

A

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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. ITS 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 ZEB UNLESS OTHERWISE SHOWN.
5. 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.
6. 6.9KV SWITCHGEAR 2TA, 2TB, AND 2TC INTERFACE TERMINATION POINTS ARE IDENTIFIED BY THE MANUFACTURER'S TERMINAL POINT NUMBER PRECEDED BY TVA'S PANEL DESIGNATION IN PARENTHESES.
7. SEE SYSTEM EB CABLE PROGRAM FOR COMPLETE CABLE INFORMATION INCLUDING SPARE CONDUCTORS. ONLY THOSE CONDUCTORS USED OR TERMINATED ARE SHOWN.
8. FOR DESCRIPTION OF BREAKER OPERATION AND AUXILIARY SWITCH TRUTH TABLE SEE 5GW0749-RP-01.
9. JUMPER DESIGNATIONS ARE FORMED BY PREFIXING THE J NUMBER SHOWN ON THE SCHEMATIC WITH THE UNID OF THE ENCLOSURE AND THE SYSTEM DESIGNATION EB. EXAMPLE: ZEB-FNYS-01-EBJ1.
10. SPECIFIC ENTRANCES ARE INDICATED FOR CABLES ENTERING EQUIPMENT THAT HAS MORE THAN ONE ENTRANCE PER DIVISION OF SEPARATION. (ENT A)
11. CABLES BETWEEN THE MAIN CONTROL ROOM AND SSCS, AND BETWEEN THE 125V DC DISTRIBUTION PANELS AND SWITCHGEAR HAVE BEEN ROUTED IN SUCH A MANNER AS TO ENSURE PHYSICAL SEPARATION BETWEEN NORMAL AND ALTERNATE POWER AND/OR CONTROL CIRCUITS.

REFERENCE DRAWINGS:

- PLANT AC AUX PWR SYS SINGLE LINE - - - - - 2GW0720-RP  
 SINGLE LINE DIAGRAM 6.9KV SWITCHGEAR 2TA - - - - - 2TR2722-EB  
 SINGLE LINE DIAGRAM 6.9KV SWITCHGEAR 2TB - - - - - 2TR2723-EB  
 SINGLE LINE DIAGRAM 6.9KV SWITCHGEAR 2TC - - - - - 2TR2724-EB  
 MAIN SINGLE LINE GENERATOR 2 AND 300KV SWITCHYARD - - - - - 2MW0504-XE  
 MAIN SINGLE LINE 161KV SWITCHYARD - - - - - 2MW0502-XB  
 TYPICAL SCHEMATICS WED VOLTAGE SWGR CNT ARRRT - - - - - 5GW0749-RP  
 CONTROL LOGIC AND SSCS INTERFACE 6.9KV NORMAL AC AUX POWER DISTRIBUTION SYSTEM - - - - - 2TW0900-EB  
 WIRING DIAGRAM 2TN-ENRB-29 - - - - - 9CW2649-TM  
 WIRING DIAGRAMS OXO-ERIB-4 250V DC SUP LTS B GEN 1 & 2 MET - - - - - 9CW0724-XO  
 WIRING DIAGRAMS OXR-EMRB-1 RESERVE 5S XFMRs 1A & 2A - - - - - 9CW0621-XR  
 WIRING DIAGRAMS OXO-ERIB-3 250V DC SUP LTS B RSS XFMR 1A & 2A MET - - - - - 9CW0723-XO  
 WIRING DIAGRAMS OXO-ERIB-5 250V DC SUP LTS B RSS XFMR 1B & 2B MET - - - - - 9CW0725-XO  
 WIRING DIAGRAMS OXR-EMRB-6 RESERVE 5S XFMRs 1B & 2B - - - - - 9CW0626-XR  
 SYSTEM SCHEMATIC 13.8KV NORMAL AC AUX POWER DISTRIBUTION SYSTEM - - - - - 5GW2740-EA  
 SYSTEM SCHEMATIC 6.9KV CLASS 1E AC AUX POWER DISTRIBUTION SYSTEM - - - - - 5GW2740-EG  
 SINGLE LINE 125V CLASS 1E DC POWER DISTRIBUTION SYSTEM - - - - - 5BW0625-EU  
 24KV MN GEN BUS, 13.8KV B & 9KV USS & RSS BUSES - PLAN - - - - - 2BW2292-RP  
 SCHEMATIC DIAGRAM ANNUNCIATOR AND SEQUENTIAL EVENTS RECORDING SYSTEM - - - - - 5GW2640-ZA  
 SCHEMATIC DIAGRAM STATUS, ENVIRONMENTAL AND ALARM MONITORING SYSTEM - - - - - 5GW0640-ES  
 SCHEMATIC DIAGRAM MAIN, USS & RSS TRANSFORMERS - - - - - 5GW0640-XM  
 SCHEMATIC DIAGRAM MAIN TURBINE INSTRUMENT & CONTROL SYSTEM - - - - - 5GW2640-TC
- ITE (GOULD) IMPERIAL CORP. TVA CONTRACT 75K5-85581  
 ITE (GOULD) REFERENCE DRAWINGS:  
 ELEMENTARY DIAGRAM, 6.9KV SWGR 2TA - - - - - 808598  
 SCHEMATIC DIAGRAM, 6.9KV SWGR 2TA - - - - - 808599  
 ELEMENTARY DIAGRAM, 6.9KV SWGR 2TB - - - - - 808601  
 SCHEMATIC DIAGRAM, 6.9KV SWGR 2TB - - - - - 808602  
 ELEMENTARY DIAGRAM, 6.9KV SWGR 2TC - - - - - 808604  
 SCHEMATIC DIAGRAM, 6.9KV SWGR 2TC - - - - - 808605  
 CONNECTION DIAGRAMS, 6.9KV SWGR 2TA - - - - - 33-51014-D2262  
 THRU 33-51014-D2265  
 CONNECTION DIAGRAMS, 6.9KV SWGR 2TB - - - - - 33-51014-D2461  
 THRU 33-51014-D2464  
 CONNECTION DIAGRAM, 6.9KV SWGR 2TB - - - - - 33-51014-D2474  
 CONNECTION DIAGRAMS, 6.9KV SWGR 2TC - - - - - 33-51014-D2681  
 AND 33-51014-D2682  
 AND 33-51014-D2687  
 CONNECTION DIAGRAMS, 6.9KV SWGR 2TC - - - - - 33-51014-D2688  
 AND 33-51014-D2689  
 INTERCONNECTION DIAGRAMS, 6.9KV SWGR 2TA - - - - - 33-51014-D2367  
 AND 33-51014-D2367  
 INTERCONNECTION DIAGRAMS, 6.9KV SWGR 2TB - - - - - 33-51014-D2566  
 AND 33-51014-D2567  
 INTERCONNECTION DIAGRAM, 6.9KV SWGR 2TC - - - - - 33-51014-D2766

SYMBOLS:

- XXXX  
AN SEAMS  
(MONITORING SYSTEM POINT NO XXXX)
- XXXX  
AN UNIT ANNUNCIATOR  
(MONITORING SYSTEM POINT NO XXXX)
- XXXX  
OR 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 5 & 8)
- 52C - - - - - CELL-MOUNTED CIRCUIT BREAKER AUXILIARY SWITCH, ACTUATED BY THE OPERATION OF THE CIRCUIT BREAKER MAIN CONTACTS (SEE NOTE 8)

PRC  
APERTURE  
CARD

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 REGULATORY DOCKET FILE

COMPANION DRAWINGS,  
 5GW2740-EB-02 THRU -09

PRINTS REC'D BY UNIT

NO.	BY	DATE	TIME

REV NO.	ECH NO.	DATE	DESIGN	CHKD	APPD	ENGR	INSP	INSPECTION	APPR
DESIGN						INSP			
DRAWN						ENGINEER			
CHECKED									
SUPERVISED									
GENERAL UNIT 2									
SYSTEM SCHEMATIC 6.9KV NORMAL AC AUX POWER DISTRIBUTION SYSTEM									
BELLEFONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN									
SUBMITTED		RECOMMENDED		APPROVED					
KNOXVILLE		2-4-79		88 E 5GW2740-EB-01		RO			

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