-10)	(100% LOAD) (0.9 P.F.) (50°C AMB) (NEW COVER PLATE WITH AIR HOLES)																			
153	103	90	93	97	-	93	93	104	-	94	96	89	87	86	91	90	91	93	85	REF. LIMITS 16, 35, 51 (374.6V)
163	107	91	93	97	90	95	95	107	103	95	98	88	85	89	93	87	92	93	86	(527.7V)
180	112	91	93	99		107	110	124		97	106	82	82	94	109	89	92	84	86	(520.4V SHUNT CIRCUIT)

SOLA ELECTRIC TEST REPORT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Capacitors: 7X 8.0MFD. @ 660VAC (C/C ASSEM)

Tested By: MARSHALL UHL

Lamination: 11150-4

Approved By: PAUL GEORGEIAN

Stack Size: 4.69

Date: (MAY 16, 1986 REF)

Res.:

Freq. Tested At: 60 HZ

Serial No.: 1980F

EQUIP. TAG. NO.: 2-1807-Y3-RX1

GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

SUMMARY TEST LOGS: (FINAL RESULTS OF EACH TEST CONDITION) (NEW TOP COVER PLATE WITH AIR VENT HOLES)

TEST LINE NO.	PRIMARY (HI-#4)				SECONDARY (X1-X2)						CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (OC)										
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	HAR- MONICS	Volts	Amps	Volts	Amps		REF. LINES 16, 35, 51 (WITHOUT HOLES)										
														1	2	3	4	5	6	7	8	9	10	11
(TEST 9-10)																								
153	374.6	19.35	7185	112.82	62.0	6460	.723	2.08%	563	10.88	8:05 _{AM}	52	50	108	145	142	133	136	144	124	122	75		
163	522.7	15.10	7545	114.41	62.8	6680	.929	2.53%	617	10.97	12:30	50	48	113	140	136	134	148	157	136	131	74		
180	520.4	18.35	871	2.16	101.8	(SHORT CIRCUIT)			87	2.3	5:00	50	49	106	147	148	165	153	191	126	98	73		
(TEST 11-12)																								
223	379.1	22.25	8235	118.18	62.6	7360	1.0	1.88%	571	12.31	2:45	40	39	104	152	149	136	142	157	124	118	64		
202	478.6	17.95	8325	118.74	62.8	7420	1.0	2.04%	598	13.71	8:30 _{AM}	42	42	108	142	138	133	153	169	133	127	66		
196	519.0	17.15	8340	118.13	62.6	7400	1.0	2.80%	604	13.98	10:00	41	40	107	140	135	130	153	170	134	128	64		
(TEST 13)																								
233	520.2	17.15	8315	118.07	62.4	7380	1.0	3.15	632	11.19	11:00 _{AM}	42	41	106	140	136	131	153	170	135	128	66		
241	517.3	18.10	895	2.12	102.2	(SHORT CIRCUIT)			81.8	2.08	2:45	42	41	95	136	137	155	141	180	115	87	62		
248	480.5	15.20	700	1.94	95.0	(SHORT CIRCUIT)			74.3	1.97	5:45	42	41	89	120	121	139	129	162	107	82	59		

SECTION 4.1

SHEET 54 OF 54

Customer: METRO POWER / BENTON POWER
 Type of Units: CVS TRANSFORMER
 Catalog No.: 23-28-275 (SPECIAL)
 Serial No.: 1980 F
 EQUIP. TAG. NO. 2-1807-V3-RX1
 GEORGIA POWER CO.
 VOGTLE ELECTRIC GENERATING PLANT

SOLA ELECTRIC TEST REPORT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT
 Tested By: MARSHALL WHL
 Approved By: PAUL GEORGIAN
 Date: (MAY 16, 1986 Ref.)
 Freq. Tested At: 60 HZ.

C/C Assm. No.: 1X 23-26-250-2E
 2X 23-26-250-3E
 Capacitors: 7X 8.0 MFD. @ 660 VAC (C/C ASSEM.)
 Laminations: 11150-4
 Stack Size: 4.69
 Sheet Size: 0.50
 Rev.: 6AP

SUMMARY TEST LOG: (FINAL RESULTS OF EACH TEST CONDITION) (NEW TOP COVER PLATES WITH AIR VENT HOLES)

THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																					REMARKS
TEST LINE NO.	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
(TEST 9-10)	(100% LOAD) (0.9 P.F.) (50°C AMB.) (NEW TOP COVER PLATE WITH AIR HOLES)																				
153	103	90	93	97	—	93	93	104	—	94	96	89	87	86	91	90	91	93	85	(REF. LINES 16, 35, 51) WITH OUT HOLES	
163	107	91	93	97	90	95	95	107	103	95	98	88	85	89	93	87	92	93	86	(INPUT V. 374.6)	
180	112	91	93	99	—	107	110	124	—	97	106	82	82	94	109	89	92	84	86	(527.7) (520.0 VV) (SHORT CIR.)	
(TEST 11-12)	(100% LOAD) (UNITY (1.0) P.F.) (40°C AMB.) (NEW COVER PLATE WITH AIR HOLES)																				
223	106	84	86	92	91	88	87	99	95	89	91	82	79	85	86	72	86	86	78	(REF. LINES 123, 124) WITH OUT HOLES	
202	106	84	87	92	91	90	90	102	98	90	93	81	78	86	88	72	87	85	81	(INPUT V. 379.1)	
196	107	84	86	90	89	89	88	101	98	88	92	78	76	86	87	67	87	83	80	(MOM. 428.4) (519.0)	
(TEST 13)	(OUTPUT SHORT CIRCUIT) (40°C AMB.) (NEW COVER PLATE WITH AIR HOLES)																				
233	108	85	87	92	91	90	89	102	96	90	93	80	78	86	88	71	88	86	81	(REF. LINES 142, 124) WITH OUT HOLES	
241	104	82	84	89	87	99	101	114	104	88	98	73	72	87	101	76	83	75	77	(INPUT V. 520.7)	
248	96	76	78	83	80	92	94	106	100	82	91	68	67	81	93	71	78	71	73	(517.3) (SHORT CIRCUIT) (480.5 NOM) (SHORT CIRCUIT)	

4.2 Thermocouple Locations

No.	Thermocouple Locations On Unit
1	Chamber Ambient - Front Left Side of Unit
2	Chamber Ambient - Front Right Side of Unit
3	(T2) Center Transformer Core - Outer Surface, Left Side
4	(T2) Transformer "A" Coil Winding #1 (G3) Surface
5	(T2) Transformer "A" Coil Winding #2 (H3) Surface
6	(T2) Transformer "A" Coil Winding #4 (R31) (X1) Surface
7	(T2) Transformer "B" Coil Winding #5 Surface
8	(T2) Transformer "B" Coil Winding #6 Surface
9	(T2) Transformer "B" Coil Winding #7 Surface
10	(T2) Transformer "C" Coil Winding #8 Surface
11	(T2) Transformer AC Caparitor Can Surface
12	(T2) Transformer Wiring Compartment Ambient - In Center of Compartment
13	(3-Conductor Cable) Input Cable Outer Jacket Surface
14	Input Cable - Inside Cable Between Jacket and Conductor
15	Input Cable - (H1) Conductor Insulation Surface
16	Input Cable - (H1) Conductor Internal Wire Strands
17	(3-Conductor Cable) Output Cable Outer Jacket Surface
18	Output Cable Inside Cable Between Jacket and Conductors
19	Output Cable - (X2) Conductor Insulation Surface
20	Output Cable - (X2) Conductor Internal Wire Strands
21	(T2) Wiring Compartment Main Terminal Block Surface by (H1) Terminal
22	(T2) Wiring Compartment Main Terminal Block Surface by (X2) Terminal
23	(T1) Left Transformer Compartment Ambient (Above Cable)
24	(T1) Transformer Input Cable Outer Jacket Surface
25	(T3) Right Transformer Compartment Ambient (Above Cable)
26	(T3) Transformer Output Cable Outer Jacket Surface
27	(T2) Wiring Compartment Ambient Below Input Cable
28	(T2) Wiring Compartment Ambient Above Input Cable
29	(T1) Compartment Ambient - In Center of Compartments
30	(T3) Compartment Ambient - In Center of Compartments

SOLA ELECTRIC TEST REPORT

TEST SHEET 2A OF

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3EType Test: TEMPERATURE TEST ON
COMPLETE UNIT

Customer: METRO POWER/BECHTEL POWER

Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH
C/C ASSEM)

Tested By: Marshall Uhl

Type of Unit: CVS TRANSFORMER

Lamination: 11150-4

Approved By: PAUL GEORGIAN

Catalog No.: 23-28-275 (SPECIAL)

Stack Size: 4.69 Shunt Size: .050

Serial No.: 1980F

Res.: Rev.:

Freq. Tested At: 60 HZ.

EQUIP. TAG. NO. 2-1807-V3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

TEST CONDITION: (100% FULL LOAD) (0.9 LAG. P.F.) (380 V. INPUT) (50°C AMBIENT)

TEST LINE NO.	PRIMARY (HI-114)			SECONDARY (X1-X2)					CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)										
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	HAR- MONICS	Volts	Amps		1	2	3	4	5	6	7	8	9	10	11
1	380.2	19.0	7200	113.23	63.6	6580	.909				8:30 _{PM}	53	52	53	59	60	67	56	62	55	60	51
2	381.8	18.8	7170	113.47	63.2	6340	.884				9:00	51	51	64	88	90	92	81	92	74	82	56
3	383.5	18.7	7145	113.41	63.0	6320	.884				9:30	51	51	70	97	99	100	92	103	84	89	58
4	383.3	18.65	7135	113.22	62.8	6440	.906				10:00	50	50	80	110	111	110	105	115	96	98	61
5	381.9	18.60	7070	113.02	62.6	6420	.907				10:30	53	53	87	118	118	117	113	123	104	105	64
6	382.2	18.5	7080	112.87	62.6	6420	.909				11:00	52	51	92	123	123	121	118	128	109	110	67
7	380.3	18.65	7085	112.70	62.6	6240	.884				11:30	50	50	96	128	127	125	123	132	113	113	68
8	379.4	18.60	7060	112.62	62.4	6400	.910				12:00 _{PM}	52	51	100	132	131	128	126	135	116	116	68
9	378.3	18.55	7030	112.52	62.4	6400	.911				12:30	51	50	102	135	134	130	129	137	119	118	70
10	380.1	18.75	7080	112.54	62.4	6360	.906				1:00	50	49	104	136	135	131	130	138	120	119	72
11	382.8	18.50	7040	112.69	62.4	6240	.887				1:30	52	52	106	138	137	134	133	141	123	121	70
12	383.3	18.45	7025	112.66	62.6	6240	.885				2:00	51	50	107	139	138	134	134	141	123	122	70
13	379.6	18.60	7040	112.47	62.4	6380	.909				2:30	52	51	108	141	139	135	135	143	125	123	71
14	379.8	18.55	7045	112.45	62.4	6380	.909				3:00	53	52	109	142	140	136	136	143	125	123	71
15	382.7	18.50	7080	112.59	62.4	6300	.897				3:30	50	49	109	142	140	136	136	143	126	124	71
16	383.3	18.55	7025	112.59	62.6	6400	.908	2.04			4:00	50	49	109	142	140	136	136	144	126	125	71
17																						
18	480.6	15.35	7320	114.37	63.4	6380	.880	1.86			4:15	50	49									
19	519.2	14.65	7285	114.14	63.4	6360	.879	2.35			4:30	50	49									
20	(TEST CONTINUED FOR 520V. INPUT ON SHEETS 3A/3B.)																					
21	0	0	0	0	0	0	0	0	0	0	8:00 AM	52	51	51	51	51	51	51	51	51	51	51

(TEST CONTINUED FOR 520V. INPUT ON SHEETS 3A/3B)

SOLA ELECTRIC TEST REPORT

TEST SHEET 2B OF

Customer: METRO POWER/BEECHTEL POWER
 Type of Unit: CVS TRANSFORMER
 Catalog No.: 23-28-275 (SPECIAL)
 Serial No.: 1980F
 EQUIP. TAG. NO. 2-1807-V3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E
 Capacitors: 7X 8.0MFD. @ 660VAC (C/C ASSEM.)
 Lamination: 11150-4
 Stack Size: 4.69 ^{GAP} Shunt Size: .050
 Rea.: Rev.:
 Type Test: TEMPERATURE TEST ON COMPLETE UNIT
 Tested By: Marshall Uhl
 Approved By: PAUL GEORGIN
 Date: April 15, 1986
 Freq. Tested At: 60 HZ.

TEST CONDITION:

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		
1	55	53	53	54	—	57	57	63	—	54	57	55	53	57	61		SEE LINE NO. 21 FOR TEMPS. BEFORE INPUT POWER WAS APPLIED.
2	69	62	63	66	—	69	70	77	—	65	71	66	61	68	71		
3	77	68	69	72	—	75	75	82	—	71	76	72	66	74	77		
4	88	76	77	80	—	81	82	89	—	79	83	80	73	81	84		
5	94	81	82	86	—	86	87	95	—	84	88	85	78	86	88		
6	97	85	86	90	—	89	91	98	—	88	92	88	82	89	92		
7	99	89	90	93	—	93	94	101	—	92	94	91	85	90	94		
8	101	91	92	95	—	95	96	103	—	94	96	93	87	93	96		
9	102	93	95	97	—	97	97	104	—	96	98	95	89	94	97		
10	103	94	96	99	—	98	98	105	—	97	99	96	90	95	98		
11	105	96	97	100	—	99	100	107	—	99	101	98	91	96	99		
12	105	97	98	101	—	94	96	108	—	99	101	98	92	96	99		
13	107	98	99	102	—	101	101	109	—	100	102	99	93	98	100		
14	107	98	100	103	—	101	102	110	—	101	103	100	93	98	101		
15	107	99	100	103	—	101	102	109	—	101	102	99	93	98	101		
16	107	99	100	103	103	101	102	109	106	101	102	99	93	98	101		(Final Temps)

NOTE: NO. 16 AND NO. 20 ARE LIVE CONDUCTOR STRANDS. UNIT POWER IS TURNED OFF TO AVOID ELECTRICAL SHOCK AND MEASUREMENTS ARE TAKEN WITH IN 2-3 MINUTES.

NOTE: UNIT WAS BUE-CONDITIONED AT 50°C AMBIENT FOR 18 HOURS BEFORE INPUT VOLTAGE AND LOAD WERE APPLIED.

17	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	TEMP. BEFORE POWER WAS APPLIED
18																	
19																	
20																	

SOLA ELECTRIC TEST REPORT

TEST SHEET 3A OF

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Customer: METRO POWER/BECHTEL POWER

Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH C/C ASSEM.)

Tested By: MARSHALL UHL

Type of Unit: CVS TRANSFORMER

Lamination: 11150-4

Approved By: PAUL GEORGIAN

Catalog No.: 23-28-275 (SPECIAL)

Stack Size: 4.69 Shunt Size: .050

Serial No.: 1980F

Res.: Rev.:

Freq. Tested At: 60 HZ.

EQUIP. TAG. NO. 2-1807-Y3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

TEST CONDITION: (100% LOAD) (0.9 LAG P.F.) (520 V. INPUT) (50°C. AMBI)

TEST LINE NO.	PRIMARY (HI-H4)			SECONDARY (X1-X2)					CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)										
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	HAR- MONICS	Volts	Amps		1	2	3	4	5	6	7	8	9	10	11
22	(UNIT RAN OVERNIGHT AT 330V. INPUT)																					
23	377.0	18.7	7015	112.36	62.4	6300	.898	2.05%	553	11.7	8:00	50	49	109	143	141	136	143	125	123	70	
24	(INPUT VOLTS INCREASED TO 520 VOLTS)																					
25	519.6	14.70	7335	114.05	63.2	6400	.887	2.41	543	13.2	9:00	50	49	109	139	137	137	146	128	126	70	
26	521.6	14.90	7360	114.04	63.4	6480	.896				9:30	49	48	110	136	134	135	142	131	129	70	
27	519.1	14.70	7340	114.01	63.2	6520	.905				10:00	50	49	112	136	134	136	144	134	132	71	
28	521.2	14.75	7315	113.98	63.2	6540	.908				10:30	50	49	113	138	135	136	146	136	133	73	
29	519.0	14.70	7285	113.97	63.2	6540	.908				11:00	51	50	114	139	136	138	147	137	134	72	
30	521.2	14.65	7290	113.92	63.2	6540	.908				11:30	50	49	115	140	137	138	148	138	135	72	
31	521.4	14.75	7325	113.96	63.2	6400	.889				12:00	50	49	116	140	137	139	149	158	135	73	
32	520.8	14.75	7310	113.94	63.2	6400	.889				12:30	50	49	116	140	137	139	149	158	135	73	
33	518.4	14.65	7300	113.95	63.2	6380	.886				1:00	51	50	116	141	138	139	150	159	136	73	
34	517.3	14.65	7285	113.93	63.2	6520	.905				1:30	50	49	117	141	138	140	150	159	136	74	
35	519.4	14.65	7290	113.92	63.2	6520	.906				2:00	51	51	117	142	139	140	150	160	140	74	
36																						
37	481.4	15.30	7315	114.22	63.4	6420	.914	2.00	586	18.90	2:10											
38	382.0	18.50	7050	112.53	62.4	6180	.880	2.07	555	11.81	2:15											

(TESTS CONTINUED FOR SHORT CIRCUIT TEST ON SHEETS 4A/4B)

SOLA ELECTRIC TEST REPORT

TEST SHEET 3B OF

Customer: METRO POWER / BECHTEL POWER
Type of Units: CVS TRANSFORMER
Catalog No.: 23-28-275 (SPECIAL)
Serial No.: 1980 F
EQUIP. TAG. NO. 2-1807-YB-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: MARSHALL UHL

Approved By: PAUL GEORGEIAN

Date: 4-16-86

Freq. Tested At: 60 HZ.

TEST CONDITION: (100% LOAD) (0.9 LAB. P.F.) (570V. INVT) (50°C AMB)

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E
Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH ASSEM.)

Lamination: 11150-4

Stack Size: 4.69

Shunt Size: 0.50

Rev.: 6AP

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)															REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
22	106	98	100	102	—	96	97	105	—	101	102	99	93	97	100	(FINAL OVERNIGHT TEMPS)
24																
25	107	97	99	101	—	98	98	107	—	99	100	97	92	96	98	
26	110	97	99	102	—	98	101	110	—	99	103	98	91	98	101	
27	113	99	101	104	—	103	103	112	—	102	104	98	92	101	103	
28	116	100	102	106	—	104	105	113	—	104	106	99	93	102	104	
29	116	101	103	106	—	105	105	114	—	104	106	99	94	102	105	
30	116	102	103	107	—	105	106	114	—	105	107	99	94	103	105	
31	116	102	104	107	—	105	106	114	—	105	107	100	94	103	105	
32	116	102	104	107	—	106	106	114	—	105	107	97	94	103	106	
33	116	102	104	107	—	106	106	115	—	105	108	100	94	103	106	
34	117	103	104	108	—	107	107	115	—	106	107	100	95	104	107	
35	118	103	105	108	108	107	108	116	113	106	108	101	95	105	107	(FINAL TEMPS)

SOLA ELECTRIC TEST REPORT

TEST SHEET 4A OF

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Capacitors: 7X 8.0MFD. @ 660VAC (C/E ASSEM)

Tested By: MARSHALL UHL

Lamination: 11150-4

Approved By: PAUL GERAGIAN

Stack Size: 4.69

Date: 4-17-86

Rev.: GAP

Freq. Tested At: 60 HZ.

Serial No.: 1980F

EQUIP. TAG. NO. 2-1807-Y3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480/380V INPUT) (50°C AMB)

TEST LINE NO.	PRIMARY (HI-H4)				SECONDARY (X1-X2)						CAPACITOR	TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)												
	Volts		Amps	Watts	Volts	Amps	Watts	POWER FACTOR	HAR- MONICS	Volts			Amps	1	2	3	4	5	6	7	8	9	10	11	
	C UNIT RAN OVERNIGHT AT 520V. INPUT)												Volts	Amps											
43																									
44	522.0	14.75	730.0	113.79	63.2	6520	907	2.63	592	13.28	8:30A	50	49	117	142	139	140	150	159	139	136	72			
45											8:35A														
46	524.0	14.25	885	2.58	100.6	240	S/C				9:00	51	51	114	148	149	171	152	187	130	112	73			
47	522.7	19.0	970	2.17	101.4						9:30	51	50	112	149	150	171	153	187	129	107	73			
48	522.7	18.75	915	2.20	101.2						10:00	50	49	112	154	156	176	158	198	132	105	71			
49	522.2	18.60	960	2.19	101.1						10:30	51	50	111	154	156	177	159	199	132	105	71			
50	522.3	18.75	950	2.19	100.9						11:00	51	51	111	154	156	177	159	199	132	105	71			
51	521.0	18.60	910	2.19	100.9		S/C				11:30	50	49	112	154	157	177	160	199	133	105	71			
52																									
53	482.8	15.6	780	1.99	93.6		S/C				11:40														
54	381.5	11.0	460	1.53	72.6		S/C				11:50														
55																									
56																									
57																									
58																									
59																									
60																									
61																									
62																									
63	(TEST CONTINUED FOR (UNITY 1.0 P.F.) ON SHEETS 5A/5B																								

SOLA ELECTRIC TEST REPORT

TEST SHEET 4B OF —

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Type Test: TEMPERATURE TEST ON
COMPLETE UNIT

Customer: METRO POWER / BECHTEL POWER

Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH C/C ASSEM.)

Tested By: MARSHALL UHL

Type of Unit: CVS TRANSFORMER

Lamination: 11150-4

Approved By: PAUL GEORGIAN

Catalog No.: 23-28-275 (SPECIAL)

Stack Size: 4.69 Shunt Size: .050

Date: 4-17-86

Serial No.: 1980 F

Res.: — Rev.: —

Freq. Tested At: 60 HZ.

EQUIP. TAG. NO. 2-1807-YB-RX1

GEORGIA POWER CO.

VOGTLE ELECTRIC GENERATING PLANT

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480/360 V. INPUT) (50°C AMB)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)															REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
43																
44	116	102	104	108	107	107	107	115	112	104	106	98	93	102		(FINAL OVERNIGHT TEMPS)
45		(OUTPUT SHORT CIRCUIT TEST)														
46	118	105	107	111	—	118	121	133	—	109	118	99	95	112		
47	119	105	106	112	—	118	122	133	—	110	118	97	93	112		
48	122	106	108	114	—	122	126	136	—	112	122	96	92	115		
49	122	106	108	114	—	122	126	137	—	111	122	96	92	115		
50	123	106	107	114	—	123	127	137	—	112	122	96	92	116		
51	124	106	107	114	111	123	127	137	130	112	123	95	91	116		(FINAL TEMPS)
52																
53																
54																
55																
56																
57																
58																
59																
60																
61																
62																
63																

↑
MISSING
DATA

TEST SHEET 5A OF 1

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: Marshall Uhl

Approved By: PAUL GORDON

Date: April 17-18, 1986

Freq. Tested At: 60 Hz

TEST CONDITION: (100% LOAD) (UNITY P.F.) (380 $\pm$ 520V. 110AT) (50°C amb)

TEST LINE NO.	PRIMARY (HI-144)			SECONDARY (X1-X2)					CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)										
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	Watts	Volts	Amps		1	2	3	4	5	6	7	8	9	10	11
64	(RE-ADJUSTED LOAD FOR 100% UNIT) (R.F.)																					
65	520	17.05	8375	119.9	62.2	7448	1.0		615	14.3												
66	480.3	17.80	8380	120.7	62.4	7526	1.0		609	13.9												
67	460.3	18.5	8390	120.6	62.6	7530	1.0		603	13.6												
68	380.2	22.2	8270	119.6	62.0	7400	1.0		579	12.6	4/11/16											
69	(UNIT RAN OVERNIGHT AT 350V. INPUT)																					
70	380.5	21.8	8095	117.92	61.18	7210	1.0				8:30 AM	51	50	119	166	164	154	157	172	140	135	75
71	380.6	21.7	8085	117.96	61.18	7216	1.0	1.83	573	12.33	11:00	48	47	118	164	162	152	157	172	140	134	73
72	(INPUT VOLTS INCREASED TO 520 V. INPUT)																					
73	519.7	16.7	8140	117.50	61.0	7140	1.0				11:30	49	47	120	156	153	150	161	178	144	140	75
74	520.7	16.55	8090	117.51	61.0	7140	1.0				12:00	50	49	121	152	149	148	164	182	147	142	75
75	521.1	16.60	8090	117.42	61.0	7140	1.0				12:30	50	49	122	152	149	148	167	184	149	144	76
76	517.0	16.70	8110	117.43	61.0	7180	1.0				1:00 PM	50	49	122	153	150	149	168	185	151	145	76
77	516.9	16.60	8085	117.46	61.2	7140	1.0				1:30	49	48	123	155	151	149	169	186	151	145	77
78	517.9	16.70	8130	117.50	61.0	7180	1.0				2:30	50	49	124	155	152	151	170	187	152	146	77
79	519.2	16.6	8120	117.43	61.0	7180	1.0				3:00	49	47	124	156	152	150	170	187	152	146	77
80	521.0	16.7	8100	117.42	61.2	7180	1.0				3:30	49	47	124	156	152	150	170	188	153	147	78
81	521.7	16.7	8100	117.34	61.0	7140	1.0	3.20	605	13.98	4:00	48	46	124	156	152	150	170	187	152	146	76
82																						
83	480.7	17.3	8155	118.22	61.2	7200	1.0	2.20	596	13.49	4:10											
84	383.7	21.5	8085	118.02	61.2	7280	1.0	2.32	574	12.35	4:15											

(50°C AMB. TEST COMPLETED)

(50°C AMB. TEST COMPLETE)

SOLA ELECTRIC TEST REPORT

TEST SHEET 5B OF

C/C Assem. No.: 1X 23-26-250-2E
 2X 23-26-250-3E
 Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH ASSEM.)
 Lamination: 11150-4
 Stack Size: 4.69
 Shunt Size: .050
 Res.:
 Rev.:
 Freq. Tested At: 60 HZ.

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: Marshall Uhl

Approved By: PAUL GOURGANN

Date: April 17-18, 1986

TEST CONDITION: (100% LOAD) (UNITY (1.0) P.F.) (380 & 520V. INPUT) (50°C AMB.)

Customer: METRO POWER / BECHTEL POWER
 Type of Unit: CVS TRANSFORMER
 Catalog No.: 23-28-275 (SPECIAL)
 Serial No.: 1980F
 EQUIP. TAG. NO.: 2-1807-V3-RX1
 GEORGIA POWER CO.
 VOGTLE ELECTRIC GENERATING PLANT

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																				REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
64																					
65																					
66																					
67																					
68																					
69																					
70	120	109	111	115	-	110	110	119	-	111	113	105	100	110	110	129	-	-	117	INSTALLED T.C. NOS. 27/30	
71	119	108	110	114	-	109	109	119	-	111	112	104	99	110	109	129		-	116	(FINAL OVERWIGHT TEMPS.)	
72																					
73	123	108	110	114	-	109	110	119	-	112	113	105	99	111	110	129		-	120		
74	136	108	110	115	-	110	110	120	-	112	114	106	99	112	111	128		-	119		
75	131	109	110	115	-	111	111	121	-	113	115	106	99	113	111	129		-	121		
76	132	110	111	116	-	112	112	122	-	114	116	106	99	114	112	129		-	121		
77	133	110	111	117	-	113	113	123	-	107	111	105	97	115	113	130		112	122	Installed Left Unit Ambient T.C. #29	
78	134	111	112	117	-	113	113	123	-	107	116	106	99	115	113	131		113	122		
79	134	111	112	118	-	113	113	124	-	115	117	107	100	115	113	130		113	122		
80	134	111	113	118	-	113	114	124	-	115	117	107	100	115	113	132		112	123		
81	131	110	112	117	114	113	113	123	119	114	116	105	98	113	112	131		113	122	(FINAL TEMPS.)	
82																					
83																					
84																					

NOTE: THERMOCOUPLES (27-30) WERE
INSTALLED TO CHECK AMBIENT TEMPS.
BY CABLES FOR REF. AMBIENT TS.

NOTE: THERMOCOUPLES (27-30) WERE INSTALLED TO CHECK AMBIENT TEMPS. BY CABLES FOR REF. AMBIENTS.

SOLA ELECTRIC TEST REPORT

C/C Assm. No.: 1X 23-26-250-2E
 Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Capacitors: 7X 8.0 MFD. @ 660VAC (C/F ASSM.)
 Tested By: Marshall Uhl

Lamination: 11150-4
 Approved By: PAUL GEORGINA

Stack Size: 4.69
 Date: April 22, 1986

Rev.:
 Freq. Tested At: 60 HZ.

TEST CONDITION: (100% LOAD) (0.9 LAG. P.F.) (380V. INPUT) (40°C AMB.)

TEST SHEET 6A OF

Customer: METRO POWER/BECHTEL POWER

Type of Unit: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

Serial No.: 1980F

EQUIP. TAG. NO. 2-1807-Y3-RX1

GEORGIA POWER CO.

VOGTLE ELECTRIC GENERATING PLANT

TEST LINE NO.	PRIMARY (HI-HV)			SECONDARY (X1-X2)			CAPACITOR	TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)										
	Volts	Amps	Watts	Volts	Amps	Watts	Power Factor		1	2	3	4	5	6	7	8	9	10	11
85	379.5	19.15	7250	113.53	64.4	6600	.902	9:00 AM	40	40	40	39	40	41	41	40	40	40	39
86	380.4	19.05	7240	113.26	64.4	6580	.902	9:30	40	39	46	62	64	70	58	68	53	61	42
87	380.2	19.10	7200	113.04	64.0	6500	.898	9:00	40	39	58	85	87	88	77	89	70	77	47
88	380.5	19.05	7230	112.98	64.2	6500	.896	9:30	33	31	66	97	98	98	91	101	82	84	48
89	380.1	19.00	7210	112.87	64.0	6500	.900	10:00	28	27	72	104	105	103	98	107	88	89	47
90	379.6	18.90	7220	112.79	64.2	6520	.900	10:30	39	39	76	109	109	107	103	112	93	94	50
91	383.3	18.90	7190	112.72	64.0	6480	.898	11:00	40	40	83	114	114	112	108	117	98	98	52
92	382.7	18.8	7220	112.64	64.0	6460	.896	11:30	40	40	86	121	120	118	114	123	104	104	55
93	379.2	19.05	7165	112.52	63.8	6440	.899	12:00	42	42	90	123	123	120	117	126	107	106	57
94	379.0	18.85	7125	112.34	63.8	6420	.901	12:30	42	42	92	127	126	122	120	128	110	109	58
95	378.4	19.05	7155	112.33	63.6	6420	.904	1:00 PM	39	38	95	129	128	124	122	130	112	110	59
96	390.0	18.90	7150	112.36	64.0	6440	.895	1:30	41	41	96	130	129	125	123	131	113	111	59
97	379.0	18.95	7155	112.28	63.8	6460	.902	2:00	42	41	97	131	130	126	124	132	114	112	61
98	377.7	18.85	7165	112.22	63.6	6420	.899	2:30	41	39	98	132	131	127	125	133	115	113	61
99	382.5	18.75	7185	112.37	63.6	6420	.898	3:00	42	41	98	134	132	128	126	134	116	114	61
100	381.1	18.05	7140	112.34	63.8	6440	.899	3:30	42	40	99	134	133	128	127	134	116	115	62
101								4:00	41	40	100	134	132	128	127	134	116	114	61
102																			
103	479.5	15.7	7440	114.42	64.2	6720	.909	4:10											
104	520.1	15.0	7470	114.19	64.8	6680	.902	4:15											
105																			

(TEST CONTINUED FOR 520V. INPUT ON SHEETS 7A/7B)

SOLA ELECTRIC TEST REPORT

TEST SHEET 6B OF C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3EType Test: TEMPERATURE TEST ON
COMPLETE UNITCustomer: METRO POWER / BECHTEL POWERCapacitors: 7X 8.0MFD. @ 660VAC (EACH C/C ASSEM.)Tested By: Marshall UhlType of Unit: CVS TRANSFORMERLamination: 11150-4Approved By: SAUL GEURGANCatalog No.: 23-28-275 (SPECIAL)Stack Size: 4.69 Shunt Size: .050 ^{GAP}Date: April 22, 1986Serial No.: 1980 FRes.: Rev.: Freq. Tested At: 60 HZ.EQUIP. TAG. NO. 2-1807-YB-RX1

GEORGIA POWER CO.

VOGTLE ELECTRIC GENERATING PLANT

TEST CONDITION: (100% Load) (0.9 LAG. P.F.) (380 V. INPT) (40°C AMB.)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																			REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
85	40	40	41	39	40	40	40	41	40	40	40	39	40	40	40	41	40	39	40	(FINAL OVERNIGHT TEMPS)
86	51	46	46	49	—	54	53	61	—	49	55	49	44	50	54	55	50	52	50	
87	66	57	57	61	—	64	64	72	—	60	65	59	53	62	65	67	62	64	62	CHAMBER CONTROLLER ERRATIC - STICKING.
88	77	64	65	69	—	68	70	76	—	68	70	65	60	67	70	77	67	68	70	AMB. TEMPS 15.2 AND LOW
89	78	68	69	73	—	72	73	79	—	72	74	69	64	71	73	83	71	73	75	Reset Controller 10:08
90	84	71	72	76	—	72	76	84	—	75	78	75	67	76	77	87	76	79	77	
91	86	75	76	80	—	80	80	89	—	79	82	78	70	78	80	89	80	83	80	
92	89	81	82	85	—	84	85	92	—	83	86	81	76	79	83	96	84	85	84	
93	92	83	84	87	—	86	86	95	—	85	88	83	77	82	84	96	87	88	86	
94	94	85	86	90	—	89	89	97	—	88	90	85	80	85	87	101	88	91	88	
95	95	87	88	92	—	89	89	97	—	89	91	86	81	85	88	103	89	93	89	
96	96	87	89	92	—	90	90	99	—	90	92	87	82	87	88	103	91	93	90	
97	97	89	90	93	—	91	91	99	—	91	93	23	83	88	90	104	92	94	91	
98	97	89	90	94	—	91	91	99	—	91	92	88	83	86	89	104	91	94	91	
99	99	90	91	95	—	92	92	101	—	92	94	90	84	88	90	106	93	95	92	
100	99	91	92	95	—	93	93	101	—	89	95	90	85	88	91	107	93	96	92	
101	98	90	91	95	94	92	93	101	98	92	94	89	84	87	90	106	93	96	92	(FINAL TEMPS)
102																				
103																				
104																				
105																				

NOTE: UNIT WAS PRE-CONDITIONED AT (40°C)
AMBIENT FOR 16 HOURS BEFORE INPUT VOLTAGE
AND LOAD WERE APPLIED

SOLA ELECTRIC TEST REPORT

TEMPERATURE TEST ON COMPLETE UNIT

C/C Amps. No.: 1X 23-26-250-2E

Tested By: Marshall Uhl

Capacitors: 7X 8.0MFD. @ 660VAC (EACH C/C ASSY)

Approved By: PAUL GEURBIAU

Lamination: 11150-4

Date: April 23, 1986

Stack Size: 4.69

Serial No.: 1980F

Rev.: 050

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (100% LOAD) (0.9 P.F.) (520V. INPUT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Equip. TAG. NO. 2-1807-Y3-RX1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Customer: METRO POWER / BECHTEL POWER

TYPE OF UNIT: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

Serial No.: 1980F

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (520/480V. INPUT) (40°C AMBIENT)

TEST SHEET 7B of

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: MARSHALL UHL

Approved By: PAV. GUNDEGAN

Date: APRIL 23, 1986

Freq. Tested At: 60 HZ.

20 V. INPUT)

E LOCATION NOS. AND

[illegible]

SOLA ELECTRIC TEST REPORT

C/C Assm. No.: 1X 23-26-250-2E

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Capacitors: 7X 8.0 MFD. @ 660VAC (EACH CAPASSM)

Laminations: 11150-4

Stack Size: 4.69

Rev.: GAP

Freq. Tested At: 60 HZ.

TEST CONDITION: (100% LOAD) (UNITY (1.0) P.F.) (380 $\pm$ 50V. INPUT) (40°C AMB)

TEST SHEET 8A OF

Customer: METRO POWER/BECHTEL POWER

Type of Units: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

Serial No.: 1980F

EQUIP. TAG. NO. 2-1807-Y3-RX1

GEORGIA POWER CO.

VOGTLE ELECTRIC GENERATING PLANT

TEST LINE NO.	PRIMARY (HI-HV)			SECONDARY (XI-X2)					CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)										
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	HAR- MONICS	Volts	Amps		1	2	3	4	5	6	7	8	9	10	11
127	UNIT RAN OVERNIGHT AT 380V. INPUT																					
128	382.4	22.05	8255	118.20	62.4	7380	1.0	1.03	507	11.26	8:20 AM	40	38	110	157	155	146	150	165	132	126	65
129																						
130	400.2	18.20	8445	118.62	63.6	7520	1.0				8:30											
131	(INPUT VOLTS INCREASED TO 520V.)																					
132	520.1	17.35	8445	117.97	63.2	7420	1.0				8:45	41	39	111	152	149	146	153	171	136	131	66
133	521.5	17.35	8340	117.85	63.2	7420	1.0				9:00	41	40	112	147	144	143	157	176	139	134	67
134	520.0	17.30	8385	117.94	63.4	7460	1.0				9:30	41	40	115	147	144	143	160	179	142	136	67
135	517.8	17.20	8345	117.90	63.2	7420	1.0				10:00	41	39	115	147	145	144	162	180	143	136	67
136	517.3	17.35	8380	117.89	63.2	7420	1.0				10:30	40	38	116	148	145	144	162	181	144	137	68
137	515.8	17.40	8385	117.86	63.2	7440	1.0				11:00	40	39	116	149	146	145	163	181	144	137	68
138	520.2	17.30	8370	117.80	63.4	7440	1.0				11:30	40	39	116	149	146	145	163	181	144	138	67
139	520.7	17.35	8500	117.76	63.2	7460	1.0				12:00	39	38	116	150	146	145	164	182	145	138	68
140	518.0	17.25	8410	117.84	63.4	7460	1.0				12:30	39	38	116	150	147	145	164	182	145	137	68
141	518.8	17.35	8395	117.78	63.2	7460	1.0				1:00	38	36	117	150	147	145	164	182	145	138	68
142	526.3	17.25	8415	117.71	63.2	7420	1.0	3.05	632	11.06	3:30	39	37	117	150	147	145	164	182	145	138	67
143																						
144	481.1	18.1	8470	118.49	63.4	7480	1.0	2.1	622	11.19	3:35											
145	380.6	22.35	8305	117.80	63.2	7400	1.0	1.97	584	11.27	3:40											
146																						
147	(40°C AMBIENT TESTS COMPLETED) - TESTS CONTINUED WITH NEW TOP COVER PLATE WITH 4 MM HOLES (50°C AMB - 0.9 P.F.)																					

SOLA ELECTRIC TEST REPORT

TEST SHEET 8B OF

Customer: METRO POWER / BECHTEL POWER
 Type of Units: CVS TRANSFORMER
 Catalog No.: 23-28-275 (SPECIAL)
 Serial No.: 1980 F
 EQUIP. TAG. NO.: 2-1807-YB-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT
 Tested By: Marshall Uhl
 Approved By: PAUL GEORGE, MAN
 Date: April 24, 1986
 Freq. Tested At: 60 HZ.

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E
 Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH C/C ASSEM.)
 Lamination: 11150-4
 Stack Size: 4.69 ^{CAP} Shunt Size: .050
 Rev.:

TEST CONDITION: (100% LOAD) (UNITY (1.0) P.F.) (380 $\pm$ 520 V. INPUT) (40 $^{\circ}$ C AMBI)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																REMARKS			
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27		28	29	30
127																				
128	111	101	102	107	-	101	101	111	-	104	105	96	91	100	100	121	108	104	106	(FINAL OVERLOAD TEMPS)
129																				
130																				
131																				
132	114	101	103	107	-	103	102	112	-	104	106	97	91	101	101	122	108	105	107	
133	118	102	103	108	-	103	103	113	-	105	107	98	91	103	102	122	110	105	109	
134	121	103	104	109	-	104	104	114	-	106	108	98	92	104	103	122	111	105	111	
135	122	103	104	109	-	108	105	115	-	106	109	98	92	105	104	123	112	106	112	
136	122	104	105	110	-	105	105	115	-	107	109	99	92	105	104	124	113	107	112	
137	121	104	105	110	-	106	105	115	-	108	109	99	92	105	104	124	113	106	113	
138	122	104	105	110	-	106	105	115	-	108	109	99	92	106	104	125	113	106	112	
139	121	104	105	110	-	108	105	116	-	108	109	99	92	106	104	125	113	107	113	
140	121	104	105	111	-	106	105	116	-	108	110	99	92	106	104	125	113	106	114	
141	122	104	105	111	-	106	105	116	-	108	110	99	92	106	105	125	114	106	114	
142	121	104	105	111	108	106	105	115	112	108	109	99	92	106	104	124	113	106	113	(FINAL TEMPS)
143																				
144																				
145																				
146																				
147																				

SOLA ELECTRIC TEST REPORT

C/C Assem. No.: 1X 23-26-250-24E
2X 23-26-250-3E

Capacitors: 7X 8.0MFD. @ 660VAC (C/FACH ASSY)

Lamination: 11150-4

Stack Size: 4.69

Rev.: 1

TEST CONDITION: (100% LOAD) (0.9 P.F.) (380V 520V IN/OUTS)

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: Marshall Uhl

Approved By: PAUL GEORGINAN

Dates: 4-24-86 - 4-25-86

Freq. Tested At: 60 HZ

TEST CONDITION: (100% LOAD) (0.9 P.F.) (380V 520V IN/OUTS) (50°C AMBIENT)

TEST SHEET 9A OF

Customer: METRO POWER/BECHTEL POWER

Type of Units: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

Serial No.: 1980F

EQUIP. TAG NO. 2-1807-V3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

TEST LINE NO.	PRIMARY (HI-14)				SECONDARY (X1-X2)				CAPACITOR	TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)										
	Volts	Amps	Watts	Volts	Amps	Watts	Power Factor	Bar-Monics	Volts	Amps	1	2	3	4	5	6	7	8	9	10	11
148																					
149	520	15.30	7530	114.50	63.0	6700	.928		59V	13.40	5:28 PM										
150	480.7	15.35	7545	114.50	63.2	6740	.928		587	12.97	5:29 PM										
151	380.5	19.25	7275	113.27	62.6	6580	.928	2.10	556	11.82	5:30 PM	50	112	144	141	132	145	154	133	129	73
152																					
153	374.6	19.35	7185	112.82	62.0	6460	.923	2.08	563	10.88	8:05 AM	50	108	145	142	133	136	144	124	122	75
154											8:15 AM										
155	522.8	15.20	7535	114.40	62.8	6700	.931				8:30	52	110	138	134	133	141	151	130	127	75
156	522.4	15.1	7520	114.47	63.0	6700	.928				9:00	54	111	137	134	133	144	154	132	129	76
157	525.1	15.15	7490	114.37	62.8	6640	.924				9:30	51	112	138	134	132	145	155	134	130	76
158	523.1	15.15	7530	114.43	62.8	6700	.932				10:00	50	112	139	135	133	146	156	135	131	76
159	524.0	15.15	7500	114.38	62.8	6660	.927				10:30	50	113	139	135	134	147	157	135	131	75
160	525.4	15.15	7530	114.43	63.0	6660	.923				11:00	49	113	139	135	133	147	157	135	132	75
161	527.4	15.15	7540	114.37	62.8	6700	.932				11:30	50	113	140	136	134	147	157	136	132	75
162	522.8	15.10	7480	114.40	62.8	6700	.932				12:00	50	113	140	136	134	148	157	136	131	75
163	527.7	15.10	7545	114.41	62.8	6680	.929	2.53	617	10.97	12:30	50	113	140	136	134	148	157	136	131	74
164																					
165	479.4	15.90	7550	114.87	63.0	6720	.928	1.87	605	11.08	12:40										
166	381.2	19.20	7245	113.21	62.2	6520	.925	2.03	567	10.92	12:45										
167																					
168																					

(TEST CONTINUED FOR 520V INPUT AND SHORT CIRCUIT TEST ON SHEETS 10A/10B)

SOLA ELECTRIC TEST REPORT

TEST SHEET 9B OF

Customer: METRO POWER / BECHTEL POWER
Type of Units: CVS TRANSFORMER
Catalog No.: 23-28-275 (SPECIAL)
Serial No.: 1980 F
EQUIP. TAG NO. 2-1807-VB-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

C/C Assm. No.: 2X 23-26-250-2E
Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH C/C ASSEM.)
Lamination: 11150-4
Stack Size: 4.69
Shunt Size: .050
Rev.:
TEST CONDITION: (INSTALLED NEW TOP COVER PLATE WHICH HAS AIR HOLES) (50°C AMB) (350V 520V INPUTS)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																			REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
148																				
149																				
150																				
151	107	91	93	98	-	83	83	95	-	85	89	77	75	91	94	87	93	91	87	TEMPS BEFORE RUNNING @ NIGHT
152																				
153	103	90	93	97	-	93	93	104	-	94	96	89	87	86	91	90	91	93	85	(FINAL DAWN LIGHT) TEMPERATURES
154																				(INPUT SET TO 520 V.)
155	104	90	92	96	-	94	93	106	-	94	96	88	86	86	91	89	91	93	85	
156	104	91	93	97	-	87	86	97	-	95	97	89	86	86	92	91	92	93	86	
157	106	91	93	97	-	95	94	107	-	94	97	88	86	89	93	89	92	93	86	
158	106	91	93	97	-	95	95	107	-	95	97	88	86	89	93	88	92	93	86	
159	106	91	93	97	-	95	94	107	-	95	97	87	86	89	93	88	92	94	86	
160	107	91	93	97	-	95	94	107	-	94	97	87	85	88	93	88	92	92	86	
161	107	91	93	97	-	95	94	107	-	95	97	88	85	89	93	86	92	93	86	
162	106	91	93	97	-	95	94	107	-	95	97	88	85	89	93	86	92	93	86	
163	107	91	93	97	98	95	95	107	103	95	98	88	85	89	93	87	92	93	86	(FINAL TEMPS)

SOLA ELECTRIC TEST REPORT

C/C Assemb. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Capacitors: 7X 8.0 mfd. @ 660 Vac (EACH C/CASSM)

Laminations: 11150-4

Stack Size: 4.69 Sheet Size: 1050

Rev.: _____

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: MARSHALL UHL

Approved By: PAUL GEORGIAN

Date: 4-25-86

Freq. Tested At: 60 HZ.

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (INAT 520/480/386V) (50°CAMB)

TEST SHEET 10A OF

Customer: METRO POWER/BECHTEL POWER

Type of Units: CVS TRANSFORMER

Catalog No.: 23-28-275 (SPECIAL)

Serial No.: 1980F

EQUIP. TAG. NO. 2-1807-V3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

TEST LINE NO.	PRIMARY (HI-14)			SECONDARY (XI-X2)			CAPACITOR		TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)													
	Volts	Amperes	Watts	Volts	Amperes	Watts	POWER FACTOR	VAR-MONICS		Volts	Amps	1	2	3	4	5	6	7	8	9	10	11	
169	(TEST CONTINUED FOR SHORT CIRCUIT TEST) WITH NEW COVER PLATE WITH AIR HOLES																						
170	527.7	15.10	7545	114.4	628	6640	929	2532	617	10.97	12:30	50	48	113	140	136	134	148	157	136	131	74	
171	(SHORT CIRCUIT TEST)																						
172	521.7	18.5	830		102.3		S/C				1:15	51	50	109	134	131	149	134	152	123	110	73	
173	521.6	18.6	885		102.0		}				1:30	54	53	110	142	143	164	143	178	122	105	75	
174	519.9	18.35	900		101.7							2:00	55	54	109	148	150	168	152	191	126	100	75
175	520.1	18.4	875		101.7							2:30	55	54	108	148	150	168	154	193	127	100	75
176	521.2	18.5	885		102.0						3:00	55	54	108	144	150	167	154	193	128	100	76	
177	522.8	18.65	925		102.0						3:30	54	53	109	150	151	168	155	194	128	100	76	
178	520.4	18.35	880		101.4						4:00	55	55	108	150	151	169	156	194	128	100	76	
179	519.7	18.40	870	216	101.3						4:30	50	49	107	148	149	166	153	191	127	98	73	
180	520.4	18.35	871	216	101.8		S/C		87.0	2.3	5:00	50	49	106	147	148	165	153	191	126	98	73	
181																							
182	480.2	15.25	740	1.99	93.8		S/C		81.3	1.92	5:10												
183	388	10.90	430	1.55	74.4		S/C		64.5	1.62	5:15												
184	460.1	14.00	660	1.89	90.1		S/C		77.8	1.88	5:20												
185																							
186																							
187																							
188																							
189	(TEST COMPLETED)																						

SOLA ELECTRIC TEST REPORT

TEST SHEET 10B of

Customer: METRO POWER / BECHTEL POWER
Type of Unit: CVS TRANSFORMER
Catalog No.: 23-28-275 (SPECIAL)
Serial No.: 1980 F
EQUIP. TAG. NO. 2-1807-VB-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Tested By: MARSHALL WHL

Approved By: PAUL GEDREGIAN

Date: 4-25-86

Freq. Tested At: 60 HZ.

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (NAT: 520/440/380V) (50°C AMB.)

C/C Assem. No.: 2X 23-26-250-2E

Capacitors: 7X8.0MFD. @ 660VAC (EACH ASSEM)

Lamination: 11150-4

Stack Size: 4.69

Shunt Size: .050

Rev.: 1

TEST CONDITION: (OUTPUT SHORT CIRCUIT) (NAT: 520/440/380V) (50°C AMB.)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																		REMARKS	
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30
169																				
170	107	91	93	97	96	95	95	107	103	95	98	88	85	89	93	87	92	93	86	(MEASUREMENTS FROM LINE 163)
171																				

SOLA ELECTRIC TEST REPORT

TEST SHEET 11A OF

C/C Assm. No.: 1X 23-26-250-2E

Type Test: TEMPERATURE TEST ON COMPLETE UNIT

Customer: METRO POWER / BECHTEL POWER

Capacitors: 7X 8.0mfd. @ 660VAC (C/F ASSY)

Tested By: MARSHALL UHL / PAUL GEORGIAN

Type of Units: CVS TRANSFORMER

Luminations: 11150-4

Approved By: PAUL GEORGIAN

Catalog No.: 23-28-275 (SPECIAL)

Stack Sizes: 4.69

Date: 5/1/86 - 5/5/86

Serial No.: 1980F

Rev.: 1

Freq. Tested At: 60 HZ.

EQUIP. TAG NO. 2-1807-V3-RX1

TEST CONDITION: (NEW TOP COVER PLATE WITH ALL HOLES)

VOGTLER ELECTRIC GENERATING PLANT

TEST CONDITION: (UNIT 520V 5480V) (40°C AMB)

TEST LINE NO.	PRIMARY (HI-14)				SECONDARY (XI-X2)				CAPACITOR	TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)												
	Volts	Amperes	Watts	Volts	Amperes	Watts	Power Factor	Har- monics			Volts	Amperes	1	2	3	4	5	6	7	8	9	10	11
	(UNIT ADJUSTED FOR UNITY P.F. (40°C) WITH NEW COVER PLATE) 5/1/86																						
190																							
191	380.2	22.7	8390	118.74	63.6	7500	1.0	1.93	572	12.42	4:00P	40	40	74	119	120	112	113	133	97	94	53	
192	481.4	18.25	8515	112.57	64.0	7660	1.0	1.97	601	13.62	4:10												
193	519.3	17.50	8475	118.85	63.4	7560	1.0	2.82	608	14.06	4:20												
194	520.0	17.20	8360	118.61	62.6	7460	1.0	2.81	609	14.10	5:00P	40	40	91	121	119	117	135	155	118	114	59	
195	(UNIT RAN OVERNIGHT AT 520V INPUT) 5/2/86																						
196	519.0	17.15	8340	118.13	62.6	7400	1.0	2.80	604	13.98	10:00A	41	40	107	140	135	130	153	170	134	128	64	
197	480.1	17.8	8380	118.84	62.8	7480	1.0	2.0	599	13.56	10:05												
198	379.5	22.25	8230	118.2	62.6	7400	1.0	1.9	570	12.34	10:10												
199	(INPUT VOLTS REDUCED TO 480V) 5/2/86																						
200	480	17.8	8380	118.84	62.8	7480	1.0	2.0	599	13.56	10:15A	41	40	107	140	135	130	153	170	134	128	64	
201	(UNIT RAN OVER WEEKEND UNTIL MONDAY MORNING) 5/5/86																						
202	479.6	17.95	8375	118.74	62.8	7420	1.0	2.04	598	13.47	8:30 AM	42	42	108	142	138	133	153	169	133	127	66	
203	520	17.10	8345	118.12	62.6	7340	1.0	2.98			8:35												
204	380.3	22.1	8230	118.11	62.4	7380	1.0	1.84	571	12.30	8:40												
205																							
206																							
207																							
208																							
209																							
240	(TEST CONTINUED FOR 380V. INPUT ON SHEETS 12A/12B)																						

SOLA ELECTRIC TEST REPORT

TEST SHEET 11B OF

C/C Assem. No.: 1X 23-26-250-2E
2X 23-26-250-3E

Type Test: TEMPERATURE TEST ON
COMPLETE UNIT

Customer: METRO POWER / BECHTEL POWER

Capacitors: 7X 8.0 MFD. @ 660 VAC (EACH
C/L ASSEM.)

Tested By: MARSHALL UHL / PAUL GEORGIAN

Type of Units: CVS TRANSFORMER

Lamination: 11150-4

Approved By: PAUL GEORGIAN

Catalog No.: 23-28-275 (SPECIAL)

Stack Size: 4.69 Shunt Size: .050

Date: 5/1/86 - 5/5/86

Serial No.: 1980 F

Rev.: Rev.:

Freq. Tested At: 60 HZ.

EQUIP. TAG. NO. 2-1807-Y3-RX1
GEORGIA POWER CO.
VOTLE ELECTRIC GENERATING PLANT

TEST CONDITION: (NEW TOP COVER PLATE WITH AIR HOLES)
(100% LOAD) (UNITY (1.0) P.F.) (INPUT 520V & 480V) (40°C AMB)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																			REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
190																				
191	81	66	67	72	-	72	71	82	-	70	75	64	61	67	71	63	67	67	65	PRELIMINARY TEMPS BEFORE OVERNIGHT TEST
192																				
193																				
194	92	74	76	80	-	80	80	92	-	78.0	83	70	68	76	80	67	76	74	73	TEMPS BEFORE OVERNIGHT TEST
195																				
196	107	84	86	90	89	89	88	101	98	88	92	78	76	86	87	67	87	83	80	FINAL OVERNIGHT TEMPS
197																				
198																				
199																				(INPUT REDUCED TO 480 V. AMB.)
200	107	84	86	90	89	89	88	101	98	88	92	78	76	86	87	67	87	83	80	PRELIMINARY TEMPS BEFORE OVERNIGHT TEST
201																				
202	106	84	87	92	91	90	90	102	98	90	93	81	78	86	88	72	87	85	81	FINAL OVERNIGHT TEMPS
203																				
204																				
205																				
206																				
207																				
208																				
209																				
210																				

SOLA ELECTRIC TEST REPORT

TEMPERATURE TEST ON COMPLETE UNIT

Tested By: Marshall Uhl

Approved By: Paul Gering

Date: May 5, 1986

Prog. Tested At: 60 Hz

TEST CONDITION: (NEW TOP COVER WITH 4 Holes) (100% Load) (UNITY P.F.) (INPUT 380V.) (40°C Amb.)

C/C Assm. No: 2X 23-26-250-35

Capacitors: 7X 8.0 MFD. @ 660VAC (C/E Assm.)

Insulation: 11150-4

Stack Size: 4.69

Rev: GNF

Base:

TEST SHEET 124 of

Customer: METRO Power/BECHTEL Power

Type of Unit: CVS TRANSFORMER

Catalog No: 23-28-275 (SPECIAL)

Serial No: 1980F

EQUIP. TAG NO. 2-1807-V3-RX1

GEORGIA POWER CO.

VOGUE ELECTRIC GENERATING PLANT

TEST LINE	PRIMARY (H1-H4)	SECONDARY (X1-X2)	CAPACITOR	TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)									
NO.	VOLTS	AMPS	WATTS	VOLTS	AMPS	WATTS	VOLTS	AMPS	WATTS	VOLTS	AMPS	WATTS	VOLTS	AMPS
211	(INPUT VOLTS REDUCED TO 380V.)													
212	381.6	22.15	822.0	118.7	62.6	736.0	1.0	1.83	571	12.28	9:15A	42	42	42
213	378.4	22.35	826.5	118.05	62.6	738.0	1.0			10:00	42	41	106	155
214	379.2	22.2	829.0	118.07	62.4	738.0	1.0			10:30	41	40	105	155
215	380.1	22.3	827.0	118.10	62.6	734.0	1.0			11:00	41	40	105	154
216	380.7	22.15	826.5	118.04	62.4	740.0	1.0			11:30	42	42	106	153
217	381.6	22.25	828.5	118.14	62.6	738.0	1.0			12:00	40	39	105	154
218	378.4	22.3	826.5	118.14	62.6	738.0	1.0			12:30	40	39	104	153
219	378.9	22.25	823.5	118.10	62.6	740.0	1.0			1:00	40	39	104	154
220	379.9	22.2	823.5	118.10	62.4	740.0	1.0			1:30	40	39	104	153
221	378.4	22.3	824.0	118.09	62.6	738.0	1.0			2:00	41	41	105	153
222	379.5	22.2	823.0	118.16	62.4	738.0	1.0			2:30	41	40	104.5	152
223	379.1	22.25	823.5	118.18	62.6	736.0	1.0	1.88	571	12.31	2:45	40	39	104
224														
225	480.7	17.85	840.0	118.86	63.0	746.0	1.0	2.05	598	13.51	2:50			
226	519.8	17.1	835.0	118.23	62.6	742.0	1.0	2.93	605	13.95	2:55			
227														
228														
229														
230														
231														

(TESTS CONTINUED AT 520V & 480V Nom. & 380V. SHORT CIRCUIT TESTS ON SHEETS 134/138)

SOLA ELECTRIC TEST REPORT

TEST SHEET 12B OF
Customer: METRO Power / BECHTEL POWER
Type of Units: CVS TRANSFORMER
Catalog Nos: 23-28-275 (SPECIAL)
Serial Nos: 1980 F
EQUIP. TAG. NO. 2-1807-V3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

C/C Assm. No.: 1X 23-26-250-2E
Type Test: TEMPERATURE TEST ON COMPLETE UNIT
Tested By: Marshall Uhl
Approved By: PAUL GEORGIAN
Date: May 5, 1986
Freq. Tested At: 60 HZ.
TEST CONDITION: (NEW TOP COVER PLATE WITH AIR HOLES)
(100% LOAD) (UNITY (100% F) (INPUT 350V) (40°C AMBI)

TEST LINE NO.	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (°C)																REMARKS			
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	(
211	106	84	87	92	91	90	90	102	98	90	93	81	78	86	88	72	87	85	81	(INPUT REDUCED TO 350V)
212	107	87	89	94	-	90	90	103	-	88	91	79	80	87	89	75	88	86	82	
213	105	86	88	94	-	90	90	102	-	91	93	82	80	87	88	72	88	87	81	
214	104	86	88	93	-	89	89	101	-	91	92	83	80	86	88	73	88	86	80	
215	105	86	88	93	-	89	89	101	-	91	92	83	80	86	88	74	87	87	80	
216	106	85	88	93	-	89	89	101	-	90	92	82	80	86	87	73	87	86	80	
217	105	85	87	92	-	86	88	101	-	90	92	82	80	86	87	71	87	86	79	
218	105	85	87	92	-	88	88	100	-	90	91	82	80	86	87	70	87	86	79	
219	105	85	87	92	-	89	88	100	-	90	91	82	80	85	87	72	86	86	79	
220	103	85	87	92	-	88	88	100	-	89	91	82	80	84	86	73	86	85	79	
221	106	84	87	92	-	88	87	99	-	89	90	82	79	85	86	70	86	85	79	
222	106	84	86	92	-	88	87	99	-	89	90	81	79	85	86	71	86	85	78	
223	106	84	86	92	91	88	87	99	95	89	91	82	79	85	86	72	86	86	78	(FINAL TEMPS)
224																				
225																				
226																				
227																				
228																				
229																				
230																				
231																				

SOLA ELECTRIC TEST REPORT

C/C Assm. No.: 1X 23-26-250-2E
Capacitors: 7X 8.0 mfd. @ 660 Vac (each assm)
Laminations: 11150-4
Stack Size: 4.69
Rev.: 1
Test Condition: (NEW TOP COVER WITH AIR HOLES)
Tested By: MARSHALL UHL
Approved By: PAUL GEORGE IAN
Dates: MAY 8, 1986, MAY 2, 1986
Freq. Tested At: 60 HZ
TEST CONDITION: (OUTPUT SHORT CIRCUIT TEST) (INPUT: 520/480/380V) (40°C AMB)
Customer: METRO POWER / DECHTEL POWER
Type of Units: CVS TRANSFORMER
Catalog No.: 23-28-275 (SPECIAL)
Serial No.: 1980F
EQUIP. TAG. NO.: 2-1807-V3-RX1
GEORGIA POWER CO.
VOGTLE ELECTRIC GENERATING PLANT

TEST SHEET 13A OF

TEST LINE NO.	PRIMARY (HI-1#)				SECONDARY (X1-X2)				CAPACITOR	TIME	THERMOCOUPLE LOCATION NOS. AND TEMPERATURE MEASUREMENTS (OC)																		
	Volts	Amps	Watts	Volts	Amps	Watts	POWER FACTOR	BAR- RELAYS			TEMPERATURE MEASUREMENTS (OC)																		
											1	2	3	4	5	6	7	8	9	10	11								
232	(UNIT RAN OVER NIGHT) (100% LOAD) (UNITY P.F.) (40°C AMB)																												
233	520.2	17.15	8315	11807	62.4	7380	1.0	3.15	632	11.19	11:00 AM	42	41	106	140	136	131	153	170	135	128	66							
234	(OUTPUT SHORT CIRCUIT TEST) (520V INPUT)																												
235	519.3	18.15	850	2.03	102.2		S/C				11:30	42	41	103	135	134	153	140	171	120	101	64							
236	519.1	18.15	840	2.13	102.3						12:15	42	41	100	141	142	159	145	183	119	94	65							
237	519.4	18.15	900	2.12	102.5						12:45	41	40	98	140	141	157	144	182	118	90	63							
238	517.2	18.00	825	2.12	101.8						1:15	42	40	97	138	140	156	143	182	117	89	62							
239	512.0	17.95	875	2.12	102.0						1:45	42	41	96	137	138	155	143	181	116	88	62							
240	516.1	17.90	860	2.12	101.9						2:15	42	41	96	136	138	155	142	180	116	87	62							
241	517.3	18.10	895	2.12	102.2		S/C		81.8	20.8	2:45	42	41	95	136	137	155	141	180	115	87	62							
242	(INPUT REDUCED TO 480V NOMINAL)																												
243	481.8	15.35	700	1.94	94.8		S/C				3:15	42	41	93	124	125	141	133	165	111	85	60							
244	479.8	15.10	700	1.94	94.6						3:45	42	41	91	123	124	140	132	165	109	84	60							
245	480.5	15.3	700	1.94	94.7						4:15	42	41	90	121	122	139	130	164	108	83	60							
246	480.2	15.15	702	1.94	95.0						4:45	42	41	89	120	121	139	130	163	107	83	59							
247	480.4	15.1	702	1.94	95.0						5:15	42	41	89	120	121	139	129	163	107	82	59							
248	480.5	15.2	700	1.94	95.0		S/C		74.3	19.7	5:45	42	41	89	120	121	139	129	162	107	82	59							
249																													
250	380.1	10.9	452	1.52	75.1		S/C		57.0	16.1	5:50																		
251																													
252	(TEST COMPLETED)																												

SECTION 4.3

TEST SHEET 138 OF

CUSTOMER: METRO POWER / BECHTEL POWER
 Type of Units: CVS TRANSFORMER
 Catalog No.: 23-28-275 (SPECIAL)
 Serial No.: 1980 F
 EQUIP. TAG. NO. 2-1807-V3-RX1
 GEORGIA POWER CO.
 VOGTLE ELECTRIC GENERATING PLANT

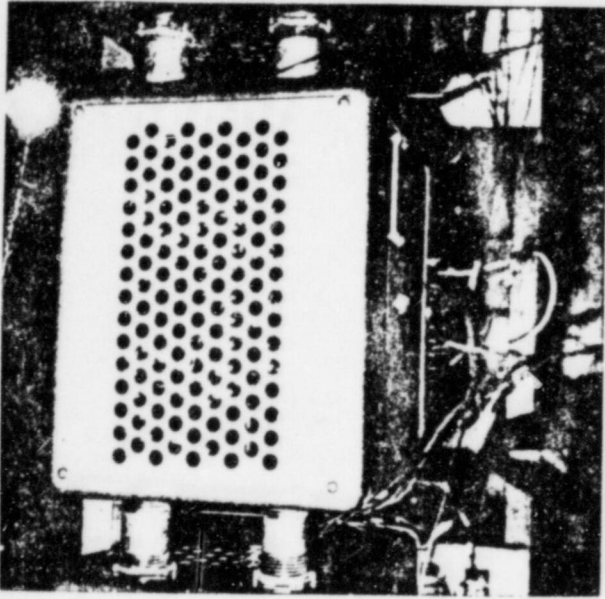
SOLA ELECTRIC TEST REPORT

Type Test: TEMPERATURE TEST ON COMPLETE UNIT
 Tested By: MARSHALL UHL
 Approved By: PAUL GEORGIN
 Date: MAY 8, 1986, MAY 9, 1986
 Freq. Tested At: 60 HZ.
 TEST CONDITION: (NEW TOP COVER PLATE WITH AIR HOLES) (INPUT: 520/480/380V) (40°C AMB)

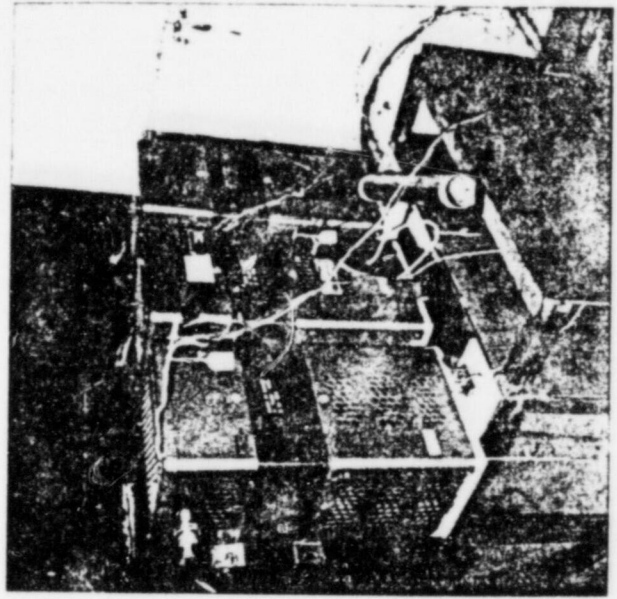
Rev.:
 Stack Size: 4.69 Sheet Size: .050
 Lamination: 11150-4
 Capacitors: 718.0 mfd. @ 660 VDC (C/E ASSEM.)
 C/C Assem. No.: 2X 23-26-250-2E
 1X 23-26-250-2E

TEST LINE NO.	THERMOCOUPLE LOCATION NO'S. AND TEMPERATURE MEASUREMENTS (°C)																REMARKS
	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
232	(100% LOAD)																
233	108	85	87	92	91	90	89	102	96	90	93	80	78	86	88	71	(PUMP WIGHT) (FINAL TEMPS)
234	(OUTPUT SHORT CIRCUIT @ 520V.)																
235	105	84	86	91	-	97	98	115	-	90	98	78	77	86	96	76	82 79
236	105	86	88	93	-	102	104	118	-	92	102	78	77	88	102	78	81 80
237	105	83	85	91	-	100	102	115	-	89	99	76	75	89	101	71	35 77 78
238	105	83	85	90	-	99	102	115	-	89	99	74	74	88	101	72	84 77 77
239	104	82	84	90	-	99	102	115	-	89	98	74	73	87	100	74	84 76 78
240	104	82	84	89	-	99	102	114	-	88	98	75	73	87	101	76	84 75 77
241	104	82	84	89	87	99	101	114	104	88	98	73	72	87	101	76	83 75 77 (FINAL TEMPS)
242	(OUTPUT SHORT CIRCUIT @ 480V. NOMINAL INPUT)																
243	99	79	80	85	-	93	95	107	-	85	92	71	70	83	94	72	80 73 75
244	97	78	79	85	-	93	95	107	-	84	92	70	69	83	94	71	79 71 75
245	96	77	79	84	-	92	94	106	-	83	91	69	69	81	94	72	79 72 74
246	96	77	78	83	-	92	94	106	-	83	91	69	68	81	93	72	78 71 73
247	96	76	78	83	-	92	94	106	-	82	91	68	68	81	93	71	78 71 73
248	96	76	78	83	80	92	94	106	100	82	91	68	67	81	93	71	78 71 73 (FINAL TEMPS)
249																	
250																	
251																	
252																	

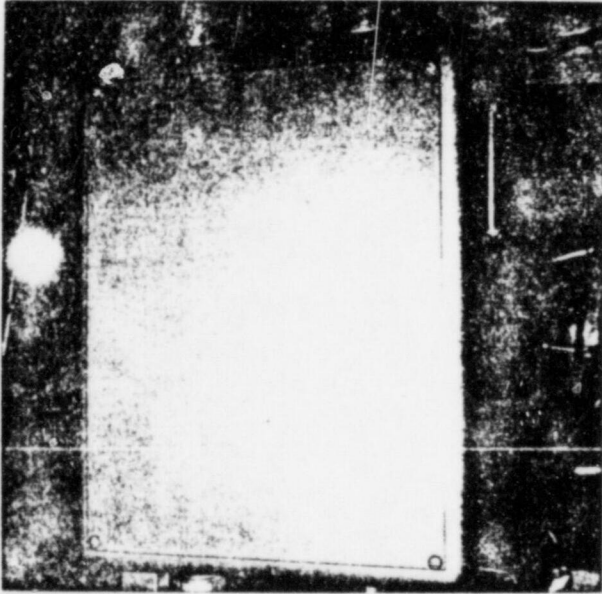
NOTE: UNIT RAN OVERLOAD UNDER LOAD BEFORE SHORT CIRCUIT TEST.



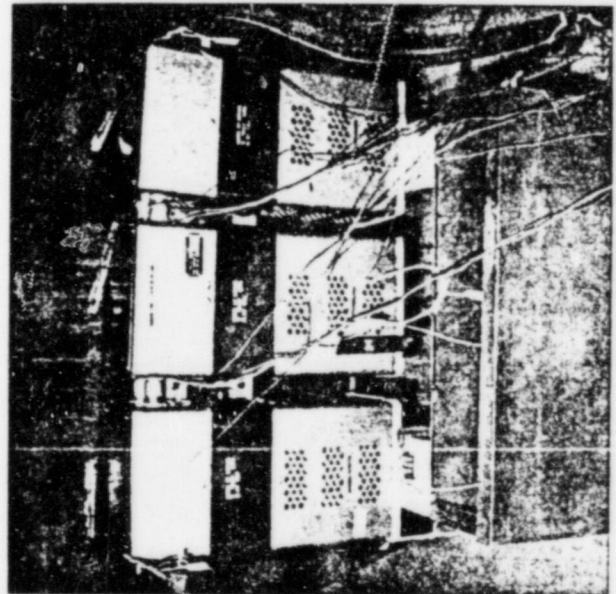
TOP COVER PLATE
WITH AIR HOLES



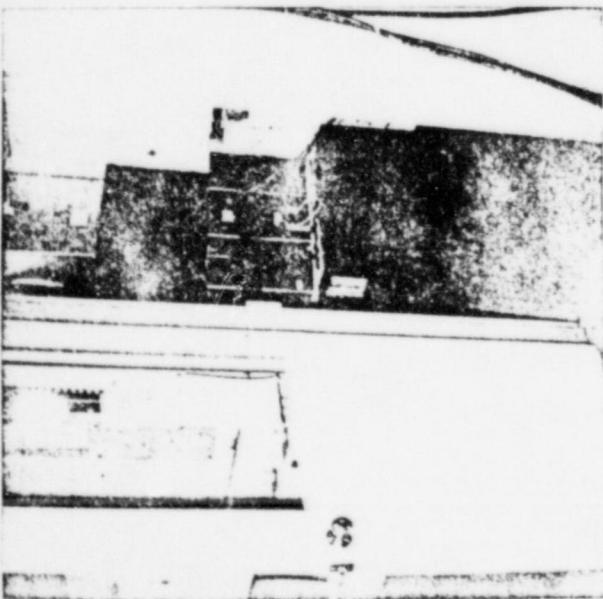
UNIT WITH AIR HOLES
IN TOP COVER PLATE



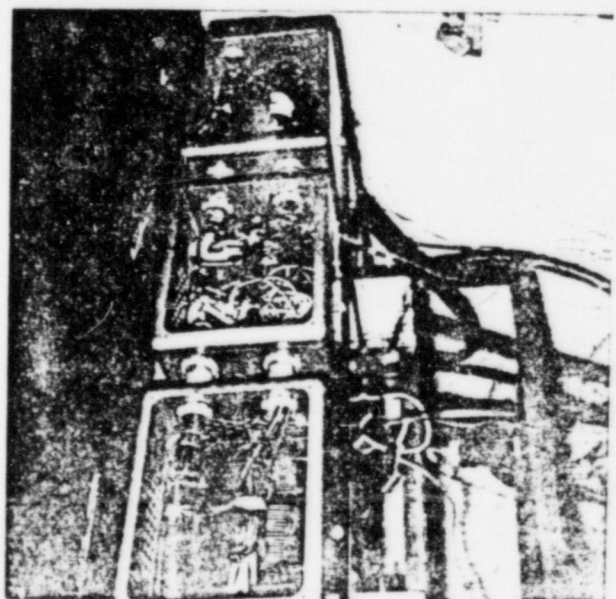
TOP COVER PLATE
WITH OUT AIR HOLES



UNIT WITHOUT AIR HOLES
IN TOP COVER PLATE.



TRANSFORMER MOUNTED
IN HEAT CHAMBER



TOP VIEW OF UNIT

INSTRUMENTATION EQUIPMENT SHEET

Catalog No.: 23-28-275 (Special)

Type Test: Temperature Test

Customer: Bechtel Power

Serial No: 1980F

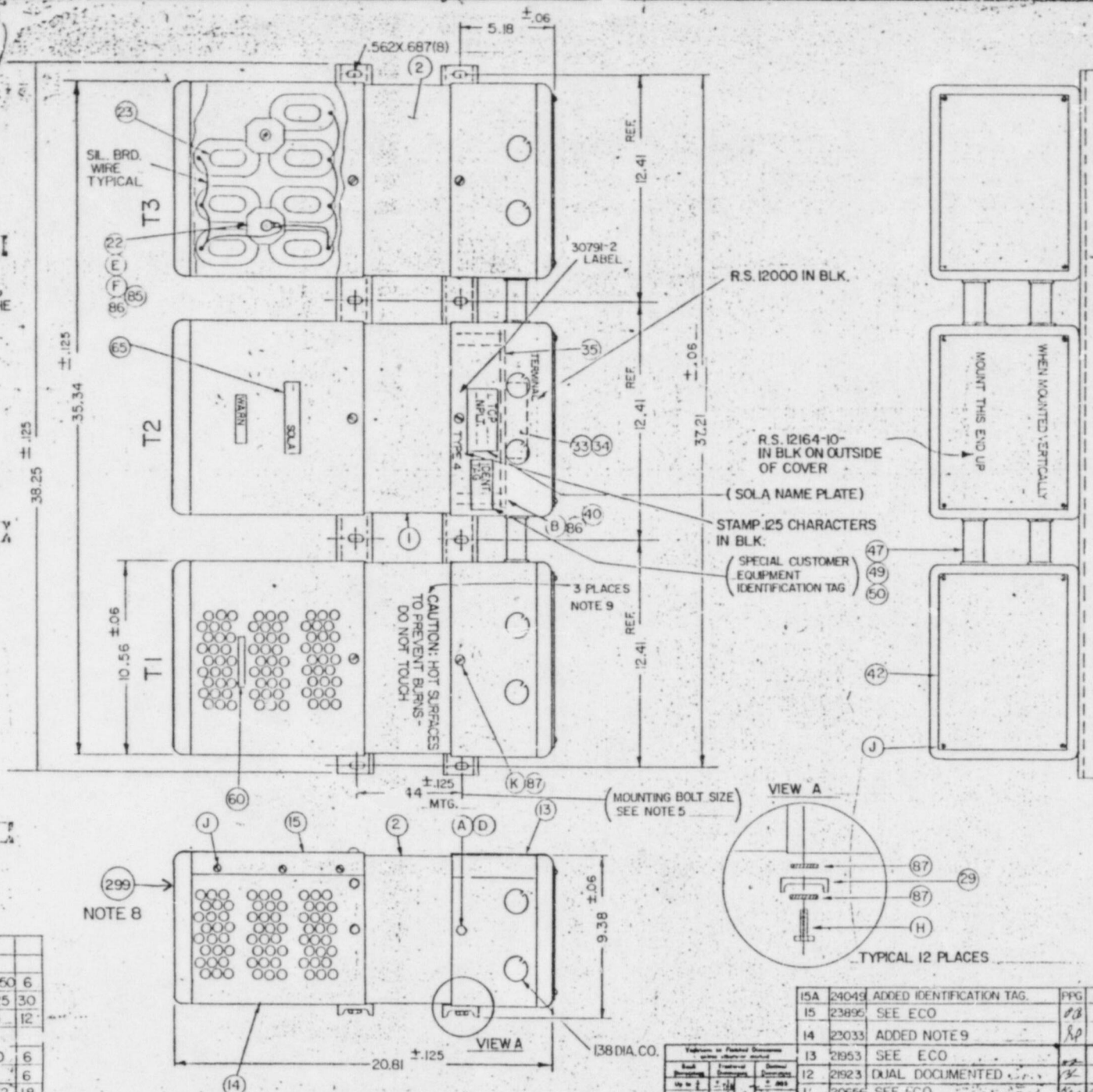
Date: May 6, 1986

No.	Instrument	Manufacturer	Model No.	Serial No.	Range	Accuracy	Calibration	
							On	Due
1	Digital Power Analyzer	Valhalla Scientific Inc.	2100	3-3520	0-600 Volts 0-20 Amps	$\pm 2.5\%$	4/4/86	10/4/86
2	Current Transformer	Daystrom Inc.	461	23128	50:5	$\pm 5\%$	4/20/86	10/20/86
3	Digital Power Analyzer	Valhalla Scientific Inc.	2101	3-3981	0-300 Volts 0-20 Amps	$\pm 2.5\%$	11/8/85	5/8/86
4	Current Transformer	Daystrom Inc.	461	23131	100:5	$\pm 5\%$	3/15/86	9/15/86
5	Distortion Meter	Leader Electronics Corp.	LEA171	5110025	3%	$\pm 5\%$	4/11/86	7/11/86
6	Digital Multimeter	Beckman Instruments Inc.	RMS 3060	30721014	1000 Volts 0-20 Milliamp	$\pm .9\%$	2/13/86	5/13/86
7	Current Probe	John Fluke Mfg Co Inc.	Y-8101	MAG-002	1000:1	$\pm 2.5\%$	4/1/86	10/1/86
8	Digital Temperature Indicator	Omega Eng. Inc.	DP900	657833	-200°C to +760°C	$\pm 1^\circ\text{C}$	12/4/85	6/4/86
9	Rotary Selector Switch	Omega Eng. Inc.	OSWT-40	MAG-006	40 position	—	12/4/85	6/4/86
1+2	Input Instruments							
3,4,5	Output Instruments							
6+7	Capacitor Instruments							
8+9	Temperature Instruments							

Prepared By: Marshall Uhl

Approved By: PAUL GEURGINN

WHEN WIRING CAPS,
AT LEAST ONE OF THE
INNER TERMINALS
MUST BE USED TO
MEET U.L. SPACING
REQ.



1. STAMP DATE CODE AFTER CAT. NO. ON NPLT.
 2. WEDGE COILS AS REQ'D PER WORKMANSHIP STD. SEC. III.
 3. IMPREGNATE C/C PER C/C B/M.
 5. UNIT WILL FIT MTG. DIM. SHOWN WITH 1/2" DIA. SCREWS USE (8) NO. 1/2-13 HEX HEAD BOLTS. STANDARD COMMERCIAL GRADE (TENSILE STRENGTH EQUAL TO 55K P.S.I.) WITH FLAT WASHERS UNDER BOLT HEADS.
 6. REF. TO S & WS. SPECIFIED ON B/M WHEN WIRING UNITS.
 7. GROUND CAPACITORS. IF CAPS. ARE PAINTED REMOVE PAINT AT GROUND POINT CONNECTION.
 8. WARNING LABEL. ITEM 299 AFFIXED TO UPPER RIGHT CORNER OF CV REAR END AS SHOWN APPLY TO EACH CV ASSY.
- 
9. STAMP 30998 ON TOP OF IRON 3 PLACES.

K	8511110668-0050	6
J	8511110377-0025	30
H	8511112411-0075	12
F	8511112091-0250	6
E	85318-8428	6
D	8511113963-0062	10
B	8511112091-0038	2
A	8531812346	18
ITEM	PART NO	QTY

15A	24049	ADDED IDENTIFICATION TAG.	PPG		111-80
15	23896	SEE ECO	OB		414-80
14	23033	ADDED NOTE 9	RP		10-4-78
13	21953	SEE ECO	OB		3-20-78
12	21923	DUAL DOCUMENTED	OB		3-20-78
11	20656	SEE ECO	OB	EW	2-16-77
10	20496	DELETED NOTE 4	OB		12-2-76
9	20244	REDRAWN REV FOR U.I.	OB		8-17-76
8	20244	REDRAWN REV FOR U.I.	OB		8-17-76
7	20244	REDRAWN REV FOR U.I.	OB		8-17-76
6	20244	REDRAWN REV FOR U.I.	OB		8-17-76
5	20244	REDRAWN REV FOR U.I.	OB		8-17-76
4	20244	REDRAWN REV FOR U.I.	OB		8-17-76
3	20244	REDRAWN REV FOR U.I.	OB		8-17-76
2	20244	REDRAWN REV FOR U.I.	OB		8-17-76
1	20244	REDRAWN REV FOR U.I.	OB		8-17-76

USE SD 23-28-275

USES 660V CAPACITORS

NPCB

SOLA ELECTRIC
a division of SOLA BASIC INDUSTRIES
ELK GROVE VILLAGE, ILL.

CAT NO 23-28-279
NON PCB CVS

SPECIAL MODIFIED UNIT
FOR BECHTEL POWER CORP

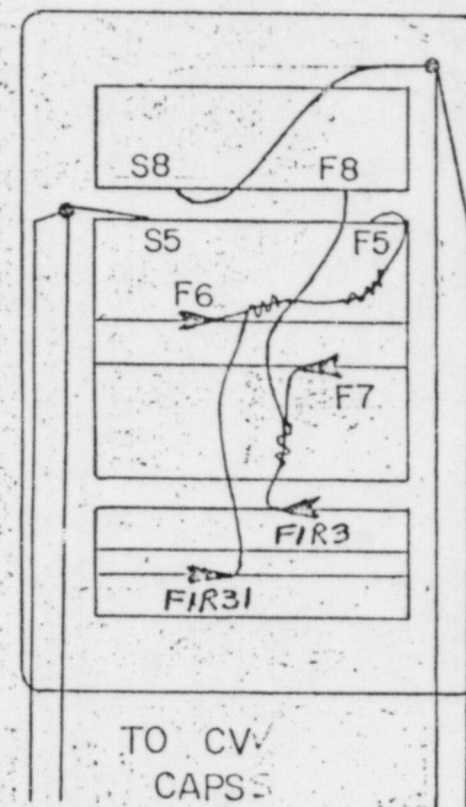
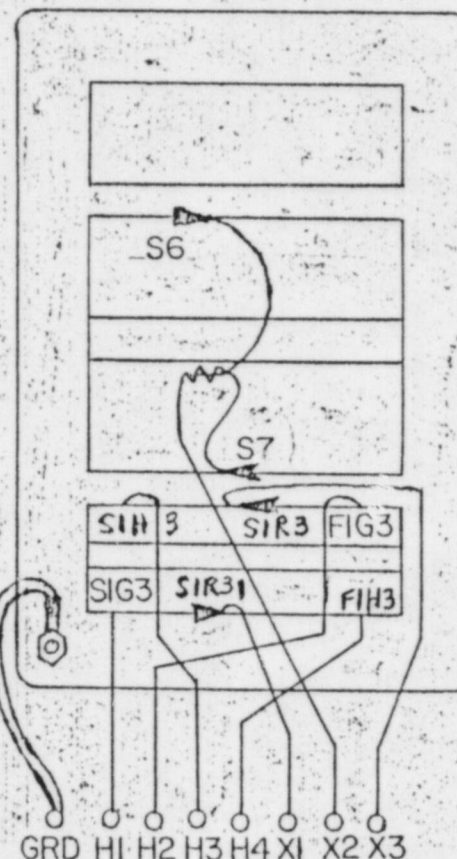
23-28-275

NOTICE OF CONFIDENTIAL INFORMATION

Information contained herein is confidential, is the property of General Signal Corporation, is to be used solely for the purpose provided, and is not to be disclosed to others without the written consent of General Signal Corporation.

S.D. 23-28-275

SIDE Y



WIRE T1 & T3
IDENTICALLY.
EXCEPT GRD.

(FP)
4-1-75

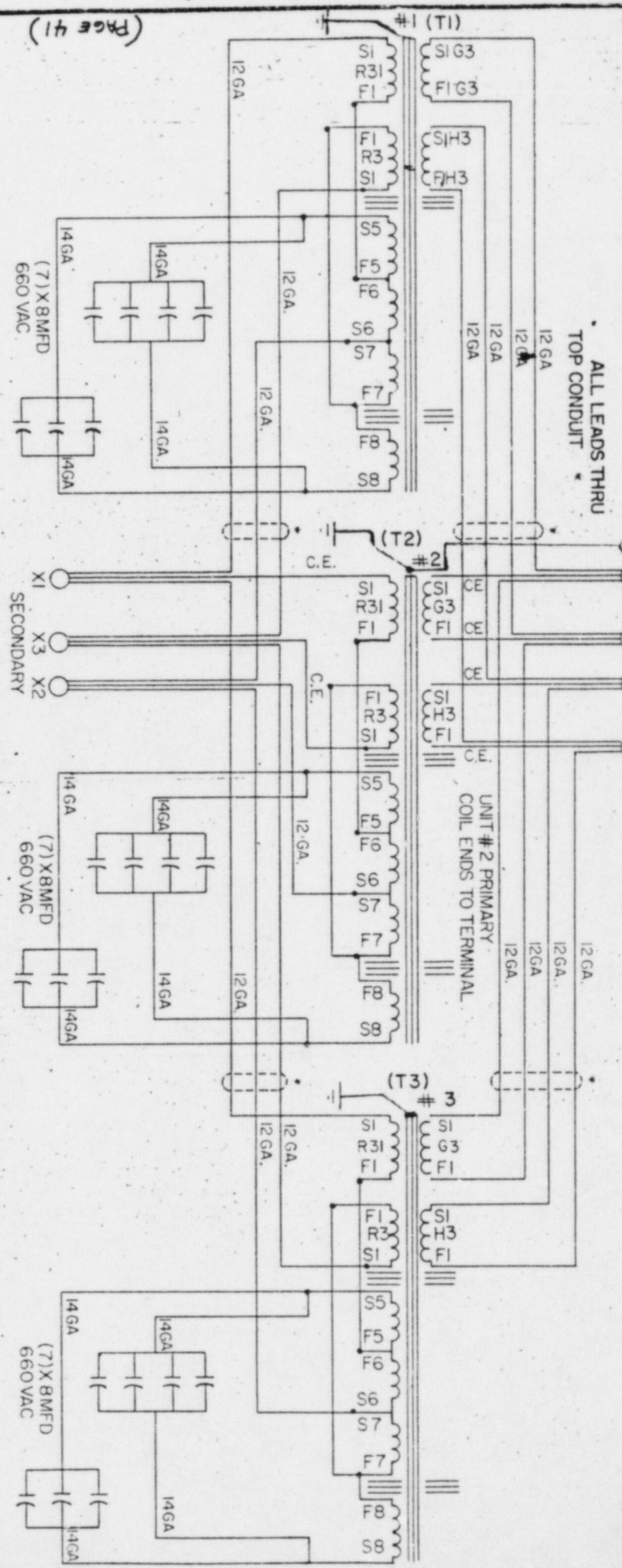
[illegible]

S.D. 23-28-275
PAGE 1 OF 2

PRIMARY	CONNECTIONS	SECONDARY
VOLTS	LINE	JUMPER
190-260	H1-H4	H1-H3, H2-H4
380-520	H1-H4	H2-H3
		240
		X1-X2
		X2-X3
		X1-X3

PRIMARY
190/380-260/520V 60 CYC.

SD 23-28-275
PAGE 20F2
PAGE 10F2 IS A SIZE

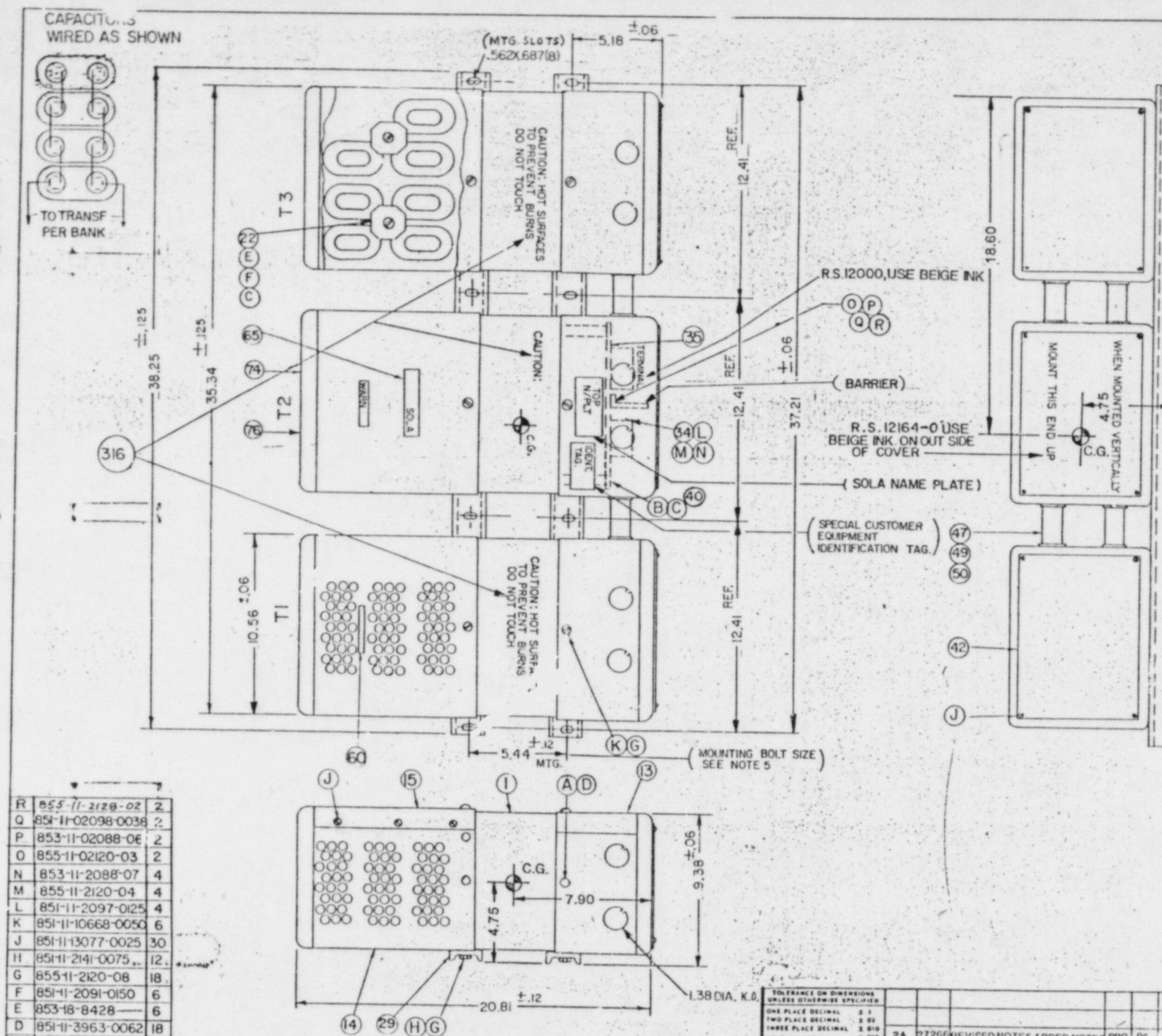


C.E. = COIL ENDS.

(PAGE 41)

(PAGE 41)

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED		ONE PLACE DECIMAL		TWO PLACE DECIMAL		THREE PLACE DECIMAL		HOLE DIAMETERS		ANGLES	
		1/10		1/100		1/1000		1/16		1/8	
CHANGES DOCUMENTED ON #1 OF 2 PAGE											
REVISION		CHK.		BY		CHK.		DATE		SCALE	
E.H.		C.H.		J.H.		J.H.		11-23-54		N/A	
PAGE 10F2 IS A SIZE											



- 1. STAMP DATE CODE & SERIAL NO. AFTER CAT. NO. ON NP TL.
- 2. WEDGE COILS AS REQ'D PER WORKMANSHIP STD. SEC. III.
- 3. IMPREGNATE C/C PER C/C B/M.
- 5. UNIT WILL FIT MTG. DIM. SHOWN WITH 1/2" DIA. BOLTS, USE (B) 1/2-13 HEX. HEAD BOLTS. STANDARD COMMERCIAL GRADE. (ASTM A307 GRADE A OR BETTER) (TENSILE STRENGTH EQUAL TO 55K P.S.I. MINIMUM) AND WITH FLAT WASHERS UNDER BOLT HEADS.
- 6. REF. S.D. & W.S. SPECIFIED ON B/M WHEN WIRING UNITS.
- 7. UNIT WEIGHT IS APPROX. 485 LBS. CENTER OF GRAVITY (C.G.) IS AS SHOWN.

R	855-11-2128-02	2
Q	855-11-02098-0038	2
P	853-11-02088-06	2
O	855-11-02120-03	2
N	853-11-2088-07	4
M	855-11-2120-04	4
L	851-11-2097-0125	4
K	851-11-10668-0050	6
J	851-113077-0025	30
I	851-11-2141-0075	12
G	855-11-2120-08	18
F	851-11-2091-0150	6
E	853-18-8428	6
D	851-11-3963-0062	18
C	855-11-2120-07	8
B	851-11-2091-0038	2
A	853-18-12346	18
ITEM	PART NO.	QTY

[illegible]

SEE PAGE 2 OF 2 FOR LEAD WIRE COLOR,
GAUGE & PRIMARY, SECONDARY
CONNECTIONS

S.D.923-28-275

PAGE
1 OF 2

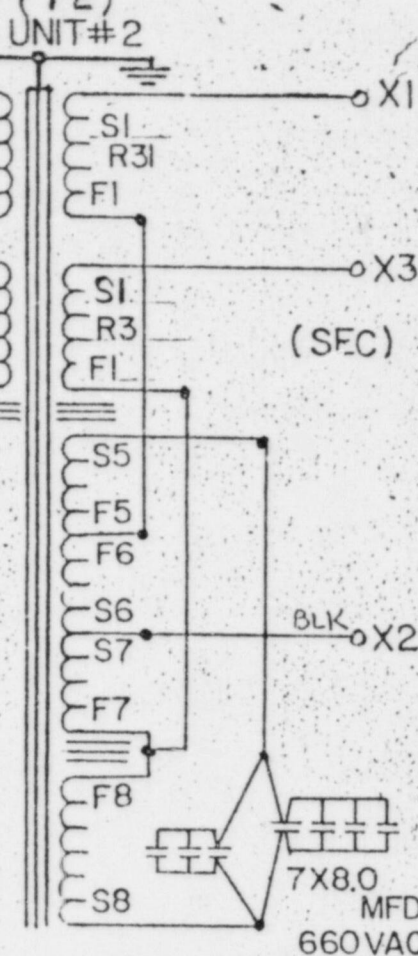
B

PRIMARY 60 HZ

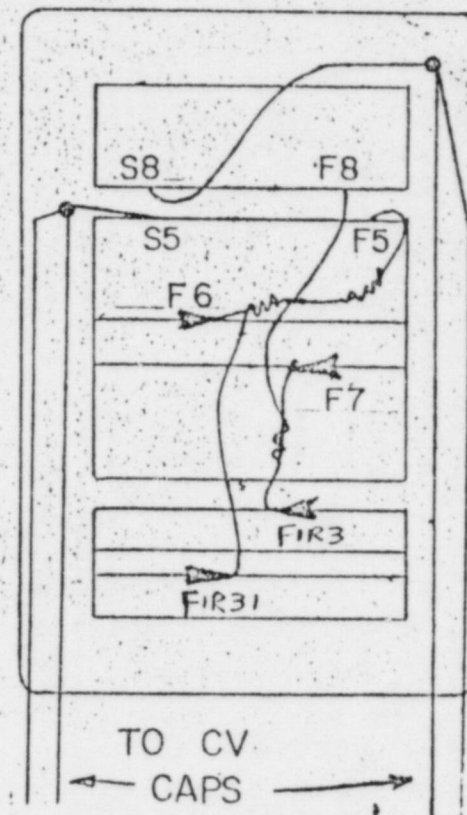
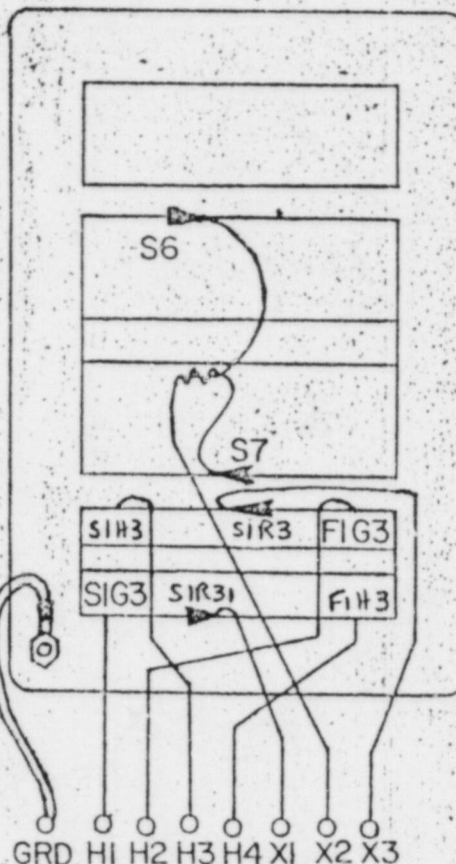
NOTE: GRD. ON
T2 ONLY.WIRE T1 & T3
IDENTICALLY
EXCEPT GRD.(FP)
4-1-75(T2)
UNIT #2

SIDE X

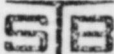
SIDE Y



BLK X2

7X8.0
MFD
660 VACTO CV
CAPS* Variations on Finished Dimensions
unless otherwise marked

Basic Dimensions	Fractional Dimensions	Decimal Dimensions
Up to $\frac{1}{4}$	$\pm \frac{1}{128}$	$\pm .005$
Above $\frac{1}{4}$ to 6	$\pm \frac{1}{64}$	$\pm .005$
Above 6 to 24	$\pm \frac{1}{32}$	$\pm .010$
Above 24	$\pm \frac{1}{16}$	$\pm .015$
Angular Dimensions		$\pm \frac{1}{2}^\circ$
See Purch. Spec. for Stock Tolerances		

9	23895	MOVED GND. LD.	P.B.	PPG	4-14-80	 SOLA ELECTRIC DIVISION OF SOLA BASIC INDUSTRIES ELK GROVE VILLAGE, ILLINOIS S.D.923-28-275 PAGE 1 OF 2 SCHEMATIC DIAGRAM FOR CAT.NO.923-28-275	
8	21953	SEE ECO	H.L.		3-20-78		
7	2024	SEE ECO	G.P.		9-23-76		
1	12579	STD - ADDED PAGE 1 OF 2,	PPG		8-9-68		
REVISION NUMBER	CHANGE ORDER	REVISION	BY	CHK.	APPD.		APPD.

DRAWN
EHCHK.
PPG

APPD. ENG.

APPD. STDS.
DATE
11-20-58

SCALE

~

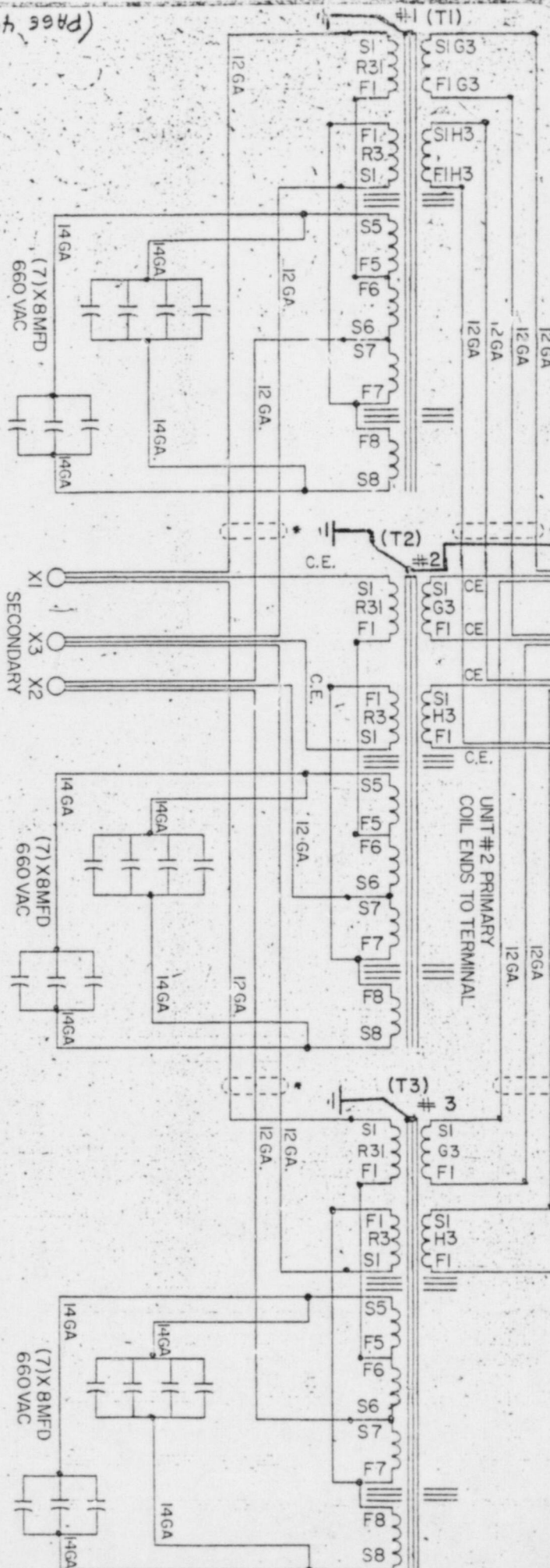
SE SOLA ELECTRIC
DIVISION OF SOLA BASIC INDUSTRIES
ELK GROVE VILLAGE, ILLINOIS
S.D.923-28-275 PAGE 1 OF 2
SCHEMATIC DIAGRAM
FOR CAT. NO. 923-28-275

S.D.923-28-275
PAGE 1 OF 2

PRIMARY VOLTS	LINE	JUMPER	SECONDARY VOLTS	TERMINAL
190-260	H1-H4	H1-H3, H2-H4	120	X1-X2
380-520	H1-H4	H2-H3	120	X2-X3
			240	X1-X3

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Information contained herein is confidential to the property of General Signal Corporation, it is to be used solely for the purposes specified, and is not to be disseminated outside the company without the written consent of General Signal Corporation.

ALL LEADS THRU TOP CONDUIT *



NOTE: ALL LEAD WIRE IS BLACK

C.E. - COIL ENDS

(Page 44)

(Page 44)

SD 923-28-275

PAGE 2 OF 2

PAGE 1 OF 2 IS A SIZE

TOLERANCE ON DIMENSIONS UNLESS OTHERWISE SPECIFIED		ONE PLACE DECIMAL ±.1		TWO PLACE DECIMAL ±.02		THREE PLACE DECIMAL ±.010		HOLE DIMENSIONS ±.005		ANGLES ±.5°	
CHANGES DOCUMENTED ON #1 OF 2 PAGE											
DESIGN	ENGINEER	DESIGN	ENGINEER	DESIGN	ENGINEER	DESIGN	ENGINEER	DESIGN	ENGINEER	DESIGN	ENGINEER
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
923-28-275 SD 923-28-275 SCHEMATIC DIAGRAM 923-28-275 CAT. NO. PAGE 1 OF 2 IS A SIZE											

(Page 45)

No. 069621

Account No. _____

(Signed) _____

(Page 45)

Georgia Power Company
Post Office Box 282
Waynesboro, Georgia 30830
Telephone 404 554-9961
404 724-8114

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 870-6011



Vogtle Project

October 6, 1986

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood
PWR Project Directorate #4
Division of PWR Licensing A
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

File: X7BC35
Log: GN-1100

NRC DOCKET NUMBERS 50-424 AND 50-425
CONSTRUCTION PERMIT NUMBERS CPPR-108 AND CPPR-109
VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2
IMPLEMENTATION OF ALTERNATE ELECTRICAL SEPARATION CRITERIA

Dear Mr. Denton:

Enclosed are five copies of the electrical and temperature test report of a 7.5 KVA CVS transformer requested by a member of your staff during a telephone conversation held on September 25, 1986.

If your staff requires any additional information concerning this extension request, please contact me.

Sincerely,

J. A. Bailey
J. A. Bailey
Project Licensing Manager

JAB/sm

xc: R. E. Conway
R. A. Thomas
J. E. Joiner, Esquire
B. W. Churchill, Esquire
M. A. Miller (2)
B. Jones, Esquire
G. Bockhold, Jr.

NRC Regional Administrator
NRC Resident Inspector
D. Feig
R. A. McManus
L. T. Gucwa
Vogtle Project File

0764V

Boo!
1/5