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 1EA UNLESS OTHERWISE SHOWN.

5. 13.8KV SWITCHGEAR 1RA AND 1RB IS SUBJECT TO ALL APPLICABLE QUALIFICATION REQUIREMENTS FOR CLASS 1E ELECTRICAL EQUIPMENT.

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. 13.8KV SWITCHGEAR 1RA AND 1RB INTERFACE TERMINATION POINTS ARE IDENTIFIED BY THE MANUFACTURER'S TERMINAL POINT NUMBER PRECEDED BY TVA'S PANEL DESIGNATION IN PARENTHESIS.

8. SPECIFIC ENTRANCES ARE INDICATED FOR CABLES ENTERING EQUIPMENT THAT HAS MORE THAN ONE ENTRANCE PER DIVISION OF SEPARATION.

   EXAMPLE: ENT A

9. SEE SYSTEM EA CABLE PROGRAM FOR COMPLETE CABLE INFORMATION INCLUDING SPARE CONDUCTORS. ONLY THOSE CONDUCTORS USED OR TERMINATED ARE SHOWN.

10. ONLY ONE OF EIGHT 52S CONTACTS ARE SHOWN. ALL ARE USED BY THE REACTOR COOLANT SYSTEM SEE 5GW0749-RP-03.

11. FOR DESCRIPTION OF BREAKER OPERATION AND AUXILIARY SWITCH TRUTH TABLE SEE 5GW0749-RP-01.

12. JUMPER DESIGNATIONS ARE FORMED BY PREFIXING THE J NUMBER SHOWN ON THE SCHEMATIC WITH THE UNID OF THE ENCLOSURE AND SYSTEM DESIGNATION EA. EXAMPLE: 1EA-EMVS-01-EAJ1.

13. NORMAL AND ALTERNATE SUPPLY BREAKERS ARE INTERLOCKED TO PROHIBIT SIMULTANEOUS CLOSING

14. BOP ISOLATOR CABLE SHIELDS THAT ARE SHOWN CONNECTED ARE TERMINATED ON THE SIGNAL GROUND BUS (SG) LOCATED ADJACENT TO THE TERMINAL BLOCK. TERMINATION POINTS ON THE GROUND BUS ARE NOT DEDICATED TO A SPECIFIC CABLE.
    UNLESS OTHERWISE SHOWN, BOP ISOLATOR DIGITAL OUTPUTS ARE SOLID STATE SWITCHING (SS SW) DEVICES.

REFERENCE DRAWINGS:

PLANT AC AUX PWR SYS SINGLE LINE	2GW0729-RP
SINGLE LINE DIAGRAM 13.8KV SWITCHGEAR 1RA AND 1RC	2WW1720-EA
MAIN SINGLE LINE GENERATOR 1 AND 500KV SWITCHYARD	2WW0504-XE
MAIN SINGLE LINE 161KV SWITCHYARD	2WW0502-XB
TYPICAL SCHEMATICS MED VOLTAGE SWGR CKT ARRGT	5GW0749-RP
CONTROL LOGIC AND SSCS INTERFACE 13.8KV NORMAL AC AUX POWER DISTRIBUTION SYSTEM	2WW0900-EA
WIRING DIAGRAM 1TN-EMRB-23	9CW1643-TN
WIRING DIAGRAM 1XU-EMRB-25 UNIT SS XFMR 1XU	9CW1645-XU
WIRING DIAGRAMS OXO-ER1B-4 250V DC SUP LTS & GEN 1 & 2 NET	9CW0724-XO
WIRING DIAGRAMS OXR-EMRB-1 RESERVE SS XFMRS 1A & 2A	9CW0621-XR
WIRING DIAGRAMS OXO-ER1B-3 250V DC SUP LTS & RSS XFMR 1A & 2A NET	9CW0723-XO
WIRING DIAGRAMS OXO-ER1B-5 250V DC SUP LTS & RSS XFMR 1B & 2B NET	9CW0725-XO
WIRING DIAGRAMS OXR-EMRB-6 RESERVE SS XFMRS 1B & 2B	9CW0626-XR
SYSTEM SCHEMATIC 6.9KV NORMAL A.C. AUX POWER DISTRIBUTION SYSTEM	5GW1740-EB
SYSTEM SCHEMATIC 6.9KV CLASS 1E A.C. AUX POWER DISTRIBUTION SYSTEM	5GW1740-EG
SINGLE LINE 125V CLASS 1E DC POWER DISTRIBUTION SYSTEM	5GW0625-EU
24 KV MV SSN BUS, 13.8KV & 6.9KV SSS & RSS BUSSES-PLAN	2BW2292-RP
SCHEMATIC DIAGRAM, ANNUNCIATOR AND SEQUENTIAL EVENTS RECORDING SYSTEM	5GW1640-IA
SCHEMATIC DIAGRAM, STATUS, ENVIRONMENTAL, AND ALARM MONITORING SYSTEM	5GW0640-IS
ITE (GOULD) IMPERIAL CORP. TVA CONTRACT 75K5-85583	
ELEMENTARY DIAGRAM	808606
SCHEMATIC DIAGRAM	808607
ELEMENTARY DIAGRAM	808608
SCHEMATIC DIAGRAM	808609
CONNECTION DIAGRAMS	33-51014-D2863 THRU 33-51014-D2867
CONNECTION DIAGRAMS	33-51014-D3063 THRU 33-51014-D3067
INTERCONNECTION DIAGRAM	33-51014-D2966
INTERCONNECTION DIAGRAM	33-51014-D3166

ELECTROMAX INSTRUMENTS INC. TVA CONTRACT 79K32-822988 FOR BOP ISOLATORS.

SYMBOLS:

XXXXX / MON	SEAMS (MONITORING SYSTEM POINT NO XXXXX)
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 6 AND 11)
52S -	CELL-MOUNTED CIRCUIT BREAKER AUXILIARY SWITCH ACTUATED BY THE OPERATION OF THE CIRCUIT BREAKER MAIN CONTACTS (SEE NOTE 11)
I	ISOLATOR

Docket # 50-438
Control # 8304050536
Date 2-25-83 of Document:
REGULATORY DOCKET FILE

PRC APERTURE CARD

COMPANION DRAWINGS, 5GW1740-EA-02 THRU -06

REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPR
2	S1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	REVISIONS PER ECN S1.										
1	S1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	REVISIONS PER S1										

DSGN J.C. HILL
DRWN J.W. JACKSON
CHKD R.D. MASSEY
SUPV [illegible]
INSP
ENGINEER W.E. Ulbrydge [illegible]

GENERAL
UNIT 1

SYSTEM SCHEMATIC
13.8KV NORMAL AC AUX POWER
DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED
W.E. Ulbrydge [illegible]	[illegible]	[illegible]

KNOXVILLE 5/13/77 88 E 5GW1740-EA-01 R2

RECORD DRAWING AS CONSTRUCTED

PRINTS REQD-R Q
SH of
PROJ DWG SIZE F H
ME
EE 2 1
CE
AD
CD
ED
MD
BF
SW
BL
PA