



GENERAL ELECTRIC 851E 506
FEEDWATER CONTROL SYS
 PLANT NO. STANDARD PLANT 18N506B01

FCP: 283X222G1,2,3,4,5,G (C33-1010)

- NOTES:**
- ALL EQUIPMENT AND INSTRUMENTS ARE PREFIXED BY SYSTEM NO. C33 (VALVE CONTROL)
 - DEVICES K524, G & C TRIP CONTACTS TO BE WIRED IN 2/3 LOGIC SO THAT ANY 2 DEVICES MUST TRIP TO INITIATE MAIN TURBINE AND FEED PUMP MOTOR TRIP
 - THE POWER SOURCE FOR THE FEEDWATER INSTRUMENTATION AND CONTROL SYSTEM SHALL HAVE AT LEAST THE SAME DEGREE OF RELIABILITY AS THE POWER SOURCE FOR THE REACTOR FEED/BOOSTER/CONDENSATE PUMPS
 - THE FOLLOWING EQUIPMENT OR REFERENCE DOCUMENTS ARE REQUIRED BUT ARE NOT SUPPLIED BY GE (BWRSD)
 - TWO NORMALLY OPEN CONTACTS PER MOTOR DRIVEN RFP (REACTOR FEED PUMP) TO OPERATE WHEN MOTOR FEED PUMP UNIT HAS TRIPPED OR SHUTDOWN. THE CONTACTS SHALL PREFERABLY BE DERIVED FROM A FLOW SWITCH MOUNTED ACROSS THE RFP LOW FLOW RECIRCULATION FLOW ELEMENT (PROVIDED BY THE A.E. (CUSTOMER) OR RFP) DISCHARGE VALVES IF THESE AUTOMATICALLY RUN CLOSED ON RFP TRIP. G.E. (BWRSD) REQUIRE THESE CONTACTS FOR INITIATION OF REACTOR RECIRCULATION SYSTEM RUN BACK IN EVENT OF AN RFP TRIP AT HIGH LOADS.
 - REFERENCE DOCUMENTS 4,5 & 6
 - SWITCHES SHALL BE "SNAP ACTION" SWITCHES, CONTACT OPERATION BEING INDEPENDENT OF SPEED OF CONTROL ROOM OPERATOR ACTION TO AVOID CONTROL SYSTEM TRANSIENTS DURING SWITCHING.
 - AC POWER SOURCES TO THE LEVEL TRIP CHANNELS MUST BE FROM INDEPENDENT SOURCES.
 - FOR LOCATION AND IDENTIFICATION OF INSTRUMENTS SEE INSTRUMENT DATA SHEET (REF 9)
 - FUNCTION GENERATORS SPECIALLY CHARACTERIZED BASED ON FLOW CONTROL DEVICE MAX SIGNAL VS FW FLOW LB/HR CHARACTERISTICS.

TI APERTURE CARD

- LEGEND:**
- ANALOG SIG. GEN
 - ANALOG COMPUTER INPUT
 - ERIS SIGNAL
- REFERENCE DOCUMENTS:**
- | NO. | DESCRIPTION | REF. ITEM NO. |
|-----|--|---------------|
| 1. | FEEDWATER CONTROL SYS DESIGN SPEC | C33-4010 |
| 2. | NUCLEAR BOILER SYS. P&ID | 821-1010 |
| 3. | REACTOR RECIRCULATION SYS FCD | 833-1020 |
| 4. | MOTOR FEED PUMP TRIP LOGIC "LEM" | |
| 5. | FEEDWATER SYS P&ID | |
| 6. | MAIN TURBINE GENERATOR TRIP LOGIC ELEM | |
| 7. | NUCLEAR BOILER SYS FCD | 821-1030 |
| 8. | INSTRUMENT DATA SHEET | C33-3030 |
| 9. | INSTRUMENT SYMBOLS (SAMA) | A2-1050 |
| 10. | FEEDWATER PLANT REQUIREMENTS | AG-3260 |

THIS DWG SUPERSEDES DWG # B28041, REV 2 FOR STANDARD PLANT C33-1010. (EXTENSIVE CHANGES REQUIRE REVIEW WITH SUPERSEDED DWG PER ECA # 31009-13)

NO.	DATE	BY	CHKD BY	APP'D BY
1	11/15/59
2	11/15/59
3	11/15/59

8412200/33

PDR RIDS

