



FLOW MEASUREMENTS 2 OF 3 SHOWN

LOSS OF REACTOR FW PUMP "A" CONTACTS (NOTE 6)  
 LOSS OF REACTOR FW PUMP "B" CONTACTS (NOTE 6)  
 2 OF 3 SHOWN  
 FW PUMP TRIP INTER-LOCK/RECIRC LOOP "A" & "B" FLOW REDUCTION

- NOTES:
1. ALL EQUIPMENT AND INSTRUMENTS ARE PREFIXED BY SYSTEM NO. CR UNLESS OTHERWISE NOTED.
  2. FOR LOCATION AND IDENTIFICATION OF INSTRUMENTS, SEE INSTRUMENT DATA SHEET LISTED IN MPL FOR EACH INSTRUMENT.
  - 3.
  4. FOR INDICATING INSTRUMENTS AND TRANSMITTER RANGES SEE INSTRUMENT DATA SHEET (NOTE 2).
  5. DEVICES K624A & B TRIP CONTACTS TO BE WIRED IN SERIES SO THAT BOTH DEVICES MUST TRIP TO INITIATE MAIN TURBINE STEAM STOP VALVE TRIP.
  6. CUSTOMER TO PROVIDE A CIRCUIT BREAKER AUXILIARY CONTACT FROM EACH REACTOR FEEDPUMP CIRCUIT BREAKER.
  7. GE (IND) TO PROVIDE AUXILIARY RELAY LOGIC FROM CUSTOMER/AE C.B. AUXILIARY CONTACTS AND CONTACTS FROM CR/K623 (E4) TO INITIATE INDEPENDENT RUNBACK OF EACH REACTOR RECIRC PUMP, IN EVENT OF A 1 OUT OF 2 RP PUMP TRIP.
  - 8.
  9. 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.
  10. FEEDWATER FLOW INTEGRATION IS AVAILABLE VIA .055S COMPUTER.
  11. SWITCHES SHALL BE "SNAP ACTION" SWITCHES, CONTACT OPERATION BEING INDEPENDENT OF SPEED OF CONTROL FROM OPERATOR ACTION TO AVOID CONTROL SYSTEM TRANSIENTS DURING SWITCHING.
  12. INDEPENDENT ALARM UNIT RELAYS OR INTERPOSING RELAYS TO BE PROVIDED TO ENSURE SEPARATION OF RECIRC LOOP A CONTROL CIRCUIT FROM LOOP B.
  13. CONTROL SWITCH OPERATES AN INTEGRAL RELAY TO RESET FEEDWATER VALVE "LOCK-UP CIRCUIT" AND EXTINGUISH "LOCK-UP" PILOT LAMP.
  14. REFERENCED DOCUMENTS 5 & 6 ARE TO BE SUBMITTED TO GE (APED) BY THE CUSTOMER/AE FOR APED DESIGN COMPLETION.

FIG. 7.9-1A  
 FEEDWATER CONTROL SYSTEM  
 NINE MILE POINT NUCLEAR STATION - UNIT 2  
 NIAGARA MOHAWK POWER CORPORATION  
 PRELIMINARY SAFETY ANALYSIS REPORT

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