



NOTES:

1. PIPING HIGH POINT VENTS AND LOW POINT DRAINS ARE TO BE ADDED BY BECHTEL AT ALL SUCH HIGH POINTS OR LOW POINTS NOT SERVED BY EQUIPMENT VENTS AND DRAINS.
2. CHEMICAL CLEANING CONNECTIONS, VALVES, ETC. IF REQUIRED, ARE TO BE PROVIDED BY BECHTEL AS NECESSARY.
3. WHERE THERMOCOUPLES ARE DESIGNATED TE-A1A2 ETC., A2 IS A SPARE.
4. FOR LOCATION AND IDENTIFICATION OF INSTRUMENTS, SEE BECO INSTRUMENT LIST M260-1.
5. ALL PIPING AND VALVING IS PROVIDED BY BECHTEL OR BECO UNLESS DESIGNATED BY © (BE - APED SUPPLIED).
6. INSTRUMENTS, INSTRUMENT PIPING AND INSTRUMENT VALVING BEYOND THE ROOT VALVES SHALL BE INSTALLED IN ACCORDANCE WITH 2214-4774B, DESIGN SPECIFICATION/PROCESS INSTRUMENT PIPING AND TUBING INSTALLATION.
7. THIS DRAWING INCORPORATES REVISIONS 1, 2, 3, & 4 TO G.E. DRAWING NO. 117C2235. THE UNNUMBERED INSTRUMENTS ARE FURNISHED WITH THE RECIRCULATION PUMP AND MOTOR.
8. THERMOCOUPLES A-111 & 13 TO BE WIRED OUT THROUGH DRYWELL TO T/C JUNCTION BOX.
9. CLOSED COOLING WATER SYSTEM TO AND FROM RECIRCULATION PUMP AND MOTOR SHALL BE CAPABLE OF CONTINUOUS OPERATION INCLUDING PERIODS OF DRYWELL ISOLATION.
10. REFER TO PIPING SPECIFICATION M300 & M600 FOR PIPING MATERIALS, VALVE CLASSIFICATIONS AND INSTRUMENT PIPING STANDARDS.
11. TE-202-1B TC-C1 ABANDONED IN PLACE.
12. REFER TO PAPS Q-LIST TO IDENTIFY THE Q AND NON-Q COMPONENTS OF THE PUMP MECHANICAL SEAL.

LIST OF PUMP & MOTOR THERMOCOUPLES & ASSOCIATED COMPUTER POINTS

| | | |
|--------------|--|------------------------------|
| TE-A1A2 | - THRUST BEARING, UPPER FACE | REC 120 |
| TE-202-1B | TE-B1,B2 | - THRUST BEARING, LOWER FACE |
| TE-202-1B | TE-C1,C2 | - UPPER GUIDE BEARING |
| TE-202-1B | TE-D1,D2 | - MOTOR WINDING "A" |
| TE-202-1B | TE-E1,E2 | - MOTOR WINDING "B" |
| TE-202-1B | TE-F1,F2 | - MOTOR WINDING "C" |
| TE-202-1B | TE-G1,G2 | - LOWER GUIDE BEARING |
| TE-H | - #2 SEAL CAVITY | REC 128 |
| TE-J | - #1 SEAL CAVITY | REC 126 |
| TE-262-2-11B | - MOTOR BEARING OIL COOLING WATER | |
| TE-262-2-13B | - SEAL CAVITY COOLING WATER | |
| TE-5050-27 | - MOTOR AIR OUTLET | |
| TE-61B | - DRIVE MOTOR OUTBOARD BRG TEMP | REC 090 |
| TE-62B | - DRIVE MOTOR INBOARD BRG TEMP | REC 094 |
| TE-J1B | - GENERATOR OUTBOARD BRG TEMP | REC 098 |
| TE-J2B | - GENERATOR INBOARD BRG TEMP | REC 102 |
| TE-2A | - FLUID DRIVE IMP. OUTBOARD BRG TEMP | REC 110 |
| TE-2B | - FLUID DRIVE IMP. INBOARD BRG TEMP | REC 112 |
| TE-2C | - FLUID DRIVE RUNNER INBOARD BRG TEMP | REC 116 |
| TE-2D | - FLUID DRIVE RUNNER OUTBOARD BRG TEMP | REC 114 |
| TE-F2 | - DRIVE MOTOR WINDING TEMP "A" PHASE (RTD) | REC 082 |
| TE-H2 | - GENERATOR WINDING TEMP "A" PHASE (RTD) | REC 086 |

SYSTEM INTENDED FUNCTION BOUNDARY

COMPONENTS SUBJECT TO AMR

PRIMARY CONTAINMENT PENETRATIONS AMRM-20

| | | | | | |
|-----|----------|---|-----|-----|-----|
| REV | DATE | DESCRIPTION | BY | CHK | APP |
| E17 | 03-15-01 | REVISED PER DON 03-15501 | TEB | AEJ | MLB |
| E16 | 03-15-01 | REVISED FOR PR 98.1035.00 PER DON 07168 | TEB | AEJ | DLJ |
| E15 | 03-15-01 | REVISED FOR PR 97.0490 PER DON 02167 | TEB | AEJ | DLJ |
| E14 | 03-15-01 | REVISED FOR PR 97.0667 PER DON 01512 | TEB | AEJ | DLJ |
| E13 | 03-15-01 | ELECTRONIC CONVERSION PER DON 97-00229 | TEB | AEJ | DLJ |
| E12 | 03-15-01 | REVISED PER FPM 96-04-62 | CTS | YBU | MLB |
| E11 | 03-15-01 | REVISED PER PDC 92-53 | CTS | YBU | MLB |
| E10 | 03-15-01 | REVISED PER PDC 92-58 | CTS | YBU | MLB |
| E9 | 03-15-01 | REVISED PER FPM 93-510-305 | CTS | YBU | MLB |
| E8 | 03-15-01 | REVISED PER PR 93.9407.01 | ALP | JRT | SD |
| E7 | 03-15-01 | PER PHOENIX PROJECT CHANGE RECORD APPENDIX (B-60) | AEJ | N/A | SD |
| E6 | 03-15-01 | REVISED PER PR 93.9407.01 | AEJ | N/A | SD |
| E5 | 03-15-01 | REVISED PER PR 93.9407.01 | AEJ | N/A | SD |
| E4 | 03-15-01 | REVISED PER PR 93.9407.01 | AEJ | N/A | SD |
| E3 | 03-15-01 | REVISED PER PR 93.9407.01 | AEJ | N/A | SD |
| E2 | 03-15-01 | REVISED PER PR 93.9407.01 | AEJ | N/A | SD |
| E1 | 03-15-01 | REVISED PER PR 93.9407.01 | AEJ | N/A | SD |

| | | | | | | |
|-----|----------|-------------|----|-----|-----|-----|
| NO. | DATE | DESCRIPTION | BY | ENG | CHK | APP |
| 0 | 6-10-05 | | | | | |
| 1 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 2 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 3 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 4 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 5 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 6 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 7 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 8 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 9 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 10 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 11 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 12 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 13 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 14 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 15 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 16 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 17 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 18 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 19 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |
| 20 | 06-10-05 | DESCRIPTION | BY | ENG | CHK | APP |