2GW0720-RP-01

PLANT A-C AUXILIARY POWER SYSTEM SINGLE LINE

GENERAL

REFERENCE DRAWINGS

DWG. NO.	TITLE
2W200	PROJECT LAYOUT
2W6700-[illegible]	EQUIPMENT ONE LINE
2W6700-[illegible]	MAIN ENGINE LINE DIAG. WITH 161KV
2W6700-[illegible]	MAIN ENGINE LINE DIAG. (UTILITY SWITCHYARD)
2W6700-[illegible]	MAIN ENGINE LINE DIAG. SH 2 EN 1 & 500KV SWITCHYARD
2W6700-[illegible]	MAIN ENGINE LINE DIAG. SH 3 EN 1 & 500KV SWITCHYARD

SYMBOLS:

- △ - - - - BREAKERS ARE KEY INTERLOCKED WITH NORMAL BOARD FEEDS
- ▽ - - - - BREAKERS NORMALLY IN THE TRIPPED STATE WITH SPRINGS DISCHARGED & CHARGING MOTORS SWITCHED OFF
- ‡ - - - - [illegible] 5 kV 60A
- † - - - - 6300 - 480V 4/5, 1000 kVA AA/FA 100°C
- ‖ - - - - 4160 - 480V, 1000 kVA AA/FA 100°C
- # - - - - 4160 - 480V, 1000 kVA AA/FA 100°C
- ○ - - - - NON-ESF EQUIPMENT INSIDE A CATEGORY I STRUCTURE
- ⊠ - - - - LOAD TAP CHANGER
- ‡‡ - - - - 480V ISOLATION XFMR, 225 kVA AA

ENGINEERED SAFETY AC AUXILIARY POWER SYSTEM

DIESEL 1A-A

DIESEL 1B-B

DIESEL 2B-B

DIESEL 2A-A

6900V, 2500 kW AT 0.8 PF (TYPICAL)

TO SECURITY BACKUP POWER BLDG VCC SKDL 9YWG53-ED-1, 2

6900-480V 750/1000 KVA AA/FA

2SW0750-ED-1 (ED-ELVS-3)(5X1)

BUS A

BUS B

THIS DRAWING SUPERSEDES 15W500-1 R0

PRC APERTURE CARD
NUCLEAR SAFETY-RELATED
Docket # 50-438
Control # 8304050532
Date 3-25-83 of Document
REGULATORY DOCKET FILE

NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	TECH	SUPR/SECT	ENGR
1	1	12 27 82								
2	2	07/29/83								

ECN 1 ADD LOAD TAP CHANGER TO UNIT STA SERVICE XFMR'S. ECN 1 & 2 ADD 480V MCC 1A1D2-2 CHANGE FDR'S TO LTG. BD., SWTD DIST CAB. AND MCC'S. ECN 51 ADD 480V ISOLATION XFMR'S ON PER ATTY'S.

ECN 1 & 2 REMOVE SHWR 1A1D3-1 FEEDERS FROM 1E1-A, 1E2-A AND 2E1-B. ADD INTERCONNECTION BETWEEN 1E1-A AND 2E2-A. ADD INTERCONNECTION BETWEEN 1E1-B AND 2E2-B. DELETE 480V SHOR 1E1-A, 1E1-B, 2E1-A AND 2E1-B.

ECN 1 CHANGE SS UNIT NUMBER FOR UNITS 1 & 2 TO 1 FOR ECN 50-100 & ECN 51. ECN 2 ADD ECN 1 CHANGE TO CREATE NEW POWER SYS. ANALYSIS ISOLATE CONTAINMENT TO CREATE NEW GROUNDING SCHEME & SPLIT LOADS. ADD CKT. BKRS. AND SWBD DIST CABS TO HAVE SHOR ON ISOLATED BUS. MCC 1E1-A, 1E1-B, 2E1-A, 2E1-B. ECN 17 CHANGE VOLTAGE RATINGS TO ACTUATED VALUES FROM 6.9KV TO 7.2KV. ECN 20 CHANGE SIZE OF FOUR 1000 CENTER HOME BREAKERS FROM 2000A TO 1600A. MCCS AND TRANSFORMERS FOR PRESSURIZER HEATERS AND DIESEL SHOR 1B1D AND 2B2D. CHANGE NAME OF SHOR 1A1D3 & 2A1D3 TO 1A1D2 & 2A1D2. ECN 47 CHANGE UNLESS NEAR FOR BKRS NUMBERS. UPDATED RATINGS OF 6.9KV SHOR & 4.16KV SHOR BKRS TO SHOR 1A1D1 & 2A1D1 FOR SEPARATE FEEDS TO SWTD DIST CABS. ADD BKRS TO SHOR 1A1D1, 1A1D3, 2A1D1 & 2A1D3 FOR XFMR YD 480V DIST CABS 1 & 2. ADD INCOMING SUPPLY BKRS TO MCC 1E3-A, 1E1-B, 2E2-A & 2E1-B

DSGN	JH BOEHMS	INSP	RS
DRWN	CWI		
CHKD	RW SLATER	ENGINEER	JH Boehms
SUPV	JH Boehms		

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED

FSAR | KNOXVILLE | 12-19-72 | 38 | 2GW0720-RP-01 | R8

15W500-1

RECORD DRAWING AS CONSTRUCTED

THIS DRAWING IS UNDER CONFIGURATION CONTROL