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GENERAL NOTES:

- ALL UNIT AND CABLE DESIGNATIONS ARE PRECEDED BY IRT UNLESS OTHERWISE SHOWN.
JUMPER DESIGNATIONS ARE FORMED BY PREFIXING THE J NUMBER SHOWN ON THE SCHEMATIC WITH THE UNIT OF THE ENCLOSURE AND THE SYSTEM DESIGNATION, RT. EXAMPLE: IEI-EMCC-64-RTJ1.
- SEE SYSTEM RT CABLE PROGRAM FOR COMPLETE CABLE INFORMATION INCLUDING SPARE CONDUCTORS. ONLY THOSE CONDUCTORS USED ARE SHOWN.
- SPECIFIC ENTRANCES ARE INDICATED FOR CABLES ENTERING EQUIPMENT THAT HAVE MORE THAN ONE ENTRANCE PER DIVISION OF SEPARATION. EXAMPLE: ENT A
- THE SYSTEM SCHEMATIC REFLECTS THE IMPLEMENTATION OF THE SYSTEM FUNCTIONAL CONTROL LOGIC DIAGRAM AND APPLICABLE CRITERIA REQUIREMENTS. THE FUNCTIONAL CONTROL LOGIC 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.
- INTERFACE NUMBERS WERE ASSIGNED TO EACH POINT OF INTERFACE WITH THE SSCS. THESE NUMBERS APPEAR ON THE CONTROL LOGIC, SSCS CIRCUIT INTERFACE DIAGRAM AND THIS SCHEMATIC. THEIR PURPOSE IS TO FACILITATE MOVEMENT BETWEEN THESE DOCUMENTS. EXAMPLES: Y3X1
- GROUND ALL THERMOCOUPLES IN THE THERMOCOUPLE JUNCTION BOX BY MEANS OF A CONTINUOUS WIRE (COPPER) CONNECTING ALL LOW RESISTANCE THERMOCOUPLE TERMINALS TO A GROUNDED SCREW IN THE BOX.
- OPERATIONS RECORDER AND
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.
- 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.
- ALL B&W DRAWING NUMBERS SHOWN WILL BE SUPERSEDED BY AS-BUILT DRAWINGS OF DIFFERENT NUMBERS. FOR A CROSS-REFERENCE BETWEEN THESE NUMBERS SEE THE BELLEFONTE NUCLEAR PLANT MONTHLY STATUS REPORT OF MANUFACTURERS DRAWINGS.
- THIS SCHEMATIC PRIMARILY DOCUMENTS TVA CABLING REQUIREMENTS. FOR CIRCUIT OPERATION VENDOR DRAWINGS MUST BE USED.

REFERENCE DWGS AND DOCUMENTS:

- FUNCTIONAL CONTROL LOGIC DIAGRAM- DIESEL GENERATOR CONTROL SYSTEM - - - - -26W0900-RT
SYSTEM SCHEMATIC - ESSENTIAL RAW COOLING WATER SYSTEM - - - - -56W1740-KE
SYSTEM SCHEMATIC - DIESEL GENERATOR BLDG ENVIRONMENTAL CONTROL SYSTEM - - - - -56W1740-VG
SCHEMATIC DIAGRAM - STATUS, ENVIRONMENTAL, AND ALARM MONITORING SYSTEM (SEAMS) - - - - -56W0640-IS
SYSTEM SCHEMATIC - 6.9KV CLASS 1E AC AUX PWR DISTRIBUTION SYSTEM - - - - -56W1740-EG
SSCS CIRCUIT INTERFACE DIAGRAM - - - - -26B0900-IL
SYSTEM SCHEMATIC- SOLID STATE CONTROL SYSTEM - - - - -56W0640-IL
- SCHEMATIC DIAGRAM - 125V CLASS 1E DC POWER DISTRIBUTION SYSTEM - INCLUDES 120V AC CLASS 1E AUX PWR 480V MOTOR CONTROL CENTER COMPARTMENT TYPICALS - - - - -56W0747-RP
OPERATIONS RECORDING AND ANNUNCIATION SCHEMATIC - - - - -9CW7364-0A
SCHEMATIC DIAGRAM- ESFAS - - - - -56W1640-IE
SCHEMATIC DIAGRAM- ANNUNCIATOR AND SEQUENTIAL EVENTS RECORDING SYS - - - - -56W1640-IA

- TVA CONTRACT 76K61 - 86181:
- DELAVAL DIESEL GENERATOR ENGINE AND SKID ELECTRICAL SCHEMATICS - - - - -09-688-75080 SHEETS 1 & 2
DELAVAL DIESEL GENERATOR CONTROL PANEL SCHEMATICS - - - - -09-500-75080 SHEETS 1 THROUGH 9
DELAVAL DIESEL GENERATOR ENGINE PNEUMATIC SCHEMATIC - - - - -09-695-75080
ELECTRIC PRODUCTS COMPANY DWGS - - - - -D09069R 263515
D7211600 760
D7211600 710
-054200 SHEETS 1 THROUGH 4
DELAVAL DIESEL GENERATOR, GENERATOR CONTROL SCHEMATICS - - - - -52391 SHEETS 1 & 2
DELAVAL DIESEL GENERATOR CONTROL PANEL COMPONENT PLACEMENT - - - - -52345 SHEETS 1 & 2

- TVA CONTRACT 71C62-54114-2 (B&W NSSS)
MAIN CONTROL ROOM PANEL WIRING DIAGRAMS - - - - -02-23785NF 02-23786NF
ELECTROMAX INSTRUMENTS INC., TVA CONTRACT 79KJ2-822988 FOR BOP ISOLATORS

SYMBOLS

- MON - INTERFACE TO STATUS, ENVIRONMENTAL, AND ALARM MONITORING SYSTEM (SEAMS) (XXXXX-POINT NUMBER)
AN - ANNUNCIATOR SYSTEM INTERFACE (XXXX-POINT NUMBER)
OR - OPERATIONS RECORDER SYSTEM INTERFACE (XXX-POINT NUMBER)
H-O-A - HAND-OFF-AUTO
I - ISOLATOR

APERTURE CARD

ME RO RI

PRINTS REC'D

ME	
EE	
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CD	
ED	
MD	
BF	
SL	
PA	

COMPANION DWGS: SYSTEM SCHEMATIC D G CONTROL SYS 5GW1740-RT-02 THRU 14

Docket # 50-438
Control # 82016 80064
Date 8/2/82 of Document
REGULATORY DOCKET FILE

REVIEWED	
RC (CIVIL)	N/A
RE (ELEC)	N/A
RM (MECH)	N/A

SI	5-8-77	ETD	AW	WPK	BR	SKK	WAL	LS	PLM											
MINOR CHANGES.																				
REV NO.	ECN NO.	DATE	DSGN	DRWN	CHKD	SUPP	ENGR	INSP	SUBM	RECD	APPR									
DSGN	E. N. D. DUNN										INSP									
DRWN	E. N. D. DUNN										ENGR	W. L. ALDRIDGE								
CHKD	E. N. D. DUNN																			
SUPP	E. N. D. DUNN																			
GENERAL UNIT I																				
SYSTEM SCHEMATIC DG CONTROL SYS - RT																				
BELLEFONTE NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY DIVISION OF ENGINEERING DESIGN															Q					
SUBMITTED					RECOMMENDED					APPROVED										
W. L. Aldridge					E. N. Dunn					W. M. Hildner										
KNOXVILLE					10-2-78					88 E					5GW1740-RT-01 RI					
RECORD DRAWING AS CONSTRUCTED																				