

DRAWING NUMBER	REFERENCE DRAWINGS
200770-01	PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE
200770-01	240V SWGR 2EX1-B SYSTEM SCHEMATIC

NOTES:

1. 480V SWGR PROVIDED BY COMPANY NO. 60-5-55524
2. ALL CRT BARS ARE 3-POLE 200A FR WITH REAR MOUNTED CURRENT LIMITING FUSE ON LINE SIDE ON EACH POLE, EXCEPT AS NOTED.  
800A FR BARS HAVE 200,000A RMS SYM INTERRUPTING RATING AT 480V.  
1000A FR BARS HAVE 200,000A RMS SYM INTERRUPTING RATING AT 480V.  
3000A FR BARS HAVE 65,000A RMS SYM INTERRUPTING RATING AT 480V.  
AS NOTED, BARS ARE EQUIPPED WITH AN ELECTRICAL LOCKOUT ATTACHMENT ACTUATED WHEN THE BAR IS TRIPPED AUTOMATICALLY BY THE AMMOTECTOR.
3. RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING OR THE APPROVED EQUAL.

4. THIS SWGR IS SUBJECT TO ALL REQUIREMENTS FOR CLASS 4E ELEC EQPT.
5. EACH DEVICE ASSOCIATED WITH THE SWGR BUS, TRANSFORMER, AND THE SWGR ON THE CRT BARS, IS PART OF THE 480V CLASS 4E AC AUX PWR DISTRIBUTION SYS WITH UNIT AND SYS DESIGNATIONS. THE DEVICE UNIT ID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH 2EX, EXCEPT AS NOTED. ALL OTHER BARS WITH THEIR ASSOCIATED DEVICES ARE PART OF THE SYS WHICH THEY SUPPLY. THE UNIT ID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH THE UNIT AND SYS DESIGNATIONS FROM THE HEADLINE SYMBOL, EXCEPT AS NOTED. THE SWGR PWR NO/UNIT DESIGNATIONS ARE FORMED AS FOLLOWS USING THE PWR NO (XX), AND THE TRAIN DESIGNATION (Y): A OR B : 2EX-ELVS-28XX-Y.
6. KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMANDS.
7. SEE DWG 200770-01 FOR LOADS THAT REQUIRE DIESEL POWER.
8. BLOWN FUSE TRIPS BREAKER.

- SYMBOLS:
- SOLID STATE TRIP DEVICE WITH SENSOR RATING SHOWN
  - L - LONG TIME DELAY (OVERLOAD)
  - S - SHORT TIME DELAY (SELECTIVE TRIP)
  - I - INSTANTANEOUS (FAULT CURRENT)
  - C - CLOSING (FAULT CURRENT)
  - INTERFACE FOR STATUS, ENVIRONMENTAL, AND ALARM MONITORING SYS (SEAMS)
  - CONNECTION TO REMOTE METER (UNIT CONTROL ROOM)
  - INTERFACE FOR REMOTE CONTROL
  - PRIMARY CONTAINMENT PENETRATION
  - KEY INTERLOCK
  - UNIT AND SYS DESIGNATION (SEE NOTE 5)
  - RED INDICATING LIGHT
  - ANN - THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATION OR ALARM SYSTEMS.
  - WHEN BREAKER IS RACKED OUT (DISCONNECTED) POSITION USE SHIPPING BRACKETS TO INSURE STABILITY, DO NOT LEAVE BREAKER IN TEST POSITION.

NO.	DATE	DESCRIPTION
1	12-20-78	REVISED PER ECN 245 - VARIOUS UNDERVOLTAGE LOAD-SHEDDING RELAYS PER ECN 245. REPLACED TWO ELCS OPERATED MEDIUM INTLK CRT BUS FEEDERS WITH ONE-ELCS OPERATED CRT BUS FEEDER PER ECN 245. ADDED ERCW BOOSTER PUMP PER ECN 220.
2	12-20-78	ADDED COOLING FANS TO 480V SWGR TRANSFORMERS.
3	12-20-78	REPLACED 600A FR BKMS WITH 1000A FR BKMS ON PEN PER ECN 109. REPLACED 500A FR BKMS PER ECN 109. VARIOUS MOUNTING BRID SYS PER ECN 109. VARIOUS UPDATE FOR MAJOR CHANGES PER ECN 109.
4	12-20-78	ADDED 480V SWGR TRANSFORMER.
5	12-20-78	ADDED 480V SWGR TRANSFORMER.
6	12-20-78	ADDED 480V SWGR TRANSFORMER.

AUXILIARY BUILDING UNIT 2

SINGLE LINE DIAGRAM 480V SWITCHGEAR 2EX1-B

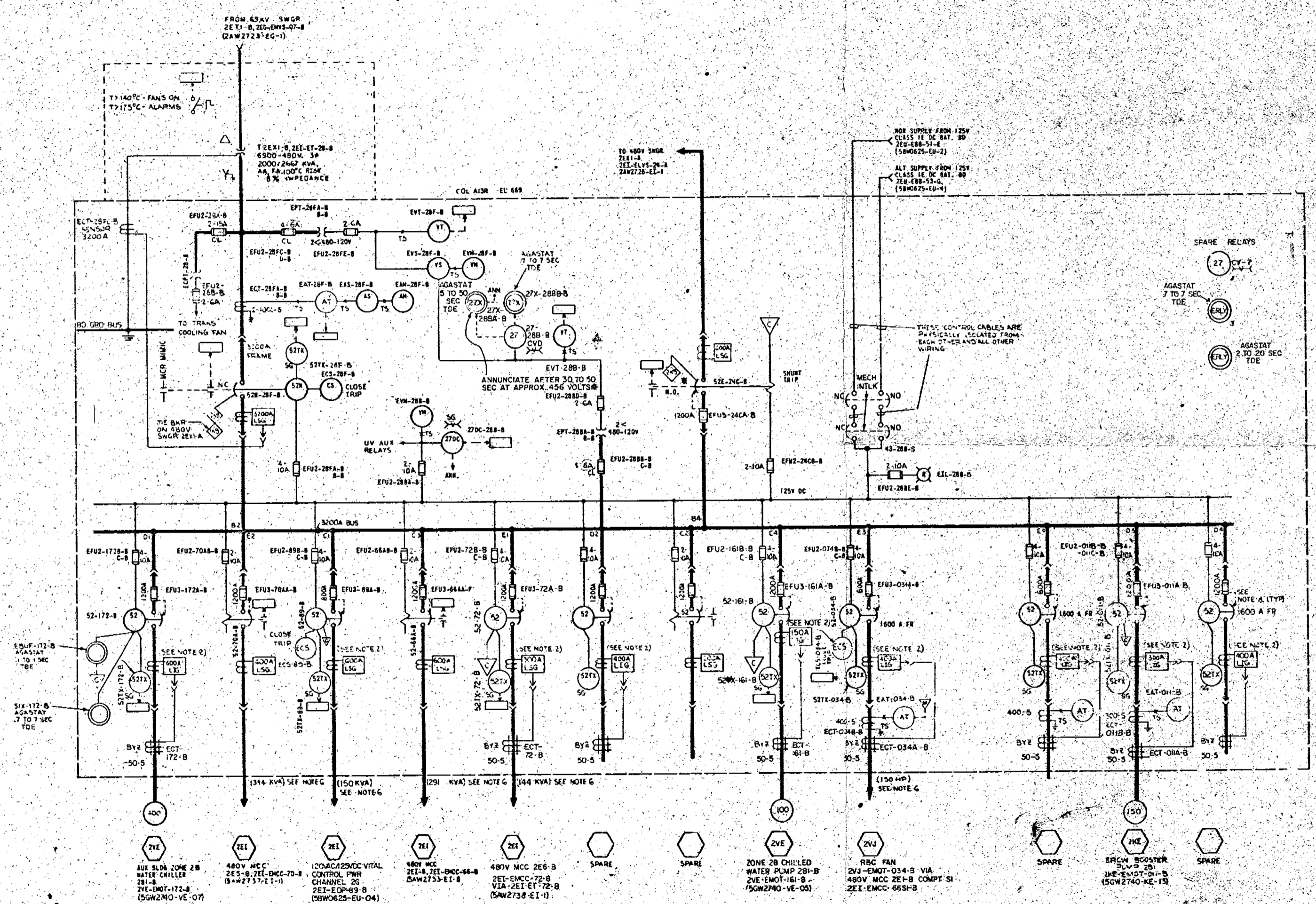
2EX1-ELVS-28-3

BELLEFRONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN

APPROVED: J. H. Chamber

DATE: 2-4-79

45W720-2



REVISED PER ECN 245  
Date 3-25-83  
REGULATORY BOOKET FILE

PRC APERTURE CARD

REPLACED 3 AMP FUSE WITH 5 AMP FUSE  
REPLACED CVD RELAY WITH CVD RELAY, 8 REPLACED 7 TO 7 SEC TOE AGASTAT WITH 5 TO 50 SEC TOE AGASTAT, CHANGED AMMOTECTOR FROM LTO TO LTV IN COMPT. E1, 6 MINOR CHANGES

INSPECTED AND APPROVED FOR ISSUE: J. M. Hodges, DESIGN PROJECT MANAGER

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