



REFERENCE DRAWINGS	
DRAWING NUMBER	TITLE
2AW1728-EI-1	PLANT AC AUXILIARY POWER SYSTEM SINGLE LINE
2AW1728-EI-2	480V SWGR 1E22-A SYSTEM SCHEMATIC

- NOTES:
- 480V SWGR PROVIDED ON CONTRACT TO 76X3-35520.
 - ALL CUT BERS ARE 1-POLE/POLE FR WITH REAR MOUNTED CURRENT LIMITING FUSE ON LINE SIDE OF EACH POLE. EXCEPT AS NOTED:
1000A FR BERS HAVE 200,000 RMS SYM INTERRUPTING RATING AT 480V.
1400A FR BERS HAVE 200,000 RMS SYM INTERRUPTING RATING AT 480V.
1200A FR BERS HAVE 85,000 RMS SYM INTERRUPTING RATING AT 480V.
AS NOTED, SWGRS ARE EQUIPPED WITH AN ELECTRICAL LOCKOUT ATTACHMENT, ACTUATED WHEN SWGR IS TRIPPED AUTOMATICALLY BY THE AWP/TECH/OP.
3. RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING OR THE APPROVED EQUAL.
 - THIS SWGR IS SUBJECT TO ALL REQUIREMENTS FOR CLASS 1E ELEC EQUIP.
 - EACH DEVICE ASSOCIATED WITH THE SWGR BUS, TRANSFORMER, AND THE NORMAL OR THE CUT BERS, IS PART OF THE 480V CLASS 1E AC ADD-PWR DISTRIBUTION SYSTEM UNIT AND SYS DESIGNATION, I.E., THE DEVICE UNIT IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH I.E1. EXCEPT AS NOTED. ALL OTHER BERS 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. (1E1), AND THE TRAIL DESIGNATION (Y) OR (B) I.E1-ELVS-25XX-Y.

- KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMAND.
- SEE DWG 200714-R1 FOR LOADS THAT REQUIRE DIESEL PWR.
- 1600A FUSE TRIP BREAKER.

- SYMBOLS:
- SOLID STATE TRIP DEVICE WITH SENSOR RATING SHOWN
 - L-LONG TIME DELAY (OVERLOAD)
 - S-SHORT TIME DELAY (SELECTIVE TRIP)
 - Z-INSTANTANEOUS (FAULT CURRENT)
 - △-ALARM/STATUS
 - 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 OF ONE ANNUNCIATION OR ALARM SYSTEM
 - ⊞ - WHEN BREAKER IS IN TRIPPED OUT (DISCONNECTED) POSITION, I.E., WITH SPRING BRACKETS TO INSURE STABILITY DO NOT LEAVE BREAKER IN TEST POSITION.

REV	DATE	DESCRIPTION	BY	CHKD
1	12.20.21	REVISED PER 31-VARIOUS DISCONNECTED UNDER VOL. LOAD SHEDDING, RELAYS PER ECH 24.5. REPLACE TWO ELEC OPER MECH NTLX CB FR WITH ONE ELEC OPER CB PER ECH 24.5. ADD ERCW BOOSTER PUMP PER ECH 220.		
2	12.20.21	REVISED PER 31-VARIOUS DISCONNECTED UNDER VOL. LOAD SHEDDING, RELAYS PER ECH 24.5. REPLACE TWO ELEC OPER MECH NTLX CB FR WITH ONE ELEC OPER CB PER ECH 24.5. ADD ERCW BOOSTER PUMP PER ECH 220.		
3	12.20.21	REVISED PER 31-VARIOUS DISCONNECTED UNDER VOL. LOAD SHEDDING, RELAYS PER ECH 24.5. REPLACE TWO ELEC OPER MECH NTLX CB FR WITH ONE ELEC OPER CB PER ECH 24.5. ADD ERCW BOOSTER PUMP PER ECH 220.		
4	12.20.21	REVISED PER 31-VARIOUS DISCONNECTED UNDER VOL. LOAD SHEDDING, RELAYS PER ECH 24.5. REPLACE TWO ELEC OPER MECH NTLX CB FR WITH ONE ELEC OPER CB PER ECH 24.5. ADD ERCW BOOSTER PUMP PER ECH 220.		

SECRET # 438
Control # 830 60 50 536
Date 3-25-83
REGULATORY DOCKET FILE

**P.R.C
APERTURE
CARD**

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

AUXILIARY BUILDING UNIT 1		
SINGLE LINE DIAGRAM 480V SWITCHGEAR 1E2-A 1E1-ELVS-25-A		
BELLEFONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN		
SUBMITTED <i>H.M. Hodges</i>	RECOMMENDED <i>J.S. Hodges</i>	APPROVED <i>F.W. Chandler</i>
KNOXVILLE 2-7-88	2AW1728-EI-1	86
45W719-3	FSAR	