



- NOTES:**
- 120V AC CLASS 1E AUXILIARY POWER DISTRIBUTION SYSTEM IS A SINGLE PHASE, 60 HZ, TWO WIRE, SINGLE-POINT GROUNDING SYSTEM.
 - 120V AC CLASS 1E AUX POWER DISTRIBUTION PANELS ARE PROVIDED ON TVA CONTRACT NO 78K4-823705.
 - PANEL DESIGNED FOR 225 AMP SERVICE, 120V AC, 2W-1Ø, 60 HZ, WESTINGHOUSE TYPE CDP, OR EQUAL.
 - 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,
 121/3 8105 0.0083 SECONDS, OR LESS
 - 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.
 - TIME DELAY RELAY: 120V AC COIL, TIMING RANGE OF 0.5-5 SECONDS, DELAY ON DROPOUT, DPDT CONTACTS, AGASTAT 7022AB, OR EQUAL.
 - ALARM RELAY: WESTINGHOUSE TYPE ARB, CAT NO ARB440A, OR EQUAL, 4 POLE, 2NO/2NC CONTACTS, 120V AC COIL.
 - INSTRUMENT FUSES: 10A, 250V AC, NON-DETERIORATING, CUSSE TYPE KMN, OR EQUAL, WITH TWO-POLE FUSE BLOCK.
 - PANELBOARD WIRING: 16 AWG, SINGLE CONDUCTOR, 300V, TEFLON INSULATED, WIRING TO FUSES TO BE AS SHORT AS POSSIBLE, NON-TWISTED AND SEPARATED FROM OTHER WIRING.
 - TERMINAL BLOCKS: 30 PT, 300V CHANNEL MOUNT, FOR #16 AWG WIRING, SQUARE Q TYPE BB, OR EQUAL.
 - PANEL ENERGIZED INDICATOR IS A TRANSFORMER W/PE LIGHT UNIT WITH AN AMBER LENS, CUTLER-HAMMER CATALOG NO 1025Q181C3, OR EQUAL.
 - 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 DRGS:
 56W0625-EJ-01 SINGLE-LINE DIAGRAM

P.R.C
 APERTURE
 CARD

Doc # 50-438
 Control # 8304650536
 Date 3-25-83
 REGISTRY DOCKET FILE

PLAN VIEW
 120V AC CLASS 1E AUXILIARY POWER
 DISTRIBUTION PANEL IEK-52-76-A
 REFER TO NOTES 2-12
 NOT TO SCALE

4	1027, 895	3/9/82								
REVISED LOADS										
3	1139	3/13/81								
REVISED LOADS										
2	E-1587.51	6/15/80								
INCORPORATED FOR E-1587, MINOR REVISION										
1	B26	10/22/79								
REDRAWN, ADDED LOADS, CABLE NUMBERS, MONITORING POINT										
REV	ECN NO	DATE	DESIGN	CHKD	APPROV	ISS	APP	APP	APP	APP
DRWN	C.B. PETERSON									
CHKD	R.F. HEARN									
SUPV	D.E. COMPTON									

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

SUBMITTED: KNOXVILLE 9-12-77
 RECOMMENDED: [Signature]
 APPROVED: [Signature]
 INSPECTED AND APPROVED FOR ISSUE: [Signature]
 KNOXVILLE 9-12-77 88 E SGM1640-EU-10 R4

THIS DRAWING HAS BEEN REDRAWN
 ORIGINAL DESTROYED