



- NOTES:**
1. INSTRUMENT LINE DESIGN & VALVING MUST COMPLY WITH INSTRUMENT PIPING SPECIFICATION REFERENCE 18.
 2. THE METHOD OF MOUNTING LOCAL INSTRUMENTS IS TO BE DETERMINED BY OTHERS.
 3. PIPING HIGH POINT VENTS & LOW POINT DRAINS ARE TO BE ADDED AS NECESSARY.
 4. CHEMICAL CLEANING CONNECTIONS, VALVES ETC. IF REQUIRED, ARE TO BE PROVIDED AS NECESSARY.
 5. DISCHARGE LINES FOR COOLING WATER TO BE ROUTED UPSTREAM OF SERVICE WATER RADIATION MONITORS.
 6. EQUIPMENT & INSTRUMENTS ARE PREFIXED BY SYSTEM NO. (E12) UNLESS OTHERWISE NOTED.
 7. ALL MOTOR OPERATED VALVES ARE AC OPERATED UNLESS OTHERWISE NOTED.
 8. REACTOR HEAD SPRAY LINE, FROM MAIN LINE TO VALVE FO23 TO BE THE SHORTEST PRACTICAL LENGTH.
 9. RECOMMENDED, BUT NOT REQUIRED.
 10. VALVE SHOULD BE INSTALLED WITH PACKING GLAND(S), UPSTREAM SIDE OF DISK.
 11. VALVES FO05, FO25 & FO30 SHALL BE 1" RELIEF VALVES. VALVES FO36 & FO55 SHALL BE RELIEF VALVES WITH PRESSURE SET POINTS OF 75 PSIG & 500 PSIG RESPECTIVELY.
 12. BETWEEN VALVES MO FO08 & MO FO09 CONSIDERATION SHOULD BE GIVEN TO THERMAL EXPANSION OF THE CONTAINED WATER.
 13. FOR ADDITIONAL CONTROL ROOM LIGHTS, SYSTEM ALARMS & REMOTE MANUAL SWITCHES SEE REF 3.
 14. PROVISIONS FOR CONTAINMENT ISOLATION BY OTHERS TO BE IN ACCORDANCE WITH CURRENT LICENSING REQUIREMENTS.
- SYSTEM SELECTION OPTIONS ARE INDICATED BY MULTIPLE MPL ITEM NO.

- REFERENCE DOCUMENTS:**
- | MPL ITEM NO. | DESCRIPTION |
|--------------|---|
| 1. | NUCLEAR BOILER SYS FCD B21/B22-1030 |
| 2. | RESIDUAL HEAT REMOVAL SPRAY P&ID - - - - - E12-1030 |
| 3. | HIGH PRESSURE CORE RCIC SYSTEM P&ID - - - - - E51-1010 |
| 4. | RADWASTE SYSTEM P&ID - G11,12,13,14,15&16-1010 |
| 5. | PROCESS RADIATION MONITORING SYSTEM - D13/D14/D17/D18-1010 |
| 6. | FUEL POOL COOLING & CLEANUP SYS P&ID- G41,G44-1010 |
| 7. | PIPING & INSTRUMENT SYMBOLS - - - - - A41-1010 |
| 8. | RCIC SYS FCD - - - - - E51-1030 |
| 9. | REAC RECIRC SYS P&ID B39-1010 |
| 10. | NUCLEAR BOILER SYS P&ID - - - - - B21/B22-1010 |
| 11. | LOW PRESSURE CORE SPRAY P&ID - - - - - E21-1010 |
| 12. | PRESSURE INTEGRITY OF PIPING & EQUIPMENT PRESSURE PARTS - - - - - A62-4030 |
| 13. | PROCESS INSTRUMENTATION & TUBING INSTALLATION SPECIFICATIONS - - - - - A62-4070 |
| 14. | RHR SYSTEM PROCESS DATA - - - - - E12-1020 |
| 15. | LEAK DETECTION SYSTEM P&ID - - - - - E31-1010 |
| 16. | RHR SYSTEM DESIGN SPECIFICATION - - - - - E12-1040 |

FIG 7.3-10a
RESIDUAL HEAT REMOVAL SYSTEM
PIPING AND INSTRUMENTATION DIAGRAM
NINE MILE POINT NUCLEAR STATION - UNIT 2
NIAGARA MOHAWK POWER CORPORATION
PRELIMINARY SAFETY ANALYSIS REPORT

