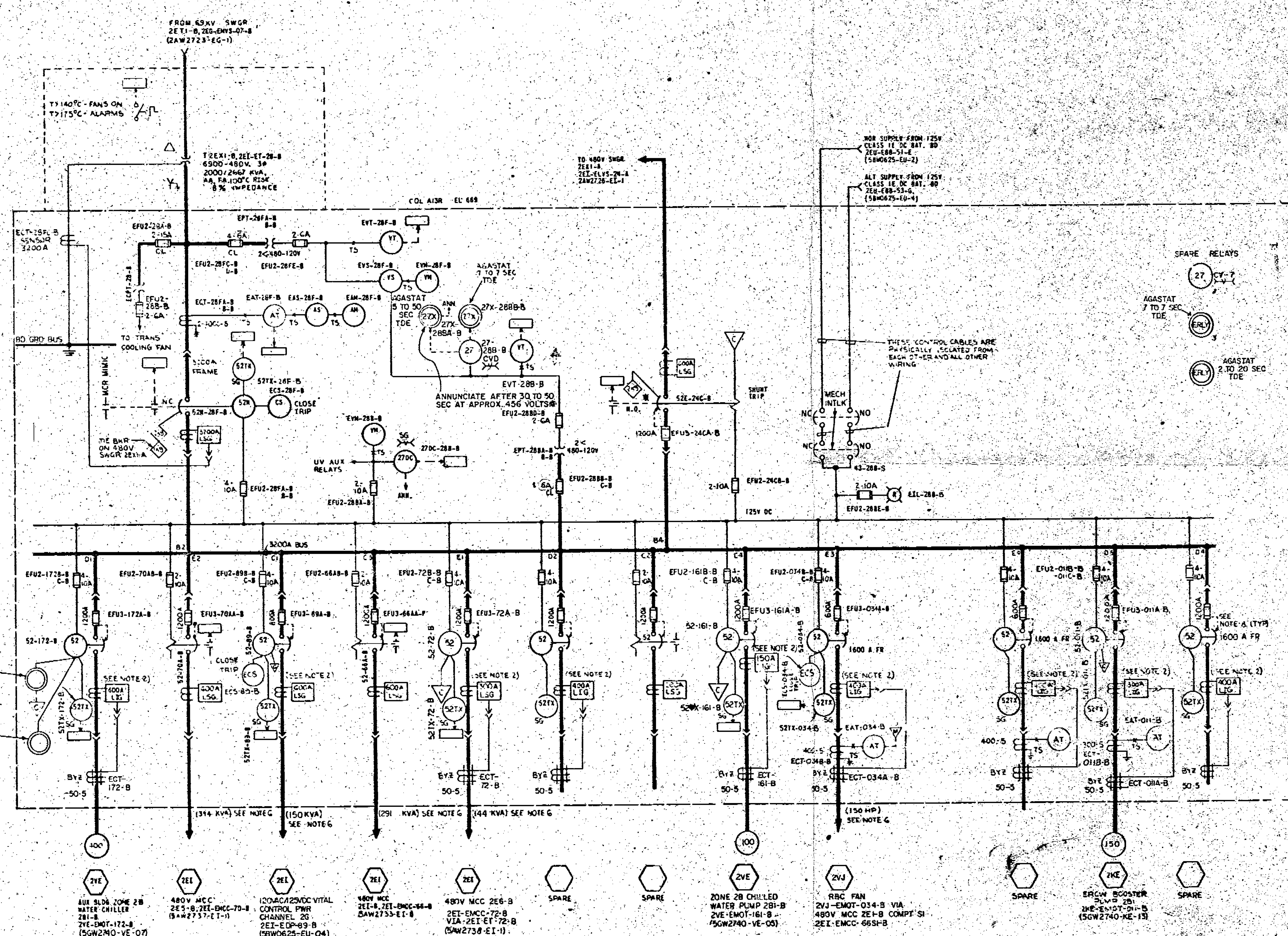
REFERENCE DRAWINGS	
DRAWING NUMBER	TITLE
2?W0720-RP-1	PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE
5GW2740-EI	240V SWGR 2EXI-B SYSTEM SCHEMATIC



NOTES:

1. 480V SWGR PROVIDED ON CONTRACT NO. 74K5-85526.
2. ALL CKT BKRS ARE 3-POLE 800A FR WITH REAR 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.
   1600A 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 ACTUATED WHEN THE 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 NOR, 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-28XX-Y.
6. KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMANDS.
7. SEE DWG 2080714-RT FOR LOADS THAT REQUIRE DIESEL POWER.
8. BLOWN FUSE TRIPS BREAKER.

SYMBOLS:

- XXX / LSIG — 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)
- M — CONNECTION TO REMOTE METER (UNIT CONTROL ROOM)
- C — INTERFACE FOR REMOTE CONTROL
- PRIMARY CONTAINMENT PENETRATION
- K — KEY INTERLOCK
- XXX — UNIT AND SYS DESIGNATION (SEE NOTE 5)
- R — RED INDICATING LIGHT
- ANN. — THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS.
- ✱ — WHEN BREAKER IS IN RACKED OUT (DISCONNECTED) POSITION USE SHIPPING BRACKETS TO INSURE STABILITY, DO NOT LEAVE BREAKER IN TEST POSITION.

REV	ECN NO.	DATE	DESCRIPTION
6	1133	11-12-81	REPLACED 3 AMP FUSE WITH 6 AMP FUSE.
5	467,683,S	5-17-?	REPLACED CV-7 RELAY WITH CVD RLY, & REPLACED .7 TO 7 SEC TDE AGASTAT WITH 5 TO 50 SEC TDE AGASTAT. CHANGED AMPTECTOR FROM LIG TO LSG IN COMPT E1, & MINOR CHANGES.
4	S1,345,245, 220		GEN REVISIONS PER ECN SI-VARIOUS. DISC UNDERVOLTAGE LOAD-SHEDDING RELAYS PER ECN 345. REPLACE TWO ELEC OPERATED MECH INTLK CKT BKR FEEDERS WITH ONE ELEC OPERATED CKT BKR FEEDER PER ECN 245. ADDED ERCW BOOSTER PUMP PER ECN 220.
3	S3, 109,44,S1,134	5-19-76	INCR HT REMOVAL CAP PER ECN 83. REPLACED 600A FR BKRS WITH 1600A FR BKRS ON PEN. PER ECN 109. INCORPORATED SEAMS PER ECN 44 - VARIOUS. INCORPORATED UNID SYS GEN REV PER ECN S-1 - VARIOUS. UPDATE FOR MAJOR CHANGES PER ECN 134.
2	20	10-8-74	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-B PER ECN 16.

INSPECTED AND APPROVED FOR ISSUE — R M Hodges — DESIGN PROJECT MANAGER

DSGN R.M. WRIGHT; DRWN R. SPENCER / E. NICHOLS; CHKD G.H. REED; SUPV E.B. REED; ENGINEER J.H. Barkow

AUXILIARY BUILDING

UNIT 2

SINGLE LINE DIAGRAM
480V SWITCHGEAR 2EXI-B
2EI-ELVS-28-3

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED: R.M. Wright | RECOMMENDED: T. Howard | APPROVED: J. H. Chandler

KNOXVILLE 2-4-74 | 88 | L | 2AW2727-EI-1 | R6

45W720-2

RECORD DRAWING AS CONSTRUCTED

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

PRC APERTURE CARD