



NOTES

1. SYMBOL \oplus INDICATES METERING SIGNAL TO BE TRANSMITTED TO COMPUTER DATA SYSTEM.
2. SYMBOL Δ INDICATES EQUIPMENT FURNISHED BY OTHERS AND LOCATED IN CONTROL ROOM.
3. SYMBOL \square INDICATES EQUIPMENT FURNISHED, MOUNTED AND WIRED BY DIESEL GENERATOR MANUFACTURER AS PER SPEC. 9527-01-201-1.
4. \bullet INDICATES ALARM RELAY (DEV. 7400) IS ENERGIZED ONLY FROM THE TIME OVERCURRENT CONTACT (DEF. 51) AT THE \oplus B OVERCURRENT RELAY (DEV. 50/5).
5. ALL FEEDERS TO BE CABLE UNLESS OTHERWISE NOTED.
6. CT'S TO BE FURNISHED BY SWGR MFR AND MTD BY OTHERS AT DIESEL GENERATOR.
7. FOR DEVICE LIST, SEE DWG. 9527-F-3077 SH-1 & 3078 SH-1.
8. Φ INDICATES SPLICE POINT.
9. ALL TRANSFORMER BKR FEEDER UNITS SHALL BE PROTECTED BY THREE TYPE IAC53B OVERCURRENT RELAYS.
10. ALL MOTOR STARTER BREAKERS SHALL HAVE THE FOLLOWING OVERCURRENT PROTECTION:
 - (a) PHASES A, C EACH HAVE ONE OVERCURRENT RELAY TRIP, IAC 57D.
 - (b) PHASE B HAS ONE OVERCURRENT RELAY TRIP, IAC 57D.
11. 74 AUX RELAY PROVIDES BKR TRIP ALARM AND COMPUTER INPUT, ENERGIZED FROM SA OR \oplus C OVERCURRENT RELAY (DEV. 50/5) OR FROM INSTANTANEOUS UNIT OF OVERCURRENT RELAY AT \oplus B.
12. 74G AUX RELAY PROVIDES ALARM FOR GROUND FAULTS.

REFERENCE DRAWINGS

9527-F-5003 UNITS 1&2 AUX. 1-LINE DIAG. 4160 EMERG. SWGR ES #E4
 9527-F-3002 UNIT 1 AUX. 1-LINE DIAG. 4160V SYSTEM SWGR 1B, 1C, 1D & COM. A
 9527-F-3077 UNITS 1&2 4160 VOLT SWGR, 'E1' DIV. I RELAYING & METERING THREE LINE DIAGRAM, SH-1 & 2
 9527-F-3078 UNITS 1&2 4160 VOLT SWGR, 'E2' DIV. II RELAYING & METERING THREE LINE DIAGRAM SH-1&2

REV. NR 5 NOTES:

- 1- ADDED ALARM RELAYS, GROUND SENSOR RELAY, GROUND SENSOR, TEST SW, AND VARM TO DIESEL CRT FIELD, VM, SIGNAL TO DIESEL SYNC.
- 2- DELETED SUBSTATION TRANSFORMERS, WATT HOUR METER AND ITS SIGNAL TO DATA SYSTEM.
- 3- CHANGED WIRE NO. & NOTES

NO.	DATE	DESCRIPTION	BY	CHKD.
10	12/27/78	AS BUILT PER PM 77137	CP&L	CP&L
9	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
8	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
7	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
6	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
5	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
4	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
3	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
2	12/27/78	REV'D PER UBR-4762	CP&L	CP&L
1	12/27/78	REV'D PER UBR-4762	CP&L	CP&L

RESTORATION ENHANCEMENT COMPLETE

DRAWING TRANSFERRED TO THE CUSTODY OF CP&L
 REV. 10 UC 33755

FIG. 8-10-4
 APERTURE CARD

CAROLINA POWER & LIGHT COMPANY
 BRUNSWICK STEAM ELECTRIC PLANT

UNITS NO. 1 & 2
 AUXILIARY ONE LINE DIAGRAM
 4160 VOLT EMERGENCY SYSTEM
 SWGR, E1 & E2

9527-F-3004

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PDR RIDS

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