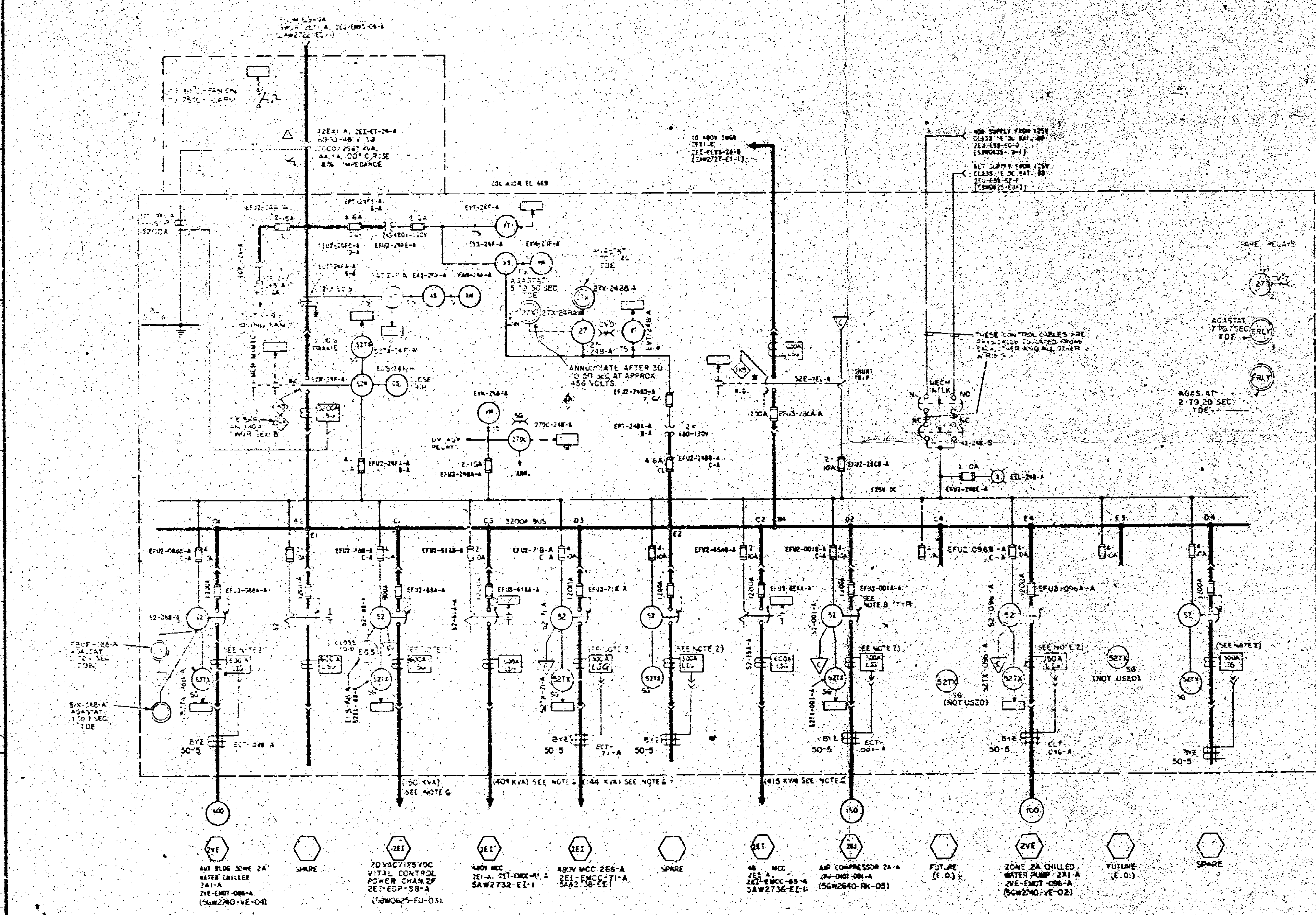

REFERENCE DRAWINGS	
DRAWING NUMBER	TITLE
15W720-AP-1	PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE
2AW2740-EI-1	480V SWGR 2EXI-A SYSTEM SCHEMATIC

NOTES:

1. 480V SWGR PROVIDED ON CONTRACT NO. 75K3-85586.
2. ALL CKT BKRS ARE 3-POLE, 1600A FR WITH REAL MOUNTED CURRENT LIMITING FUSE ON LINE SIDE OF EACH POLE, EXCEPT AS NOTED.
   800A FR BKRS HAVE 200,000A RMS SYM INTERRUPTING RATING AT 480V.
   3200A FR BKRS HAVE 65,000A RMS SYM INTERRUPTING RATING AT 480V.
   AS NOTED, BKRS ARE EQUIPPED WITH AN ELECTRICAL LOCKOUT ATTACHMENT ACTIVATED WHEN BKR IS TRIPPED AUTOMATICALLY BY THE AMPTECTOR.
3. RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING OR TVA APPROVED EQUAL.
4. THIS SWGR IS SUBJECT TO ALL REQUIREMENTS FOR CLASS 1E ELEC EQPT.
5. EACH DEVICE ASSOCIATED WITH THE SWGR BUS, TRANSFORMER, AND THE MAIN OR TIE CKT BKRS IS PART OF THE 480V CLASS 1E AC AUX PWR DISTRIBUTION SYS WITH UNIT AND SYS DESIGNATION 2EI. THE DEVICE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH 2EI, EXCEPT AS NOTED. ALL OTHER BKRS WITH THEIR ASSOCIATED DEVICES ARE PART OF THE SYS WHICH THEY SUPPLY. THE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH THE UNIT AND SYS DESIGNATION SHOWN IN THE HEXAGON SYMBOL, EXCEPT AS NOTED. THE SWGR PNL NO. UNID DESIGNATIONS ARE FORMED AS FOLLOWS USING THE PNL NO. XX AND THE TRAIN DESIGNATION (Y) A OR B: 2EI-ELVS-24XX-Y.
6. KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMAND.
7. SEE DWG 15W720-AP-1 FOR LOADS THAT REQUIRE DIESEL PWR.
8. CURRENT LIMITER IS BREAKER.

SYMBOLS:

- (K) — KEY INTERLOCK
- (YYX) — UNIT AND SYSTEM DESIGNATION (SEE NOTE 5)
- □ — PRIMARY CONTAINMENT PENETRATION
- ANN. — THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS
- (R) — RED INDICATING LIGHT
- SOLID STATE TRIP DEVICE WITH SENSOR RATING SHOWN
  - L = LONG TIME DELAY (OVERLOAD)
  - S = SHORT TIME DELAY (SELECTIVE TRIP)
  - I = INSTANTANEOUS (FAULT CURRENT)
  - G = GROUND (FAULT CURRENT)
- ▭ — INTERFACE FOR STATUS, ENVIRONMENTAL, AND ALARM MONITORING SYS (SEAMS)
- ✱ — WHEN BREAKER IS IN BACKED OUT (DISCONNECTED) POSITION USE SHIPPING BRACKETS TO INSURE STABILITY. DO NOT LEAVE BREAKER IN TEST POSITION.
- ▽ — INTERFACE FOR REMOTE CONTROL

REV	ECN NO.	DATE	DESCRIPTION
6			REPLACED 3 AMP FUSE WITH 6 AMP FUSE.
5	457, 883, 911		REPLACED CV-7 RELAY WITH CVD RELAY AND REPLACED TDE AGASTAT WITH 5 TO 50 SEC TDE AGASTAT. CHANGED AMPTECTOR FROM LIS TO LSG IN COMPARTMENT 33. MINOR CHANGES.
4	51, 345		GEN REV PER ECN 51. VARIOUS DISCONNECTED UNDERVOLTAGE LOAD-SHEDDING RELAYS PER ECN 345.
3	33, 51, 54		NON-LT REMOVAL CAP PER ECN 33. INCORPORATED SEAMS PER ECN 51. INCORPORATED 2812 SYS. SEE REV PER ECN 54. UPDATE FOR MAJOR CHANGES PER ECN 54.
2	20	10-2-75	ADDED COOLING FANS TO 480V SWGR TRANSFORMERS.
1	12, 20, 16	9-9-74	CHG 480V DISTR SYS FROM DELTA TO GRD WYE AND ADDED GRD FAULT PROT PER ECN 12. REV LOADS PER ECN 20. ADDED 480V MCC 2E5-A PER ECN

DESIGNED: R.H. WRIGHT
DRAWN: P. SPENCER / D.F. NICHOLS
CHECKED: G.R. REED
SUPERVISED: G.R. REED

AUXILIARY BUILDING
UNIT 2

SINGLE LINE DIAGRAM
480V SWITCHGEAR 2EXI-A
2EI-ELVS-24-A

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED | RECOMMENDED | APPROVED

INSPECTED AND APPROVED FOR ISSUE
DESIGN PROJECT MANAGER

KNOXVILLE 2-4-74 | 88 | 1 | 2AW2726-EI-1

45W720-1

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

PRC APERTURE CARD