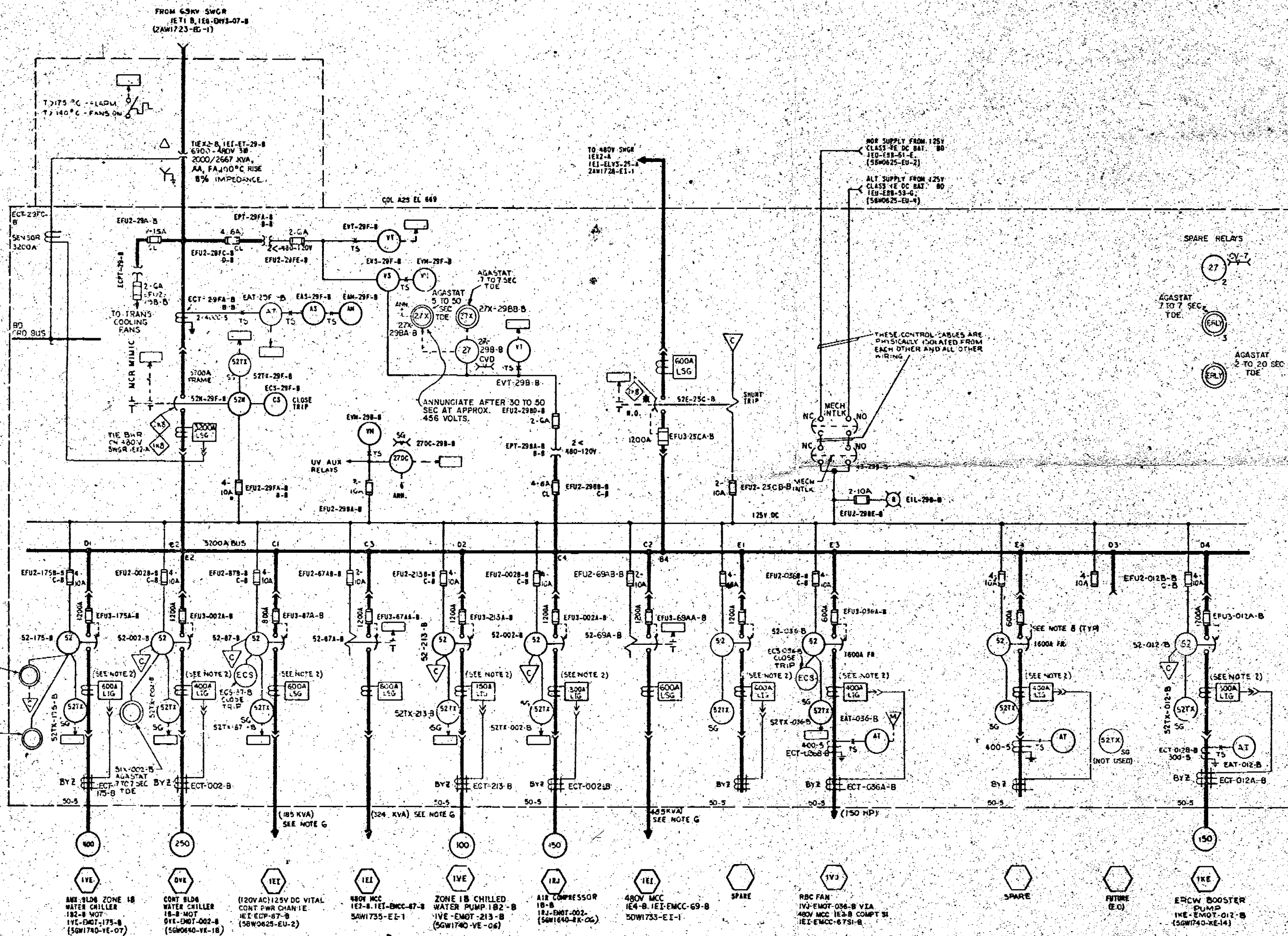


REVISION NUMBER	TITLE
1	PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE
2	480V SWGR 1E2-B SWITCH SCHEMATIC

- NOTES:
- 480V SWGR PROVIDED BY CONTRACT NO. 1645-8552G
  - ALL CBT DEVS ARE 3-POLE, 200A FR WITH REAR MOUNTED CURRENT LIMITING FUSE ON LINE SIDE OF EACH POLE, EXCEPT AS NOTED.  
200A FR DEVS HAVE 200,000 RMS SYM INTERRUPTING RATING AT 480V.  
1000A FR DEVS HAVE 200,000 RMS SYM INTERRUPTING RATING AT 480V.  
2500A FR DEVS HAVE 65,000 RMS SYM INTERRUPTING RATING AT 480V.  
AS NOTED, DEVS ARE EQUIPPED WITH AN ELECTRICAL COUPLER ATTACHMENT ACTUATED WHEN THE DEVS TRIP TO TRIP AUTOMATICALLY BY THE ADAPTECTOR.  
RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING OR TYP. APPROVED EQUAL.



- THIS SWGR IS SUBJECT TO ALL REQUIREMENTS FOR CLASS 1E ELEC. EQPT.
- EACH DEVICE ASSOCIATED WITH THE SWGR BUS, TRANSFORMER, AND THE NORMAL OR THE CBT BARS, IS PART OF THE 480V CLASS 1E AC AUX. PWR. DISTRIBUTION SYS. THE UNIT AND SYS. DESIGNATION, I.E.C., THE DEVICE ORIGIN IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH I.E.C., EXCEPT AS NOTED. ALL OTHER BARS WITH THEIR ASSOCIATED DEVICES ARE PART OF THE SYS. WHICH THEY SUPPLY. THE UNIT 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. UNIT DESIGNATIONS ARE FORMED AS FOLLOWS USING THE PNL NO. 1000 AND THE TRAIL DESIGNATION (Y) & CBT: I.E.C.-ELVS-29X-Y.
- KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMAND.
- SEE DWG 206074-R.T. FOR LOADS THAT REQUIRE DIESEL POWER.
- BLOWN FUSE - TRIPS BREAKER.

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

NO.	DATE	DESCRIPTION
1	11/83	REPLACED 3 AMP FUSE WITH 5 AMP FUSE.
2	1/84	REPLACED CBT RELAY WITH CVD RELAY AND REPLACED 7 TO 7 SEC TOE AGASTAT WITH 5 TO 50 SEC TOE AGASTAT MINOR CHANGES.
3	3/22/85	PER REVISIONS PER 51-VARIOUS DISCONNECTED UNDER VOLTAGE LOAD SHEDDING RELAYS PER ECN 345. REPLACE TWO ELEC OPER MECH NTLK CB FR WITH ONE ELEC OPER CB FOR PER ECN 245. ADD ERCW BOOSTER PUMP PER ECN 220.
4	12/20/21	ADDED COOLING FANS TO 480V SWGR XFORMS PER ECN 20. CHANGED LOAD ON PRESS. NTR. NTR. FEEDER FROM 216 KVA TO 140KVA. PER ECN 18.
5	12/20/21	CHG 480V ELEC. SYS. FROM DELTA TO WYE AND ADDED 540 FAULT PROOT PER ECN 12. CHG 1.0A/5.0 PER ECN 20. 6.0A/5.0 PER ECN 21.

Docket # 80-438  
Control # 8304650536  
Date 3-25-83 of Document  
REGULATORY DOCKET FILE

PRC  
APERTURE  
CARD

AUXILIARY BUILDING  
UNIT 1

SINGLE LINE DIAGRAM  
480V SWITCHGEAR 1E2-B  
1E1-ELVS-29-B

BELLEFONTE NUCLEAR PLANT  
TENNESSEE VALLEY AUTHORITY  
DIVISION OF ENGINEERING DESIGN

INSPECTED AND APPROVED FOR ISSUE  
DESIGN PROJECT MANAGER

APPROVED

NO. 2AW1729-EI-1

45W719-4 FSAR