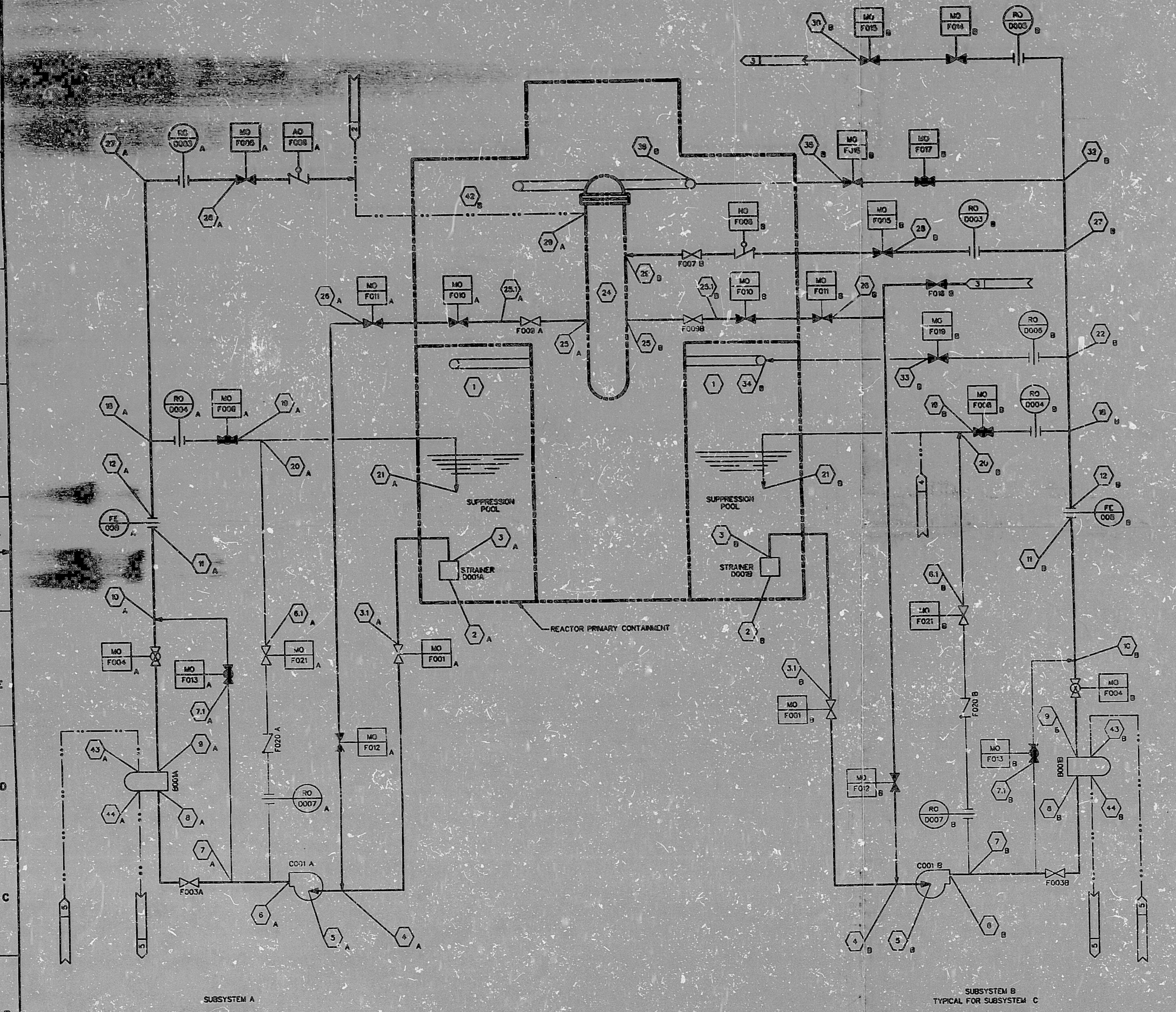
103E1798

A PRELIMINARY ISSUE



NOTES:

1. SHOWN AS TYPICAL FOR ONE SUBSYSTEM. IF SUBSYSTEMS ARE NOT SYMETRICALLY ARRANGED, VALUES FOR EACH SUBSYSTEM SHALL BE SUBMITTED.

2. PIPING BETWEEN POINTS WITH EMPTY DATA BLANKS SHALL BE SIZED BY OTHERS BASED ON SPECIFIED OPERATING CONDITIONS EMPTY DATA BLANKS CAN BE FILLED IN BASED ON ACTUAL ARRANGEMENT OR EQUIVALENT HYDRAULIC DATA.

   [X] ---- INDICATES THE DATA IS NOT SIGNIFICANT.

3. MODE B1 IS THE LIMITING MODE FOR HEAT LOAD. HEAT CAPACITY BASED ON K =88.5 KCAL/°C-SEC.

4. [X / Y] ---- INDICATES MAXIMUM (X) AND MINIMUM (Y) VALUES FOR THE MODE SPECIFIED.

5. DASHED LINES INDICATE FLOW DOES NOT PASS THROUGH THESE POINTS.

6. TYPICAL VALUES FOR MAXIMUM SUPPRESSION POOL TEMPERATURE SHOWN. FINAL TEMPERATURE DEPENDS ON INITIAL POOL WATER TEMPERATURE AND POOL WATER VOLUME.

7. THE NPSH AVAILABLE IN MODES A AND C-1, AT A REFERENCE LOCATION 1 METER ABOVE THE PUMP MOUNTING FLOOR MUST EQUAL OR EXCEED 2.4 METERS ASSUMING SATURATION TEMPERATURES OF 100°C AND 182°C RESPECTIVELY THE NPSH AVAILABLE AT THE PUMP SUCTION NOZZLE MUST EQUAL OR EXCEED THIS VALUE PLUS THE DIFFERENCE IN ELEVATION BETWEEN THE REFERENCE LOCATION AND THE CENTERLINE OF THE PUMP SUCTION NOZZLE.

8. TABLE 1 INDICATES VALVE POSITIONS DURING VARIOUS MODES OF OPERATION.

9. THIS TABLE IS FOR REFERENCE ONLY: SEE P&ID. FOR REQUIRED VALUES.

10. THE WEIGHT OF WATER IN THE SHUTDOWN COOLING SUBSYSTEM PIPING, INCLUDING THE HEAT EXCHANGERS AND PUMPS SHALL NOT EXCEED THE VALUE SPECIFIED C41-4010 IN ORDER TO PREVENT DILUTION OF STANDBY LIQUID CONTROL NEUTRON ABSORBER BELOW MINIMUM REQUIREMENTS.

11. HEAT EXCHANGER HEAT REMOVAL AND SPRAY BASED UPON 954 m^3/hr TUBE SIDE FLOW.

12. SOH = 195 METERS REQUIRED MINIMUM AND 220 METERS MAXIMUM.

13. MAXIMUM TUBE SIDE FLOW RATE IS 1130 m^3/H WHICH IS MAXIMUM PUMP RUNOUT FLOW.

14. HEAT EXCHANGER HEAT REMOVAL SHOWN FOR FULL FLOW AND MAXIMUM TEMPERATURE DIFFERENCE.

15. ONLY TWO SUBSYSTEMS ARE REQUIRED AT THIS STAGE OF SHUTDOWN.

16. LOCATIONS 19,20,21 AND 22,33,34 SHOW THE FLOW SPLIT ON LOOPS B AND C WHEN THE WETWELL SPRAY FUNCTION IS MANUALLY INITIATED.

17. ONLY ONE SUBSYSTEM IS REQUIRED FOR THIS MODE OF OPERATION, EITHER SUBSYSTEM B OR SUBSYSTEM C.

SUPPLEMENTAL DOCUMENTS UNDER THE FOLLOWING IDENTITIES ARE TO BE USED IN CONJUNCTION WITH THIS DRAWING.

	MPL NO.
1. RESIDUAL HEAT REMOVAL SYSTEM P&ID	E11-1010
2. NUCLEAR BOILER SYSTEM PFD	B21-1020
3. FUEL POOL COOLING & CLEANUP SYS PFD	G41-1020
4. HIGH PRESSURE CORE FLOODER SYS PFD	E22-1020
5. REACTOR BUILDING COOLING WATER SYSTEM PFD	P21-1020
6. STANDBY LIQUID CONTROL SYSTEM DESIGN SPEC	C41-4010

SUPPORTING DOCUMENTS	MPL NO.
1. PIPING AND INSTRUMENT DIAGRAM SYMBOLS	A10-5030

FIG. 5.4-11

MPL NO. E11-1020

SI APERTURE CARD

EQUIPMENT CLASS. CODE

SIGNATURES	DAY	MO	YR
WB TORRES	16	7	90
FE WILHELMI	9	11	90
GA BAYLIS	13	11	90
W TAFT	9	11	90

SAFETY RELATED THIS ITEM IS OR CONTAINS A SAFETY RELATED ITEM ☐ YES ☐ NO

IEEE CLASS 1E NUCLEAR SAFETY RELATED ☐ YES ☐ NO

Nuclear Energy — GENERAL ELECTRIC COMPANY San Jose CA

DOC TYPE: PFD

RESIDUAL HEAT REMOVAL SYS

FMF ABWR CERT

APPLIED PRACTICES

UNLESS OTHERWISE SPECIFIED TOLERANCES ON: 2 PLACE DECIMALS ± FRACTIONS ± 3 PLACE DECIMALS ± ANGLES ±

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