



- NOTES:
1. FOR SYMBOLS OTHER THAN THOSE NOTED SEE INSTRUMENTATION AND IDENTIFICATION STANDARDS, LATEST ISSUE.
  2. FOR COMPLETE INSTRUMENTATION AND COMPONENT SEPARATION DESIGNATIONS SEE CONTROL DIAGRAM, 1-47W610-67-1, 2, 3, 4, 5.
  3. PAIRED PUMPS (A-A & B-A, C-A & D-A, E-B & F-B, & G-B & H-B) ARE TIED TO COMMON SHUTDOWN BOARD PURPOSE OF XS-67-XXX IS TO PREVENT MORE THAN ONE PUMP AT A TIME BEING FED FROM A SINGLE DIESEL GENERATOR.
  4. "DIGITAL AND ANALOG LOGIC SYMBOLS ARE USED ON LOGIC DIAGRAMS TO FUNCTIONALLY DESCRIBE THE PROCESS CONTROL, REFER TO THE ASSOCIATED WIRING SCHEMATIC FOR THE ELECTRICAL COMPONENTS USED TO IMPLEMENT THE CONTROL SCHEME."
  5. O-HS-67-28B, 32B, 36B & 40B ARE DISCONNECTED TO PREVENT SPURIOUS OPERATION OF PUMPS A-A, B-A, C-A & D-A IN CASE OF FIRE.
  6. THE BACKWASH/FLUSH MASTER TIMER ACTIVATES AT 12 HOUR INTERVALS FOR A PERIOD OF BETWEEN 5 AND 20 MINUTES.
  7. VALVES 1 AND 2-FCV-67-22 AND 1 AND 2-FCV-67-24 ARE ADMINISTRATIVELY LOCKED IN THE OPEN POSITION. (WITH BREAKER OPEN) (APPENDIX R)
  8. INPUT TO MICROBIOLOGICAL INDUCED CORROSION (MIC) REMOVAL SYSTEM SUPPLIED ON CONTRACT 91NNA-7595AA, DRAWING #BEC5001.
  9. SEAL-IN NOT FOR 1-FCV-67-143, 2-FCV-67-143 & 0-FCV-67-144.
  10. SAFETY INJECTION SIGNAL FROM UNIT 2 IS DISCONNECTED, SO AS TO AVOID INADVERTENT START OF ERCW PUMPS.

- SYMBOLS:
- \* - LOCATED ON ELECTRICAL SWITCHGEAR
  - # - LOCATED IN AUXILIARY CONTROL ROOM
  - ▲ - TEST SWITCH
  - ① & ② - DENOTE UNIT 1 AND UNIT 2 INTERFACE POINTS.

COMPANION DRAWINGS:  
 1-47W611-67-SERIES-----LOGIC DIAGRAM  
 1-47W611-0-1-----LOGIC DIAGRAM INDEX & SYMBOLS  
 1-47W610-67-SERIES-----CONTROL DIAGRAM  
 47B601-67-SERIES-----INSTRUMENTATION TABULATION  
 1-47W645-SERIES-----FLOW DIAGRAM  
 1-47W60-67-SERIES-----SCHEMATIC DIAGRAMS

8	52798	RWE	ESJ	JHR	10-9-99
REVISED PER DCA 52798-39-0.					
REV	CHANGE REF	PREPARER	CHECKER	APPROVED	DATE
SCALE: NTS EXCEPT AS NOTED					
PROJECT FACILITY POWERHOUSE UNITS 1 & 2					
TITLE <b>ELECTRICAL LOGIC DIAGRAM ESSENTIAL RAW COOLING WATER</b>					
1	WATTS BAR NUCLEAR PLANT TENNESSEE VALLEY AUTHORITY				Q
DESIGN		INITIAL ISSUE		ENGINEERING APPROVAL	
DRAFTER J.A. TALLEY	CHECKER FRANK LAYFIELD	RO ISSUE PER EAL-3.10, RIMS T28-92 0128 807, DCN M-14565-A & DCN S-16643-A		1 GARY BARNARD	
DESIGNER GARY BARNARD	REVIEWER R.L. FORESTER	DATE 2-27-92		2 ROBERT D. MURR	
ISSUED BY: R.M. JOHNSON		DATE 2-27-92		3 M.C. BRICKEY/RLS	
DATE 2-27-92 85 E 1-47W611-67-1 R8					

FSAR FIG 9.2-5

PRINTS REQ'D R BR OR PROJ AB CE EE ME NE FE SE TE BL BF WB SO