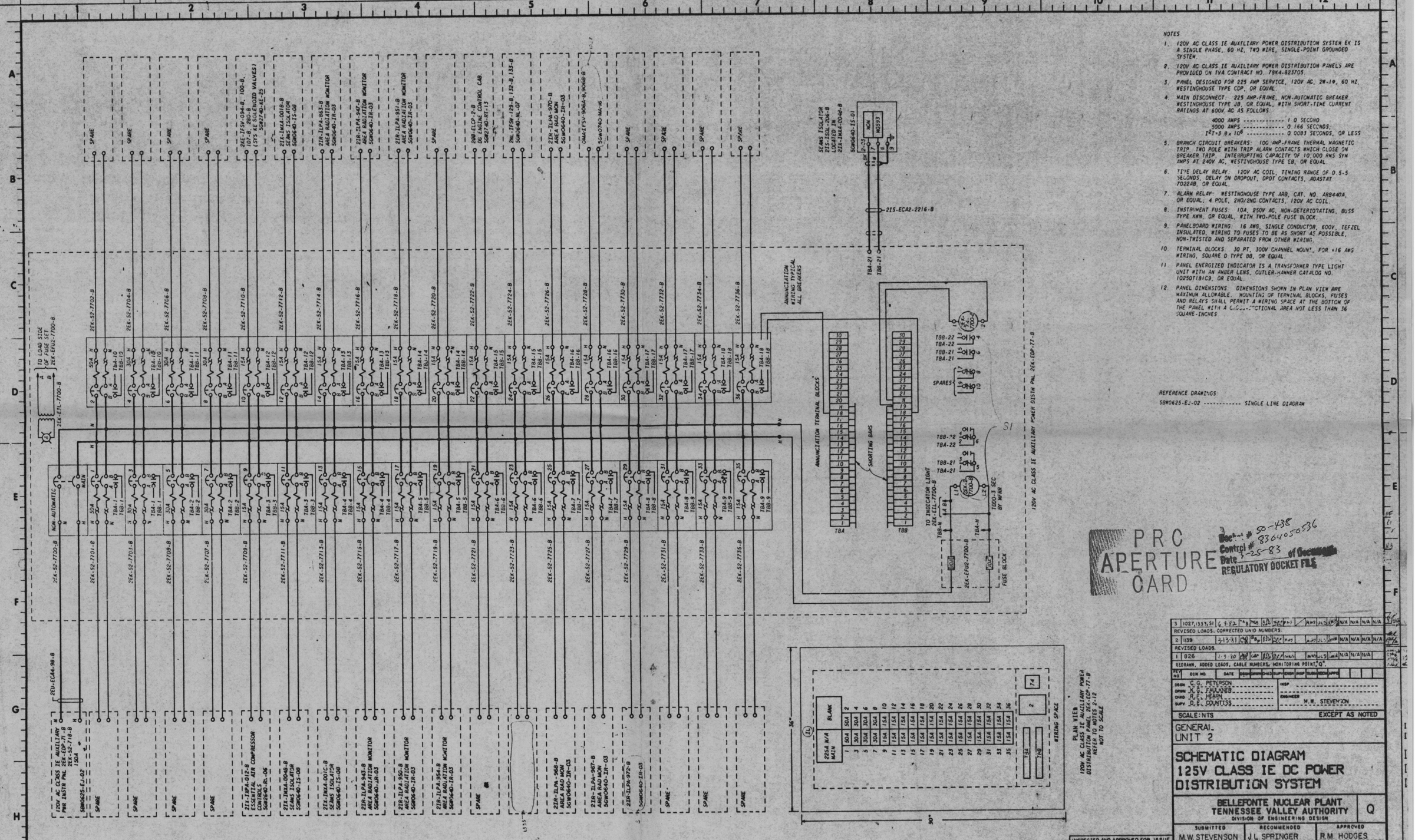

NOTES

1. 120V AC CLASS IE AUXILIARY POWER DISTRIBUTION SYSTEM EK IS A SINGLE PHASE, 60 HZ, TWO WIRE, SINGLE-POINT GROUNDED SYSTEM.
2. 120V AC CLASS IE AUXILIARY POWER DISTRIBUTION PANELS ARE PROVIDED ON TVA CONTRACT NO. 79K4-823705.
3. PANEL DESIGNED FOR 225 AMP SERVICE, 120V AC, 2W-1Ø, 60 HZ, WESTINGHOUSE TYPE CDP, OR EQUAL.
4. MAIN DISCONNECT: 225 AMP-FRAME, NON-AUTOMATIC BREAKER WESTINGHOUSE TYPE JB, OR EQUAL, WITH SHORT-TIME CURRENT RATINGS AT 600V AC AS FOLLOWS:

   4000 AMPS ---------- 1.0 SECOND
   5000 AMPS ---------- 0.166 SECONDS;
   $I^2t = 3 \times 10^6$ ---------- 0.0083 SECONDS, OR LESS

5. BRANCH CIRCUIT BREAKERS: 100 AMP-FRAME THERMAL MAGNETIC TRIP, TWO POLE WITH TRIP ALARM CONTACTS WHICH CLOSE ON BREAKER TRIP. INTERRUPTING CAPACITY OF 10,000 RMS SYM AMPS AT 240V AC, WESTINGHOUSE TYPE EB, OR EQUAL.
6. TIME DELAY RELAY: 120V AC COIL, TIMING RANGE OF 0.5-5 SECONDS, DELAY ON DROPOUT, DPDT CONTACTS, AGASTAT 7022AB, OR EQUAL.
7. ALARM RELAY: WESTINGHOUSE TYPE ARB, CAT. NO. ARB440A, OR EQUAL; 4 POLE, 2NO/2NC CONTACTS, 120V AC COIL.
8. INSTRUMENT FUSES: 10A, 250V AC, NON-DETERIORATING, BUSS TYPE KWN, OR EQUAL, WITH TWO-POLE FUSE BLOCK.
9. PANELBOARD WIRING: 16 AWG, SINGLE CONDUCTOR, 600V, TEFZEL INSULATED, WIRING TO FUSES TO BE AS SHORT AS POSSIBLE, NON-TWISTED AND SEPARATED FROM OTHER WIRING.
10. TERMINAL BLOCKS: 30 PT, 300V CHANNEL MOUNT, FOR #16 AWG WIRING, SQUARE D TYPE BB, OR EQUAL.
11. PANEL ENERGIZED INDICATOR IS A TRANSFORMER TYPE LIGHT UNIT WITH AN AMBER LENS, CUTLER-HAMMER CATALOG NO. 10250T181C3, OR EQUAL.
12. PANEL DIMENSIONS: DIMENSIONS SHOWN IN PLAN VIEW ARE MAXIMUM ALLOWABLE. MOUNTING OF TERMINAL BLOCKS, FUSES AND RELAYS SHALL PERMIT A WIRING SPACE AT THE BOTTOM OF THE PANEL WITH A CROSS-SECTIONAL AREA NOT LESS THAN 36 SQUARE-INCHES.

REFERENCE DRAWINGS:

5GW0625-EJ-02 ---------- SINGLE LINE DIAGRAM

PRC APERTURE CARD
Document # 50-438
Control # 8304050536
Date 4-25-83
of Documents
REGULATORY DOCKET FILE

REV NO	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	DSGN	INSP	ENGR	SUPV	APPD				
3	1027,1333,51	6-7-82										N/A	N/A	N/A	N/A
REVISED LOADS. CORRECTED UNID NUMBERS.															
2	1139	3-15-81										N/A	N/A	N/A	N/A
REVISED LOADS.															
1	826	1-5-80										N/A	N/A	N/A	N/A
REDRAWN, ADDED LOADS, CABLE NUMBERS, MONITORING POINT "Q".															

DSGN C.G. PETERSON
DRWN J.C.D. FAULKNER
CHKD R.E. HEARN
SUPV D.E. DONTISS
INSP
ENGINEER M.W. STEVENSON

SCALE: NTS — EXCEPT AS NOTED

GENERAL
UNIT 2

SCHEMATIC DIAGRAM 125V CLASS IE DC POWER DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED
M.W. STEVENSON	J.L. SPRINGER	R.M. HODGES

KNOXVILLE 9-12-77 88 E 5GW2640-EU-11 R3

RECORD DRAWING AS CONSTRUCTED

INSPECTED AND APPROVED FOR ISSUE

THIS DRAWING