



BILL OF MATERIAL

- FOR INFORMATION ONLY - EQUIPMENT LISTED BELOW TO BE FURNISHED BY OTHERS:
- FOR BILL OF MATERIAL OF POTENTIAL TRANSFORMERS BUS NO.1, BUS NO.2 & BUS NO.3 SEE DRAWING E-229-005, SHIT.2. ALL OTHER POTENTIAL TRANSFORMERS ARE GENERAL ELECTRIC, TYPE EA-900, 448724.
 - ALL 115KV POTENTIAL TRANSFORMERS ARE GENERAL ELECTRIC, TYPE EN-550, 540331.
 - FOR BILL OF MATERIALS FOR CARRIER CURRENT TRANSFORMERS XCT001-TS, XCT002-TS, XCT003-TS, XCT007-TS, XCT008-TS, XCT009-TS, XCT010-TS, XCT011-TS AND XCT012-TS. SEE DRAWING E-229-005, SHIT.2. ALL OTHER CARRIER TRANSFORMERS ARE WESTINGHOUSE TYPE ACT-100A.
 - FOR BILL OF MATERIALS FOR CARRIER CURRENT LINE TRAP, XL1003-TS, XL1008-TS AND XL1009-TS. SEE DRAWING E-229-005, SHIT.2. ALL OTHER CARRIER CURRENT LINE TRAPS ARE GENERAL ELECTRIC COMPANY, TYPE CF2620NE3PX PEDESTAL MOUNTED.
 - FOR BILL OF MATERIALS FOR COUPLING CAPACITORS XCC003-TS, XCC004-TS, XCC005-TS, XCC006-TS, XCC007-TS, XCC008-TS, XCC009-TS, XCC010-TS, XCC011-TS, XCC012-TS, XCC013-TS, XCC014-TS, XCC015-TS, XCC016-TS, XCC017-TS, XCC018-TS, XCC019-TS, XCC020-TS, XCC021-TS AND XCC022-TS. SEE DRAWING E-229-005, SHIT.2. ALL OTHER COUPLING CAPACITORS ARE GENERAL ELECTRIC COMPANY, TYPE LOW C C40022506.
 - BILL OF MATERIALS FOR LIGHTNING ARRESTORS BUS NO.1, BUS NO.2, XCB882, XCB884, XCB885, XCB886, XCB887, XCB888, XCB889, XCB890, XCB891, XCB892, XCB893, XCB894, XCB895, XCB896, XCB897, XCB898, XCB899, XCB900, XCB901, XCB902, XCB903, XCB904, XCB905, XCB906, XCB907, XCB908, XCB909, XCB910, XCB911, XCB912, XCB913, XCB914, XCB915, XCB916, XCB917, XCB918, XCB919, XCB920, XCB921, XCB922, XCB923, XCB924, XCB925, XCB926, XCB927, XCB928, XCB929, XCB930, XCB931, XCB932, XCB933, XCB934, XCB935, XCB936, XCB937, XCB938, XCB939, XCB940, XCB941, XCB942, XCB943, XCB944, XCB945, XCB946, XCB947, XCB948, XCB949, XCB950, XCB951, XCB952, XCB953, XCB954, XCB955, XCB956, XCB957, XCB958, XCB959, XCB960, XCB961, XCB962, XCB963, XCB964, XCB965, XCB966, XCB967, XCB968, XCB969, XCB970, XCB971, XCB972, XCB973, XCB974, XCB975, XCB976, XCB977, XCB978, XCB979, XCB980, XCB981, XCB982, XCB983, XCB984, XCB985, XCB986, XCB987, XCB988, XCB989, XCB990, XCB991, XCB992, XCB993, XCB994, XCB995, XCB996, XCB997, XCB998, XCB999, XCB1000.
 - ALL LIGHTNING MASTS ARE POWER STRUCTURES, INCORPORATED.
 - BILL OF MATERIALS FOR XCB932 BUS EXTENSION INSULATORS, SEE DRAWING E-229-005, SHIT.2. ALL OTHER INSULATORS AND BUS INSULATORS ARE LAPP CATALOG #301043-70.
 - ALL UNDERGROUND INSULATORS ARE LAPP CATALOG #15100-70.

NOTES:

- ALL 8" IPS SCHED. 40 ALUMINUM BUS SPAN OF 20 FEET AND LONGER TO BE DAMPED WITH ALCOA CONDUCTOR PRODUCTS COMPANY, EXTENSION, WELD-UP, BUS VIBRATION DAMPERS, UNLESS OTHERWISE NOTED.
- FIELD TO DRILL 3/16" DIAMETER DEEP HOLES AT LOP POINTS, (INVERTS) OF MAIN & CROSS BUS RUNS.
- FACTORY DRILL 8/16" DIAMETER HOLES IN DEAD END STRUCTURES, POTENTIAL TRANSFORMER STRUCTURES, AND CURRENT TRANSFORMER STRUCTURES, SPACED APPROX. 8 FEET APART, FOR GROUNDING EQUIPMENT ON STRUCTURE.
- ALL STRAIN ASSEMBLIES FOR CONDUCTOR AND SHIELD WIRE WILL BE SUPPLIED BY OTHERS.
- ALL COPPER BUS REQUIRING BENDING SHALL BE FURNISHED AS FACTORY BENT SECTIONS.
- LINE DEAD END STRUCTURES TO BE DESIGNED FOR A MAXIMUM PULLOFF ANGLE OF 15° UNLESS OTHERWISE NOTED.
- FOR SUBSTATION STRUCTURES, BUSES, AND SWITCHES SEE SPECIFICATION 37-431-34401-000, AND PURCHASE ORDER INFORMATION PER BILL OF MATERIAL DWS E-229-005, SHIT.2.
- THESE DRAWINGS TO BE WORKED IN CONJUNCTION WITH ARTHUR TATMAN & ASSOC. DWG. 875-104.

CLEARANCE:

- BETWEEN OPPOSING LIVE PARTS - 15'-0" REC. 7'-0" MIN.
- BETWEEN LIVE PARTS & GROUND - 8'-0" REC. 6'-11" MIN.
- TO ANY LOWER VOLTAGE - 15'-0" REC. 10'-0" MIN.
- ISOLATION ELEVATION - 15'-0"

LEGEND:

- INDICATES FUTURE EQUIPMENT OR STRUCTURE
- INDICATES LINE TRAP & COUPLING CAPACITOR
- INDICATES LIGHTNING ARRESTOR OR AS CALLED OUT ON THE DRAWING
- INDICATES LIGHTNING MAST
- INDICATES STRAPUP CLAMP LOCATION FOR TEMPORARY GROUND CONNECTIONS

REFERENCES:

- E-005-001 LAYOUT - PLOT PLAN
- E-229-001 GENERAL ARRANGEMENT - 230KV SUBSTA. ARRG.
- E-229-002 230KV SUBSTA. ARRG. - PLAN - BUS SECT. 1 & 3
- E-229-004 230KV SUBSTA. ARRG. - SECTIONS
- E-229-005 SHIT. 1 - 230KV SUBSTA. ARRG. - SECTIONS
- E-229-005 SHIT. 2 - 230KV SUBSTA. ARRG. - BILL OF MATERIAL
- E-229-005 SHIT. 3 - 230KV SUBSTA. ARRG. - SECTIONS
- E-229-006 OVDG LINE ARRG. - 230KV & 115KV OUTDOOR XTRA AREA
- E-229-008 230KV SUBSTA. GROUNDING - PLAN - BUS SECT. 2 & 3
- E-229-009 230KV SUBSTA. GROUNDING - PLAN - BUS SECT. 1 & 3
- E-229-012 230KV SUBSTA. CABLE TRENCH ARRG.
- E-229-013 230KV SUBSTA. CONDUIT PLAN - BUS SECT. 2 & 3
- E-229-014 230KV SUBSTA. CONDUIT PLAN - BUS SECT. 1 & 3
- E-229-015 230KV SUBSTA. RELAY HOUSE ARRG.
- E-229-054 ONE LINE DIAGRAM - 230KV SUBSTA. LAYOUT
- E-229-043 230 KV SUBSTA. OVERHEAD CONDUCTOR LEAD END ASSEMBLIES
- E-229-158 230KV SUBSTATION UNIT 1 RELAY HOUSE ARRANGEMENT

DRAWING LEGIBILITY CLASS 2

FSAR Figure 8.2-2b

SOUTH CAROLINA ELECTRIC & GAS COMPANY		VIRGIL C. SUMNER NUCLEAR STATION	
ELECTRICAL		230KV SUBSTATION ARRANGEMENT	
14	10/20/00	JMR	REVISED PER ECR-50835
13	10/20/00	JMR	REVISED PER ECR-50836
12	10/20/00	AVT	REVISED PER ECR-50836 & 50867
11	10/20/00	VAK	REVISED PER ECR-50859
10	10/20/00	VAK	REVISED PER ECR-50747, 50748, 50772, 50777, 50804, 50806, 50831, 50832, 50834
9	10/20/00	DDJ	REVISED PER ECR-50803
NO.	DATE	BY	REVISION
16	10/27/00	NAX	REVISED PER ECR-50882
15	10/26/00	CMS	REVISED PER ECR-50836/50855
14	10/20/00	JMR	REVISED PER ECR-50835
13	10/20/00	JMR	REVISED PER ECR-50836
12	10/20/00	AVT	REVISED PER ECR-50836 & 50867
11	10/20/00	VAK	REVISED PER ECR-50859
10	10/20/00	VAK	REVISED PER ECR-50747, 50748, 50772, 50777, 50804, 50806, 50831, 50832, 50834
9	10/20/00	DDJ	REVISED PER ECR-50803
NO.	DATE	BY	REVISION

