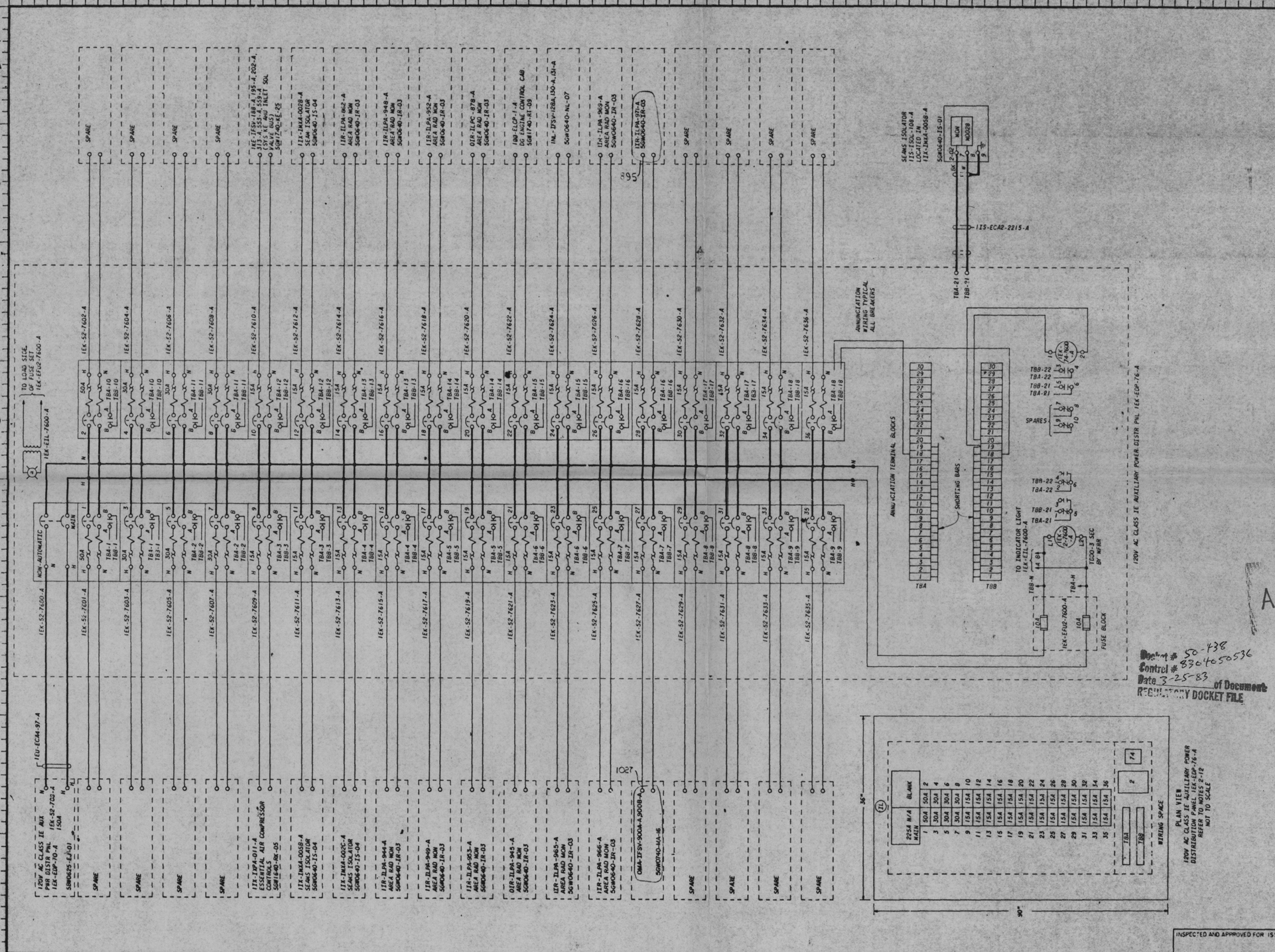

NOTES:

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 AUX POWER DISTRIBUTION PANELS ARE PROVIDED ON TVA CONTRACT NO. 78K4-823705.
3. PANEL DESIGNED FOR 225 AMP SERVICE, 120V AC, 2W-1Φ, 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;
   - $I^2T = 3.8 \times 10^6$ ---------- 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, 300V, 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 Q TYPE BB, OR EQUAL.
11. PANEL ENERGIZED INDICATOR IS A TRANSFORMER WYPE LIGHT UNIT WITH AN AMBER LENS, CUTLER-HAMMER CATALOG NO. 10250T181C9, 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 DWGS:
5GW0625-EJ-01 --------- SINGLE-LINE DIAGRAM

P.R.C APERTURE CARD

Docket # 50-438
Control # 8304050536
Date 3-25-83
of Document
REGULATORY DOCKET FILE

REV NO	ECN NO	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPD
4	1027, 895	3-9-82									
REVISED LOADS.											
3	1139	3-13-81									
REVISED LOADS.											
2	E-1587,S1	5-5-80									
INCORPORATED FCR E-1587, MINOR REVISION											
1	826	10-22-79									
REDRAWN, ADDED LOADS, CABLE NUMBERS, MONITORING POINT											

DSGN C.G. PETERSON
DRWN K.G. FAULKNER
CHKD R.F. HEARN
SUPV D.E. COUNTISS
INSP
ENGINEER M.W. STEVENSON

SCALE: NTS — EXCEPT AS NOTED

GENERAL
UNITS 1 & 2

SCHEMATIC DIAGRAM 125V CLASS 1E DC POWER DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED: M.W. Stevenson — RECOMMENDED: C.L. Spencer — APPROVED: R.M. Hodges

KNOXVILLE 9-12-77 — 88 E — SGW1640-EU-10 R4

RECORD DRAWING AS CONSTRUCTED

INSPECTED AND APPROVED FOR ISSUE

THIS DRAWING HAS BEEN REDRAWN ORIGINAL DESTROYED.