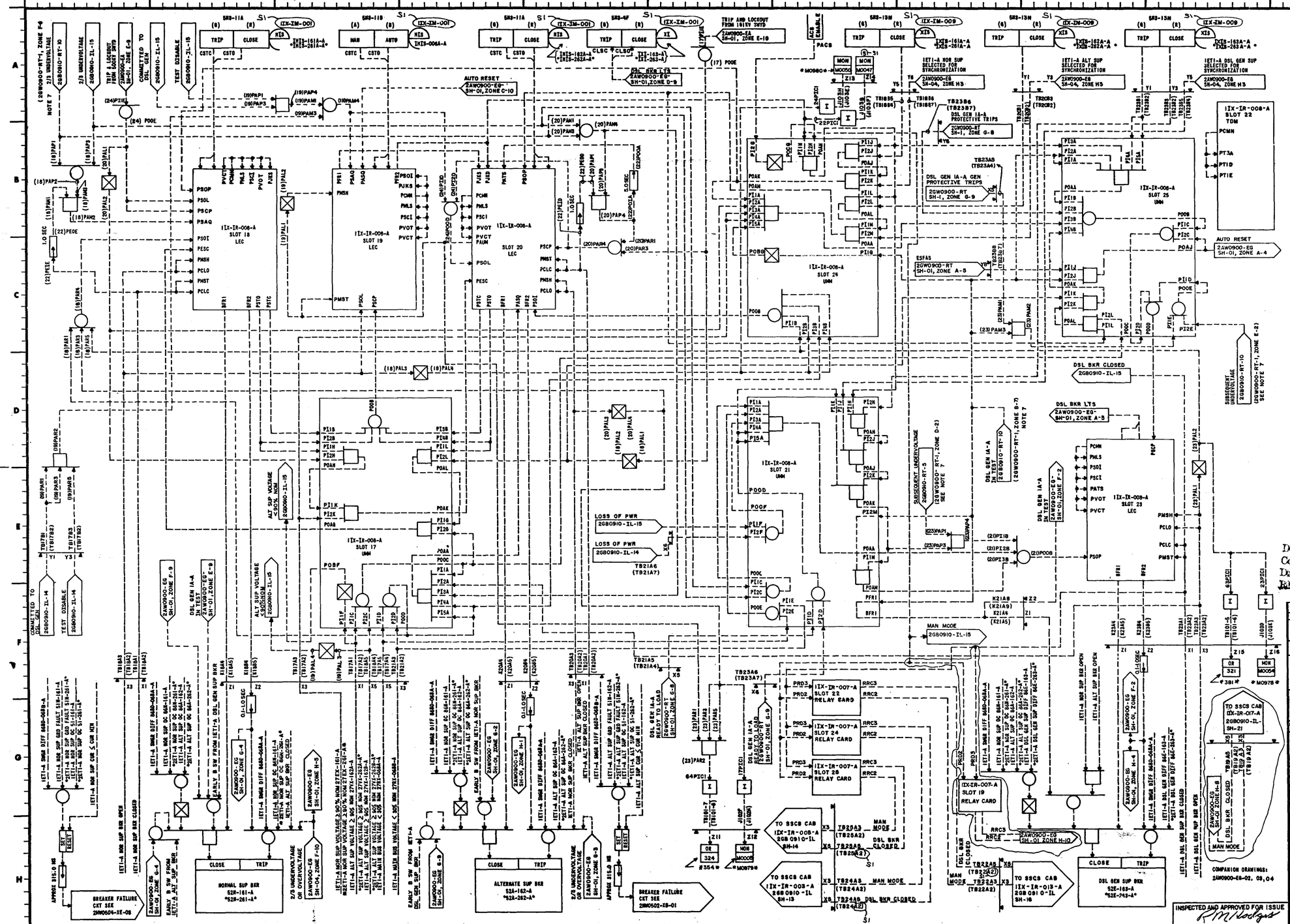

NOTES:

1. THIS DRAWING REPRESENTS THE FUNCTIONAL CONTROL LOGIC AND SOLID STATE CONTROL SYSTEM (SSCS) UTILIZATION BY DEPICTING THE ACTUAL SSCS EQUIPMENT. SSCS IS PROVIDED BY CONSOLIDATED CONTROLS CORPORATION (CCC) ON TVA CONTRACT 75K3-85550.
2. LOGIC GATES SHOWN INTERNAL TO THE SSCS BOUNDARIES AND EXTERNAL TO THE SSCS CARDS ARE IDENTIFIED AS FOLLOWS:

(XX) XXXX
CARD PIN NO.
CARD SLOT NO.

3. ALL UNIQUE IDENTIFICATION CODES SHOWN ARE TO BE PREFIXED WITH 1EG- OR 2EG- TO DENOTE EQUIPMENT ASSOCIATED WITH UNIT 1 OR UNIT 2 6.9KV CLASS 1E AC AUXILIARY POWER DISTRIBUTION SYS, UNLESS OTHERWISE NOTED.
4. DRAWING IS SHOWN FOR UNIT 1, UNIT 2 IS TYPICAL UNLESS OTHERWISE NOTED BY ASTERISKS (*).
5. SSCS TERMINATIONS ASSOCIATED WITH IX-008-A LOGIC CAB ARE MADE IN CAB IX-007-A AND TERMINATIONS ASSOCIATED WITH IS-008-B LOGIC CAB ARE MADE IN CAB IS-007-B.
6. STATUS FEEDBACK FOR SWITCHES LOCATED ON IM-9 IS PROVIDED DIRECTLY FROM THE ASSOCIATED CKT BKR.
7. SEE REFERENCED DWG ENCLOSED IN PARENTHESIS FOR FUNCTIONAL CONTROL LOGIC.
8. ACS ENABLE (NORMALLY LOGIC "0") GOES TO LOGIC "1" WHEN AUXILIARY CONTROL SYSTEM IS ENABLED.
9. SEE DWG 2GW0900-IO-1 THRU -4 FOR EXPLANATION OF SYMBOLS.
10. ALL BKR POSITION INPUTS ARE VIA CELL MOUNTED AUX SWITCHES.

REFERENCE DRAWINGS:

SL PLANT AC AUX PWR SYS - 2GW0720-RP-1
SL DIAG 6.9KV SWGR 1ET1-A - 2AW1722-EG-1
SL DIAG 6.9KV SWGR 1ET1-B - 2AW1723-EG-1
SL DIAG 6.9KV SWGR 2ET1-A - 2AW2722-EG-1
SL DIAG 6.9KV SWGR 2ET1-B - 2AW2723-EG-1
SL DIAG 161KV SWYD - 2WM502-XE-01
SL DIAG GEN AND 500KV SWYD - 2WM0504-XE-01, 02, 03
FCLD 13.8KV NOR AC AUX PWR - 2AW0900-EA-01, 02, 03
DESIGN CRITERIA STANDBY AC AUX PWR SYS - WN-RPD775A
SL DIAG 6.9 KV SWGR 1ET2-A & B 2KW1717-EG-1
SL DIAG 6.9 KV SWGR 2ET2-A & B 2KW2718-EG-1

CCC DRAWINGS, TVA CONTRACT 75K3-85550
BLOCK DIAGRAM/SCHEM SSCS SINGLE CHANNEL KDB 2316
LOGIC DIAGRAM LEC KFB 2316
LOGIC DIAGRAM UMM KFM 2316
LOGIC DIAGRAM TDM KFW 2316

SYMBOLS:

LEC - LOGIC ELEMENT CONTROLLER
UMM - UNIVERSAL MISCELLANEOUS MODULE
TDM - TIME DELAY AND MEMORY MODULE

I - ISOLATOR
OR - OPERATIONS RECORDER

APERTURE CARD

Docket #50-438
Control #8202080064
Date 820202 of Document
REGULATORY DOCKET FILE

REV. NO.	S'CN NO.	DATE	DSGN	DRWN	CHKD	SUPV	ENGR	INSP	SUBM	RECM	APPD	
4	951,S1	12-2-90										ADDED RELAY INTERFACE TO NEW SSCS CAB. MINOR CHANGES
3	467, S1	4-6-89										INCORPORATED NEW MODIFIED DESIGN REQUIREMENTS FOR BUS TRANSFERS @ VOLTAGE ANN POINTS. MINOR CHANGES
2	341, S1	4-5-88										IMPLEMENTED ANTICIPATORY RELAY SCHEME PER ECN 341. INCORPORATED LATEST DESIGN FEATURES (COMMIT TO DSL, MAN CLOSE OF DSL BKR IN THE PRESENCE OF A SUBSEQUENT UNDER VLTAGE, DSL GEN PROTECTIVE TRIPS, AND MINOR REVISIONS)- ADDED MK-VI TORING SYS PT NO. PER ECN 51.
1	115, S1	3-18-77										REDRAWN TO REFLECT SSCS EQUIP AND LATEST DESIGN STATUS. INCORPORATING ECN 115, S1

DESN O.M. SLATED
DRWN J.E. NICHOLS
CHKD H.D. SOUNDS
SUPV T.M. SLATED
INSP
ENGINEER J.M. Lenhart

SCALE: EXCEPT AS NOTED

POWERHOUSE
UNIT 1 & 2

CONTROL LOGIC AND SSCS INTERFACE 6.9KV CLASS IE AC AUX POWER DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

Q

SUBMITTED	RECOMMENDED	APPROVED
J.H. Buchanan	T.S. Wilson	E.H. Chandler

KNOXVILLE 12-2-75 | 88 | E | 2AW0900-EG-01 R4

RECORD DRAWING AS CONSTRUCTED

INSPECTED AND APPROVED FOR ISSUE R.M. Hodges

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SIZE F
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