2AWI729-E1-1 | 2 | 88

REFERENCE DRAWINGS	
DRAWING NUMBER	TITLE
2CB0729-RE-1	PLANT AC AUXILIARY POWER SYSTEM 3-WIRE LINE
2AWI790-EE-5	480V SWGR 1E12-B SYSTEM SCHEMATIC

NOTES:

1. 480V SWGR PROVIDED ON CONTRACT NO TVA-65525.
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.
   2000A 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 TO OPEN AUTOMATICALLY BY THE INSPECTOR.
3. RELAYS SHALL BE THE TYPES SHOWN ON THIS DRAWING OR EVA 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 NORMAL OR TIE CKT BKRS, IS PART OF THE UNIT CLASS 1E AC AUX PWR DISTRIBUTION SYS WITH UNIT AND SYS DESIGNATION, 1EI. THE DEVICE UNID IS FORMED BY PREFIXING THE DESIGNATIONS SHOWN ON THE DWG WITH 1EI, 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. 000, AND THE TRAIN DESIGNATION (Y) & CRD: 1EI-ELVS-29XX-Y.
6. KVA LOADS SHOWN ARE ESTIMATED MAXIMUM DEMAND.
7. SEE DWG 2CB0729-RT FOR LOADS THAT REQUIRED DIESEL POWER.
8. BLOWN FUSE TRIPS BREAKER.

SYMBOLS:

- ✱ — WHEN BREAKER IS IN RACKED OUT (DISCONNECTED) POSITION USE SHIPPING BRACKETS TO INSURE STABILITY. DO NOT LEAVE BREAKER IN TEST POSITION.
- (K) — KEY INTERLOCK
- 111 L S/G — 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)
- (V) — CONNECTION TO REMOTE MECH UNIT CONTROL ROOM
- (V) — INTERFACE FOR REMOTE CONTROL
- □ — PRIMARY CONTAINMENT PENETRATION
- (111) — UNIT AND SYS DESIGNATION (SEE NOTE 5)
- (X) — RED INDICATING LIGHT

ANN. — THIS FUNCTION TO BE MONITORED BY ONE OR MORE ANNUNCIATOR OR ALARM SYSTEMS.

NO.	DATE	BY	CHKD	APPD
6	1133			
	REPLACED 3 AMP FUSE WITH 6 AMP FUSE			
5	1457,78			
	REPLACED CV-7 RELAY WITH CVD RELAY AND REPLACED 7 TO 7 SEC TDE AGASTAT WITH 5 TO 50 SEC TDE AGASTAT. MINOR CHANGES.			
4	11,21,0245345			
	GEN REVISIONS PER SI-VARIOUS. DISCONNECTED UNDER VOLTAGE LOAD SHEDDING RELAYS PER ECN 945. REPLACE TWO ELEC OPER MECH INTLK CB FLR WITH ONE ELEC OPER CB FOR PER ECN 245. ADD ERCW BOOSTER PUMP PER ECN 220.			
3	134,44,5,109			
	UPDATE FOR MAJOR CHANGES PER ECN 134. ONLY AT TIME OF PER ECN 61. INCORPORATED SEAMS. PER ECN. 94-VARIOUS. INCORPORATED UNID STS. PER REV PER ECN 5-1-VARIOUS. REPLACED 600A FR 52B WITH 1600A FR 52B ON PER PER ECN 109.			
2	1820			
	ADDED COOLING FANS TO 480V SWGR XFMRS PER ECN 20. CHANGED LOAD ON PRESS. HTR. NEMR FEEDER FROM 216 KVA TO 144 KVA. PER ECN 18.			
1	12,20,21			
	CHG 480V DISTR SYS FROM DELTA TO GRD WYE AND ADDED GRD FAULT PROT PER ECN 12, REV LOADS PER ECN 20, ADDED PRESS HTR XFMR PER ECN 21.			

NO./ NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	LEAD	PROJ	SYSTEMS	APPR
DSGN	R.H. WRIGHT									
DRWN	R. SCHNEIDER/D. NICHOLS									
CHKD	G.R. REED									
SUPV	C.A. REED									

PROJ: | APPROVED (INITIALED): L. Boehmer

AUXILIARY BUILDING
UNIT 1

SINGLE LINE DIAGRAM
480V SWITCHGEAR 1EX2-B
1EI-ELVS-29-B

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED
D.A. Nuttall	T.S. Worden	S.A. Vassallo

KNOXVILLE | 2-4-79 | 88 | 1 | 2AWI729-E1-1 | R6

45W719-4 FSAR

RECORD DRAWING AS CONSTRUCTED

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

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

PRC APERTURE CARD

PRINTS NEED 2 OF THIS PROJ

	DWG	SYS
RL		
CK		
CE		
RR		
CD		
ED		
RD		
SW		
DL		
PD		