

GENERAL NOTES:

1. THE SYSTEM SCHEMATIC REFLECTS THE IMPLEMENTATION OF THE SYSTEM CONTROL LOGIC AND SSCS INTERFACE DIAGRAM AND APPLICABLE CRITERIA REQUIREMENTS. THE CONTROL LOGIC AND SSCS INTERFACE DIAGRAM AND ITS REFERENCED DOCUMENTATION FOR THE SOLID STATE CONTROL SYSTEM MUST BE USED IN CONJUNCTION WITH THE SYSTEM SCHEMATIC IN EVALUATING CIRCUIT OPERATION. PORTIONS OF THE SYSTEM SCHEMATIC ARE SHOWN OUT-OF-FUNCTION. THESE OUT-OF-FUNCTION PORTIONS ARE SHOWN FOR INFORMATION, WITH REFERENCES PROVIDED TO THE DOCUMENT WHICH CONTROLS THE EQUIPMENT CONFIGURATION.
2. INTERFACE NUMBERS WERE ASSIGNED TO EACH POINT OF INTERFACE WITH THE SSCS. THESE NUMBERS APPEAR ON THE CONTROL LOGIC AND SSCS INTERFACE DIAGRAM AND THIS SCHEMATIC. IT'S PURPOSE IS TO FACILITATE MOVEMENT BETWEEN THESE DOCUMENTS.
3. SSCS CABLE SHIELDS ARE TERMINATED ON THE SHIELD GROUND BUS LOCATED ADJACENT TO THE TERMINAL BLOCKS. TERMINATION POINTS ON THE GROUND BUS ARE NOT DEDICATED TO A SPECIFIC CABLE.
4. ALL UNID AND CABLE DESIGNATIONS ARE PRECEDED BY IEG, UNLESS OTHERWISE SHOWN.
5. FOR DESCRIPTION OF BREAKER OPERATION AND AUXILIARY SWITCH TRUTH TABLE SEE 56W0749-RP-01.
6. 52H CONTACTS ARE SHOWN IN THEIR OPEN POSITION AND THEIR DESIGNATION IS SUFFIXED WITH -IN OR -OUT TO INDICATE THEY ARE CLOSED WHEN THE BREAKER IS RACKED IN OR RACKED OUT RESPECTIVELY.
7. 6.9KV CLASS IE SWITCHGEAR IETI-A AND IETI-B INTERFACE TERMINATION POINTS ARE IDENTIFIED BY THE MANUFACTURER'S TERMINAL POINT NUMBER PRECEDED BY TVA'S PANEL DESIGNATION IN PARENTHESIS.

- S1 8. SEE SYSTEM EG CABLE PROGRAM FOR COMPLETE CABLE INFORMATION INCLUDING SPARE CONDUCTORS. ONLY THOSE CONDUCTORS USED OR TERMINATED ARE SHOWN.
- S1 9. JUMPER DESIGNATIONS ARE FORMED BY PREFIXING THE J NUMBER SHOWN ON THE SCHEMATIC WITH THE UNID OF THE ENCLOSURE AND THE SYSTEM DESIGNATION EG. EXAMPLE IEG-ENV5-06-A-EGJ1.
- S1 10. SPECIFIC ENTRANCES ARE INDICATED FOR CABLES ENTERING EQUIPMENT THAT HAS MORE THAN ONE ENTRANCE PER DIVISION OF SEPARATION. EXAMPLE: ENT A
- S1 11. ALL B&W DRAWING NUMBERS SHOWN WILL BE SUPERSEDED BY AS-BUILT DRAWINGS OF DIFFERENT NUMBERS. FOR A CROSS-REFERENCE BETWEEN THESE DRAWINGS SEE THE BELLEFONTE NUCLEAR PLANT MONTHLY STATUS REPORT OF MANUFACTURERS DRAWINGS.
- S1 12. NOR AND ALTERNATE SUPPLY BREAKERS ARE INTERLOCKED TO PROHIBIT SIMULTANEOUS CLOSING.
- S1 13. BOP ISOLATOR CABLE SHIELDS THAT ARE SHOWN CONNECTED ARE TERMINATED ON THE SIGNAL GROUND BUS (SG) LOCATED ADJACENT TO THE TERMINAL BLOCKS. TERMINATION POINTS ON THE GROUND BUS ARE NOT DEDICATED TO A SPECIFIC CABLE. BOP ISOLATOR DIGITAL OUTPUTS ARE SOLID STATE SWITCHING (SS SW) DEVICES.

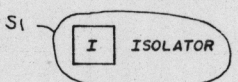
REFERENCE DRAWINGS:

- PLANT AC AUX PWR SYS SINGLE LINE ----- 26W0720-RP
- SINGLE LINE DIAGRAM 6.9KV CLASS IE SWGR IETI-A ----- 24W1722-EG
- SINGLE LINE DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 24W1723-EG
- MAIN SINGLE LINE GENERATOR 1 AND 500KV SWYO ----- 24W0504-IE
- MAIN SINGLE LINE 161KV SWYO ----- 24W0502-XB
- TYPICAL SCHEMATIC MED VOLTAGE SWGR CKT ARRGT ----- 56W0749-RP
- CONTROL LOGIC AND SSCS INTERFACE 6.9KV CLASS IE ----- 24W0900-EG
- AC AUX POWER DISTRIBUTION SYSTEM ----- 24W0900-EG
- WIRING DIAGRAMS OXO-ER1B-3 250V DC SUP LTS & RSS ----- 9CW0723-EO
- XFMR 1A & 2A NET ----- 3CW0724-XO
- WIRING DIAGRAMS OXO-ER1B-4 250V DC SUP LTS & GEN ----- 3CW0724-XO
- 1 & 2 NET ----- 3CW0724-XO
- WIRING DIAGRAMS OXO-ER1B-5 250V DC SUP LTS & RSS ----- 9CW0725-XO
- XFMR 1B & 2B NET ----- 9CW0725-XO
- STATUS, ENVIRONMENTAL AND ALARM MONITORING SYSTEM ----- 56W0640-IS
- SYSTEM SCHEMATIC 13.8KV NORMAL AC AUX POWER ----- 56W1740-EA
- DISTRIBUTION SYS ----- 56W1740-RT
- SYSTEM SCHEMATIC STANDBY DSL GEN AND CONTROLS SYS ----- 56W0640-IL
- SOLID STATE CONTROL SYSTEM (SSCS) ----- 56W1651-JT
- POWER DISTRIBUTION RELAY CABINET ----- 56W1651-JT
- POWER DISTRIBUTION RELAY CABINET ----- 56W1651-JT
- SINGLE LINE 125V CLASS IE DC POWER ----- 56W0625-EU
- DISTRIBUTION SYS ----- 56W0625-EU
- 24KV MN GEN BUS, 13.8KV @ 6.9KV USS & RSS ----- 26W2292-FP
- BUSES - PLAN ----- 56W1740-7C
- MN TURB INSTN AND CONTROL SYSTEM ----- 56W1740-7C
- SCHEMATIC DIAGRAM ANNUNCIATOR AND SEQUENTIAL ----- 56W1640-ZA
- EVENTS RECORDING SYSTEM ----- 56W1640-ZA

- ITE (GOULD) IMPERIAL CORP. TVA CONTRACT 75K5-85583
- ITE (GOULD) REFERENCE DRAWINGS:
- ELEMENTARY AND SCHEMATIC DIAGRAMS, 6.9 KV CLASS IE SWGR IETI-A ----- 808564, 808565, 808566, 808567
  - ELEMENTARY AND SCHEMATIC DIAGRAMS, 6.9 KV CLASS IE SWGR IETI-B ----- 808568, 808569, 808570, 808571
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-A ----- 33-51014-D61
  - CONNECTION DIAGRAMS 6.9KV CLASS IE SWGR IETI-A ----- 33-51014-D66 & 33-51014-D67
  - CONNECTION DIAGRAMS 6.9KV CLASS IE SWGR IETI-A ----- 33-51014-D69 THRU 33-51014-D73
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-D74
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-D262
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-D267
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-D269 THRU 33-51014-D273
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-E274
  - CONNECTION DIAGRAM 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-D363
  - INTERCONNECTION DIAGRAMS, 6.9KV CLASS IE SWGR IETI-A ----- 33-51014-D166 & 33-51014-D167
  - INTERCONNECTION DIAGRAMS, 6.9KV CLASS IE SWGR IETI-B ----- 33-51014-D366 & 33-51014-D367
  - B&W NSSS, TVA CONTRACT NO. 71C62-54114-2 MAIN CONTROL ROOM PANEL WIRING DIAGRAMS-02-23785NF & 02-23786NF
  - S1 ELECTROMAX INSTRUMENTS INC, TVA CONTRACT 79KJ2-822988 FOR BOP ISOLATORS

SYMBOLS:

- XXXXX SEALS (MONITORING SYSTEM POINT NO. XXXXX)
- XXXX UNIT ANNUNCIATOR (MONITORING SYSTEM POINT NO. XXXX)
- XXXX OPERATIONS RECORDER (MONITORING SYSTEM POINT NO. XXXX)
- OP DISCONNECTING CONTACT CLOSED IN FULLY CONNECTED POSITION
- TP DISCONNECTING CONTACT CLOSED IN THE TEST POSITION
- TEST BLOCK
- 52H - CELL-MOUNTED CIRCUIT BREAKER AUXILIARY SWITCH ACTUATED BY THE POSITION OF THE REMOVABLE CIRCUIT BREAKER (SEE NOTES 6 AND 5)
- 52S - CELL-MOUNTED CIRCUIT BREAKER AUXILIARY SWITCH ACTUATED BY THE OPERATION OF THE CIRCUIT BREAKER MAIN CONTACTS (SEE NOTE 5)



APERTURE CARD

Date of Document at REGULATORY DOCKET FILE

Docket # 30-438 Control # 8202090064 Date 3/20/02 of Document REGULATORY DOCKET FILE

COMPANION DRAWINGS: 56W1740-EG-02 THRU 13, 56W1740-EG-01(8)02

PRINTS REQUIRED

ME	
EE	
CE	
AD	
CD	
ED	
MD	
SD	
WD	
PD	
QA	

2	SI	1-31-77	Setting up control - 100% (100%)	ack							
MINOR CHANGES.											
1	SI	7-17-77	Setting up control - 100% (100%)	ack							
REVISIONS PER SI											
REV NO.	ECN NO.	DATE	DESIGN	DRWN	CHKD	SUPV	ENGR	INSP	INSP	RECN	APPR
DESIGN	J.C. HILL										
DRWN	J.W. JACKSON										
CHKD	J.W. JACKSON										
SUPV	S.A. MASSIE										
GENERAL UNIT 1											
SYSTEM SCHEMATIC 6.9KV CLASS IE AC AUX POWER DISTRIBUTION SYSTEM											
BELLEFONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN											
SUBMITTED				RECOMMENDED				APPROVED			
W.L. Aldridge				J.L. Aldridge				R.M. Aldridge			
KNOXVILLE 11-29-77 88 E 56W1740-EG-01 R2											
RECORD DRAWING AS CONSTRUCTED											