



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
B	C/N 528	REVISED & REDRAWN	1-17-77	[Signature]
C	C/N 515L	REVISED & UP-DATED	8-22-77	[Signature]
D	C/N 527L	REVISED & UP-DATED	9-6-77	[Signature]
BC	E	C/N 555 - PASH WAS PALT. NOTE 10 WAS FIT IN SLOTS 8, 17, 39, 42, 38 OR 47 DUE TO NOTE 10 BEING WITH CHD RACK SUPPORTS. ADDED 12, 14 TO TEST POINTS. DS 2 (AMBER) WAS DS 5 (YELLOW); DS 3 (AMBER) WAS DS 4 (YELLOW); DS 4 (AMBER) WAS DS 7 (YELLOW); DS 5 WAS DS 4; DS 4 WAS DS 3; DS 7 WAS DS 8; DS 8 WAS DS 10; DS 9 WAS DS 2; DS 10 (AMBER) WAS DS 10 (YELLOW).	2-7-78	[Signature]
F	F	C/N 553 NOTE 4 KGV 2316 WAS KGV 2316 ADDED E3 TO CLOCK FAIL DETECT BONE B5 ADDED MATS BONE B3 ADDED 10 HS CLOCK BONE C4 ADDED E3 4.15V REGULATOR BONE B7	1/14/78	[Signature]
TEF	G	C/N 569 - ADDED NOTE 11. ADDED 3 AND 4 GATES. ADDED PRGM PH1 TO PTS, P.C. CONN. PINS & SIGNALS NOT AVAILABLE ON PRGM PNL. ADDED NOTE 11.	6/6/78	[Signature]
BD	H	C/N 585S. DARKENED [Symbol] P500	7-12-77	[Signature]

- NOTES:
- IF SEQUENCER IS IN AN LOP SEQUENCE OR HAS COMPLETED ONE, AND ANOTHER LOP OCCURS IT WILL COMPLETE ITS COUNT OR REMAIN IN STANDBY (COUNTED OUT). IT WILL, HOWEVER, RECORD THE SECOND LOP FOR USE BY TVA.
 - IF A TEST IS IN PROGRESS WHEN AN LOP OCCURS, THE TEST WILL STOP AND THE SEQUENCER WILL BEHAVE AS SPECIFIED FOR AN LOP. THE TEST WILL NOT AUTOMATICALLY RESTART AFTER LOP.
 - CLOCK SIGNALS PCA1, 2, 3 GO TO PROGRAM BACK PLANE FOR USE BY LEC LAMP FLASH CIRCUITS, TDM TIMERS, OR SPECIAL APPLICATIONS.
 - CRYSTAL CLOCK PROVIDES 100 HZ FOR SEQ. TIMERS AND 10 HZ FOR TDM'S & LEC'S. IF CLOCK FAILS, OR SEQ. CTRL CARD IS REMOVED, ANOTHER CLOCK ON SEQ. T CARD (KGV 2316) TURNS ON AND PROVIDES SAME 100 HZ & 10 HZ SIGNALS. CLOCK FREQ. IS ACCURATE TO ±0.005% FROM 0° TO 70°C. CLOCK DRIFT IS ±0.0005% PER YEAR.
 - "E" DESIGNATES TEST POINT ON CARD, ACCESSIBLE WHEN LOGIC CABINET FRONT DOOR IS OPENED, RESISTOR ISOLATED.
 - ALL SET/RESET MEMORIES COME ON IN RESET STATE WHENEVER POWER IS APPLIED. RESET OVERRIDES SET. OUTPUT IS DELAYED WITH RESPECT TO INPUT BY 8.5 M SEC, TYPICALLY. (2.5 M SEC. MIN., 20.5 M SEC. MAX.) THE OUTPUT STATE IS NOT LATCHED UNTIL THE OUTPUT IS PRESENT.
 - UNLESS OTHERWISE SPECIFIED, ACCURACY FOR ALL TDE'S IS +0.15, -0.05 SEC.
 - PC JUMPERS ARE PROVIDED FOR PROGRAMMING THE TDE CIRCUIT BLOCKS WHERE APPLICABLE. THE DELAYS CAN BE SET WITH INCREMENTS OF 0.5 SEC.
 - CARDS WILL BE SHIPPED WITH PROGRAMMABLE TDE'S AT THE NOMINAL SETTINGS.
 - SEQUENCER CONTROL MODULES WILL NOT FIT IN SLOTS NEXT TO A TDM OR ALMM DUE TO INTERFERENCE OF WIREWRAP PINS.
 - PROGRAM PANEL TB POINTS ARE SHOWN THUS \square . PRINTED CIRCUIT CONNECTOR PINS ARE SHOWN THUS \oplus . SIGNALS NOT AVAILABLE ON PROGRAM PANEL ARE SHOWN \boxtimes . AFTER POWER ON, AS DESCRIBED IN NOTE 6, "SET" WILL OVERRIDE "RESET" ON THIS MEMORY.

APPROVED
 CONTRACT 75K3-35550
 DRAWING NO. KGV 2316
 SHEET 1 OF 1 UNIT 152
 SEP 25 1978

APERTURE CARD

ITEM NO.	QUANTITY	NOMENCLATURE OR DESCRIPTION	DWG. SIZE	PART OR IDENTIFYING NO.	SPECIFICATION	MATERIAL OR NOTE	REMARKS
LIST OF MATERIAL							
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES							
X XX XXX ANGLES							
± .03 ± .01 ± .008 ± 1/2"							
FRACTIONS ±							
ALL MACH SURFACES ✓ RMB							
DRILL HOLES PER ANSI B31.3							
BURRS AND CHAMFER EDGES PER J2.13							
65° CHAMFER FIRST THREAD							
TOLERANCES PER ANSI Y14.5-1973							
COIL TOL. APPLY TO STOCK SIZES							
MATERIAL							
BELLEFONTE NUCLEAR PLANTS, UNITS 1 & 2							
CONTRACT NO. 75K3-35550							
TENNESSEE VALLEY AUTHORITY							
DRAWN: SCL 4-21-76 RS H1917							
CHECKED: K. TARRANT 4-30-76							
ENGR: J. FAVLICK 4-30-76							
REV. 1: 1-14-77							
MATERIAL							
BELLEFONTE NUCLEAR PLANTS, UNITS 1 & 2							
CONTRACT NO. 75K3-35550							
TENNESSEE VALLEY AUTHORITY							
DRAWN: SCL 4-21-76 RS H1917							
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REV. 1: 1-14-77							
MATERIAL							
BELLEFONTE NUCLEAR PLANTS, UNITS 1 & 2							
CONTRACT NO. 75K3-35550							
TENNESSEE VALLEY AUTHORITY							

LOGIC DIAGRAM SEQUENCER CONTROL

DATE: 1-29-78	BY: [Signature]	CHECKED: [Signature]	ENGR: [Signature]	REV. 1: 1-14-77
MATERIAL		BELLEFONTE NUCLEAR PLANTS, UNITS 1 & 2		CONTRACT NO. 75K3-35550
TENNESSEE VALLEY AUTHORITY		DRAWN: SCL 4-21-76 RS H1917		CHECKED: K. TARRANT 4-30-76
ENGR: J. FAVLICK 4-30-76		REV. 1: 1-14-77		MATERIAL
BELLEFONTE NUCLEAR PLANTS, UNITS 1 & 2		CONTRACT NO. 75K3-35550		TENNESSEE VALLEY AUTHORITY