

MODES

MODE A-FULL FLOW FOR EXCESS AMOUNT OF LEAKAGE AT CHECK VALVE SEAT E11-F031A OR C (REF.1, SH. 1&2).

MODE B-FULL FLOW FOR EXCESS AMOUNT OF LEAKAGE AT CHECK VALVE SEAT E21-F003A (REF.2).

MODE C-NORMAL OPERATION SYSTEM PRESSURIZED. MIN. FLOW RECIRCULATION.

GENERAL NOTES

1. ALL EQUIPMENT AND INSTRUMENT NUMBERS ARE TO BE PRECEDED BY MPL-E21 UNLESS OTHERWISE NOTED. EXAMPLE E21-C002A.
2. FOR WEIGHT & MATERIAL OF PIPE, VALVES & FITTINGS SEE MATERIAL SPEC. SS-6909-1.
3. ALL CHECK & GLOBE STOP CHECK VALVES MUST BE LOCATED CLOSE TO THE CROSS HEADER.
4. JOCKEY PUMP DRAINS & VENTS TO DRW.
5. VALVE F044A NORMALLY OPEN & F044B NORMALLY CLOSED.
6. ALL HIGH POINT VENTS ARE 3/4", AND ALL LOW POINT DRAINS ARE 1" UNLESS NOTED OTHERWISE.

BOUNDARY DIAGRAM NO.: 1E11-B01-04
 FUNCTION(S) NO.: 1E11-01, 1E21-01, 1E21-05
 PREPARED BY: WILLIE JENNINGS
 DATE: 8/20/98
 REVIEWED BY: WILLIAM P EVANS
 DATE: 9/28/98

PROCESS FLOW NOTES

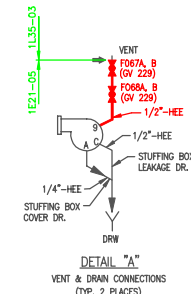
1. FOR PUMP NPSH_{AVAIL} CALCULATIONS:
MAX. TORUS WATER TEMP.= 200°F
TORUS PRESS. = 14.7 PSIA
2. MIN. NPSH_{AVAIL} CALCULATED @ 7 FT.
3. VALVES WILL BE THROTTLED TO MAINTAIN DESIGN FLOWS.
4. WHEN THE CORE SPRAY SYSTEM IS AT TEST MODE THEN SUCTION TO JOCKEY PUMP WILL BE THROUGH (D_g, (D_g), (D_g)).
5. THE JOCKEY PUMPS ARE TO PROVIDE A MINIMUM OF 10 PSIG PRESSURE IN THE MAIN PUMP DISCH. LEGS IN ADDITION TO HEAD PRESSURE FROM WATER COLUMN.
6. THE RESTRICTING ORIFICES ARE DESIGNED TO DROP THE DISCH. HEAD TO A LOW TORUS PRESSURE. (15.7 PSIA)
7. RELIEF VALVES F061 A & B SET PRESSURE SHALL BE 100 PSIG.
8. CAP SUCTION LINE FROM RHR SUCTION AND SPOOL THROUGH SUCTION LINE FROM CORE SPRAY SUCTION UNTIL VALVES F060 A & B, F065 A & B, AND F066 A & B ARE DELIVERED.
9. PUMPS C002 A & B SHALL OPERATE ON EMERGENCY A-C PUMPS

REFERENCES

| REFERENCE | MPL NO. | S.S.I. NO. |
|-------------------------------|---------------|---------------|
| 1. R.H.R. SYS. P&ID | E11-1010 SH12 | H-16329 |
| 2. CORE SPRAY SYS. P&ID | E21-1010 | H-16331 |
| 3. R.H.R. SYS. PROCESS DIA. | E11-1009 | S-15366-15328 |
| 4. CORE SPRAY PROCESS DIA. | E21-1020 | S-15117 |
| 5. SAMPLING SYSTEM P&ID & PFD | P33-1010 | H-16281 |
| 6. PUMP SEAL DMC | E21-C002 A&B | SK-15816 |
| 7. JOCKEY PUMP INSTR. MANUAL | E21-C002 A&B | SK-15110 |
| 8. JOCKEY PUMP OUTLINE | E21-C002 A&B | SK-15109 |
| 9. PIPING & INST. SYMBOLS | A41-1010 | S-15551 |

LEGEND

- EXISTING PIPING FOR E11-1010 AND/OR E21-1010.
- PIPING FOR JOCKEY PUMP SYSTEM.



LICENSE RENEWAL INFORMATION

MPL NO. E21-1050 LVN-F126 ACAD14 HL16328



LICENSE RENEWAL SCREENING FOR INFORMATION ONLY

EDWIN I. HATCH NUCLEAR PLANT UNIT No. 1
 JOCKEY PUMP SYSTEM P & ID AND
 PROCESS FLOW DIAGRAM

Revision: A Date: 1-7-2000
 APPROVED, ISSUED PER LICENSE
 DRAWING CREATED FROM
 H-16329, REV.18, BY IDW

| DATE | REVISION | LOCATION | DOCUMENT NUMBER | REVISION |
|--------|----------|----------|-----------------|----------|
| 10-502 | None | | | A |

MODE A-FULL FLOW TO RHR PUMPS DISCHARGE LEG (FAR SIDE).

| POSITION | A | 0A | 1A | 0A | 2A | 3A | 4A | 5 | 6 | 7 | 9A | 10 | 12 | XA |
|--------------------------|------|----|----|----|----|----|----|----|---|---|----|----|----|----------------------|
| FLOW-G.P.M. | - | 0 | 40 | | | | | 30 | | | 40 | | | 10 |
| PRESSURE-PSIA | 14.7 | | | | | | | | | | | | | |
| TEMP.- °F(MAX.) | 200 | | | | | | | | | | | | | 200 |
| MAX. PRESSURE DROP- FEET | | | | | | | | | | | | | | REQ'D TDH= 121.5 FT. |

MODE B-FULL FLOW TO C.S. PUMP DISCHARGE LEG (FAR SIDE).

| POSITION | A | 0A | 1A | 0A | 2A | 3A | 4A | 5 | 7 | 8 | 9A | 10 | 12 | XA |
|--------------------------|------|----|----|----|----|----|----|----|---|---|----|----|----|--------------------|
| FLOW-G.P.M. | - | 0 | 40 | | | | | 30 | | | 40 | | | 10 |
| PRESSURE-PSIA | 14.7 | | | | | | | | | | | | | |
| TEMP.- °F(MAX.) | 200 | | | | | | | | | | | | | 200 |
| MAX. PRESSURE DROP- FEET | | | | | | | | | | | | | | REQ'D TDH= 126 FT. |

MODE C-RECIRC. TO TORUS (NO FLOW TO PUMP DISCH. LEGS) NEAR SIDE.

| POSITION | A | 0A | 1A | 0A | 2A | 3A | 4A | 9A | 10 | 12 | 14A | XA |
|--------------------------|------|----|----|----|----|----|----|----|----|----|-----|-------------|
| FLOW-G.P.M. | - | 0 | 10 | | | | | 10 | | | | |
| PRESSURE-PSIA | 14.7 | | | | | | | | | | | 15.7 |
| TEMP.- °F(MAX.) | 200 | | | | | | | | | | | 200 |
| MAX. PRESSURE DROP- FEET | | | | | | | | | | | | TDH=130 FT. |