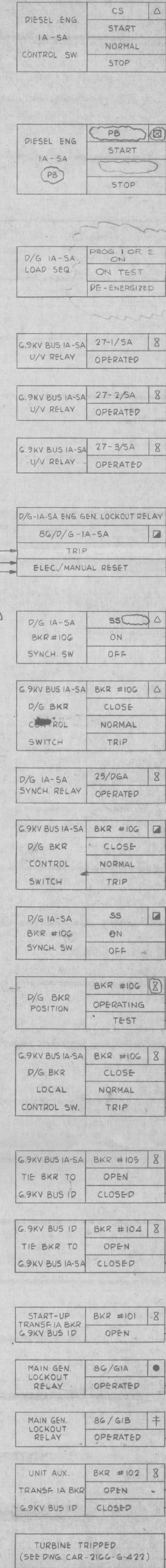
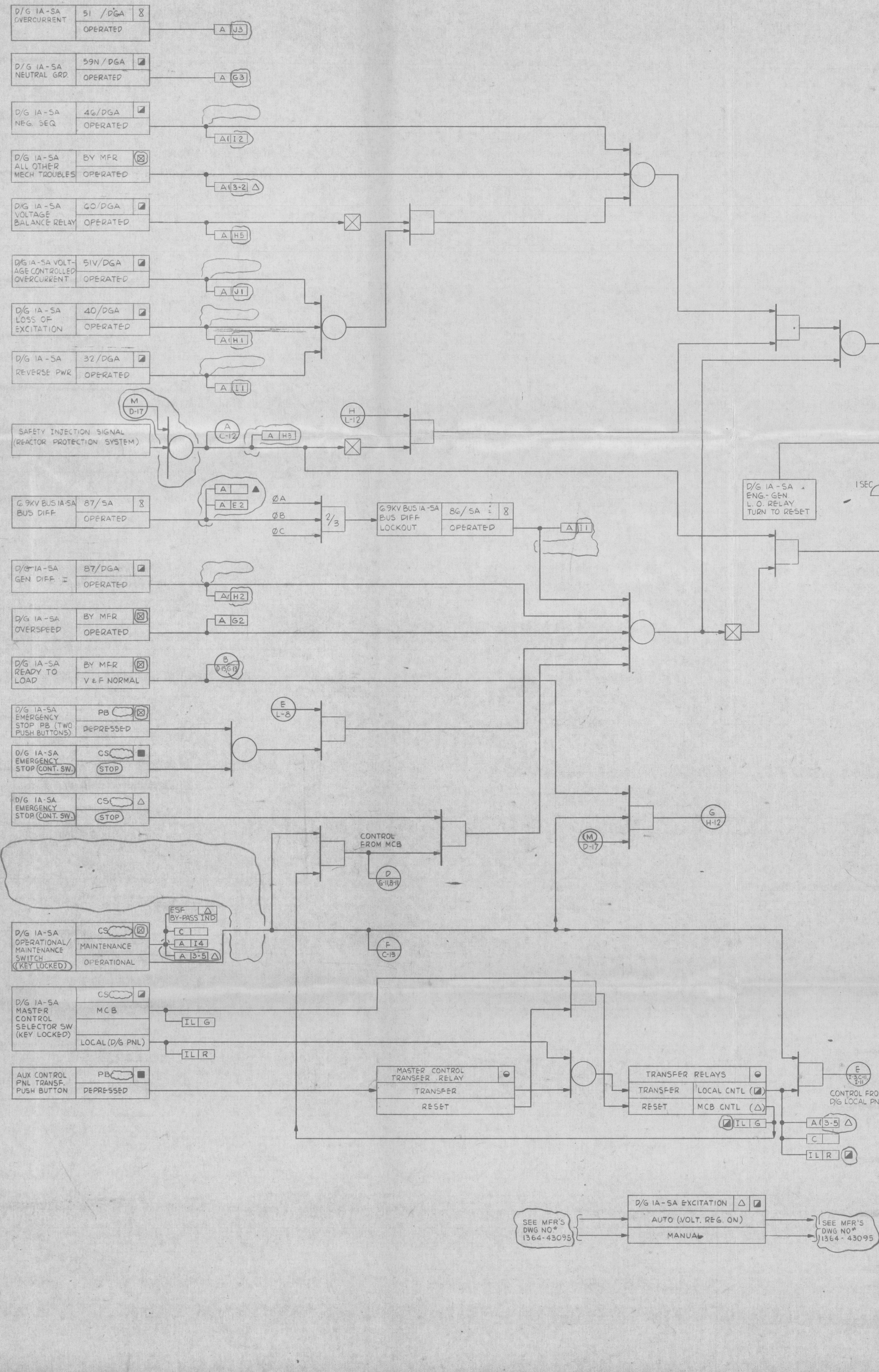


CAR-2166  
G-039



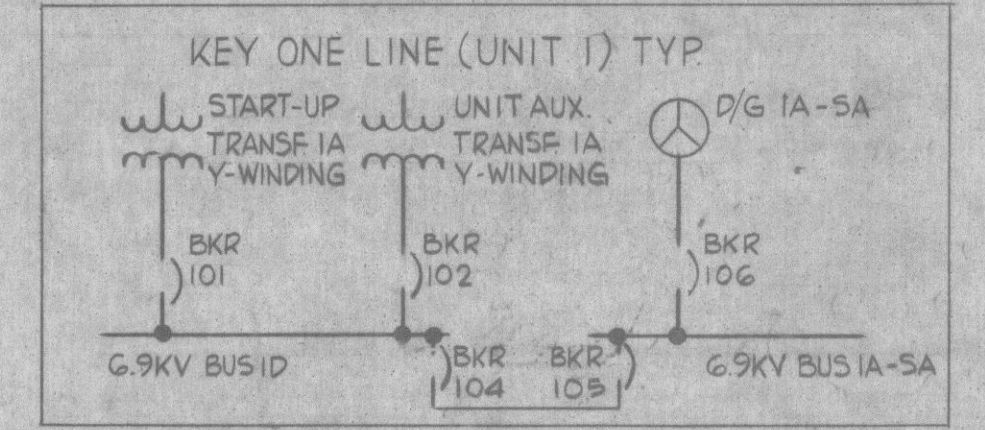
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FOR INFORMATION ONLY

PROC  
APERTURE  
CARD

Doc# 29-400  
Control 29-400-0212  
Date 11/18/82 of Document  
REGULATORY DOCKET FILE

- LEGEND:
- AND PRODUCES AN OUTPUT ONLY WHEN EVERY INPUT IS PRESENT
  - OR PRODUCES AN OUTPUT WHEN ONE (OR MORE) INPUT IS PRESENT
  - NOT PRODUCES AN OUTPUT ONLY WHEN NO INPUT IS PRESENT
  - TIME DELAY INPUT PRODUCES OUTPUT AFTER...SEC TIME DELAY
  - OUTPUT IS WIPE OUT AFTER...SEC EVEN IF INPUT CONTINUES TO BE PRESENT
  - ANNUNCIATOR # WINDOW I.D NUMBER
  - COMPUTER # POINT IDENTIFICATION(4-16)
  - INDICATING LIGHT # LAMP COLOR
  - MAIN GENERATOR RELAY PANEL NO. 1A
  - MAIN GENERATOR RELAY PANEL NO. 1B
  - DIESEL GENERATOR CONTROL PANEL NO. 1A
  - 6900V SWITCHGEAR
  - MAIN CONTROL PANEL
  - AUX CONTROL PANEL
  - TRANSFER RELAY PANEL
  - DIESEL ENGINE CONTROL PANEL NO. 1A
  - AUXILIARY CONTROL PANEL

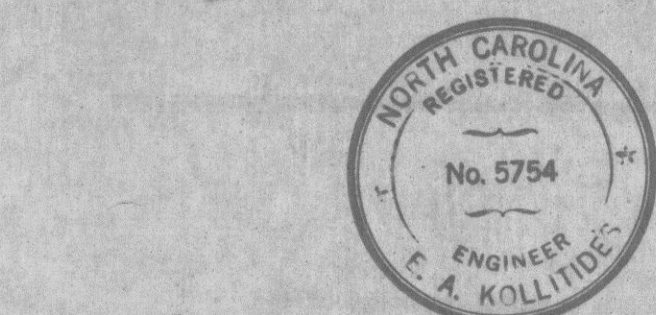
- NOTES:
1. THIS DRAWING IS TYPICAL FOR DIESEL GENERATORS 1A-SA, 2A-SA, 3A-SA, 4A-SA, 1B-SB, 2B-SB & 4B-SB.
  2. EMERGENCY DIESEL GENERATOR WILL START AUTOMATICALLY BY ACTION OF UNDERVOLTAGE OR A SAFETY INJECTION SIGNAL. WHEN UP TO SPEED AND VOLTAGE, THE DIESEL GENERATOR BREAKER WILL CLOSE IF THE BUS IS DE-ENERGIZED.
  3. MANUAL PARALLELING OF NORMAL & EMERGENCY SOURCES OR VICE-VERSA IS PERMISSIBLE AND SOURCES MAY REMAIN PARALLELED FOR EXTENDED PERIODS. SYNCHRONIZING SWITCHES ARE PROVIDED TO ENSURE SYNCHRONIZING.
  4. SYNCHRONIZING FACILITIES FOR EACH DIESEL GENERATOR WILL BE PROVIDED AT BOTH THE MAIN CONTROL PANEL AND THE DIESEL GENERATOR LOCAL PANEL.
  5. UNLESS OTHERWISE NOTED, ALL ANNUNCIATORS ARE LOCATED IN THE DIESEL GENERATOR CONTROL PANEL.



- REFERENCE DRAWINGS:
- MAIN & 6900 VOLT AUXILIARY ONE LINE WIRING DIAGRAM UNIT 1 CAR-2166 G-029
  - MAIN & 6900 VOLT AUXILIARY ONE LINE WIRING DIAGRAM UNIT 2 CAR-2166 G-031
  - MAIN & 6900 VOLT AUXILIARY ONE LINE WIRING DIAGRAM UNIT 3 CAR-2166 G-033
  - MAIN & 6900 VOLT AUXILIARY ONE LINE WIRING DIAGRAM UNIT 4 CAR-2166 G-035
  - CONTROL WIRING DIAGRAMS CAR-2166 G-041

DOCUMENT CONTROL  
RECEIVED  
FEB 17 1982  
SHEARON HARRIS, N. P. P.

APPROVED FOR CONSTRUCTION  
CAR-2166 G-039



NUCLEAR SAFETY RELATED  
THIS DOCUMENT IS DELIVERED IN ACCORDANCE WITH AND IS SUBJECT TO THE PROVISIONS OF SECTION 4 OF THE CONTRACT BETWEEN CAROLINA POWER & LIGHT COMPANY AND EBASCO SERVICES INCORPORATED DATED SEPTEMBER 1, 1976, AS AMENDED.

CAROLINA POWER & LIGHT COMPANY  
SHEARON HARRIS NUCLEAR POWER PLANT

ELECTRICAL RELAY LOGIC DIA.  
DIESEL GENERATOR CONTROLS  
UNITS 1, 2, 3 & 4

EBASCO SERVICES INCORPORATED

SCALE: ~  
APPROVED DATE: 10-23-78  
DIV. ELEC.  
DR. O. GRANT  
ENR. K. WESCHUK

NO.	DATE	REVISION	BY	CHK.	APPROVED	
2	2-9-82	REVISED: RELOC. SW. (B016, J10K1) RELAYS (C141) INDICATING (M5) SWITCH (B140) ADDED: NOTE (F-616), LEGEND (D16), LOGIC (A15, F2, M11-13), INPUT (D17, G15, H2), MAIN (A17, B15, F3, K13), IND. (A15), CONT. SW. (A10, I1, K1), CMPTR. (K17), RELAY (A15) DELETED: CMPTR. (B2, I7, D2, B2, H, F1, G2, G, H1), SW. (I2), IND. (C13, I5, D15)				
1	6-15-79	APPD FOR CONSTRUCTION AS PER CP&L LTR CB09952 OF 12-19-78				