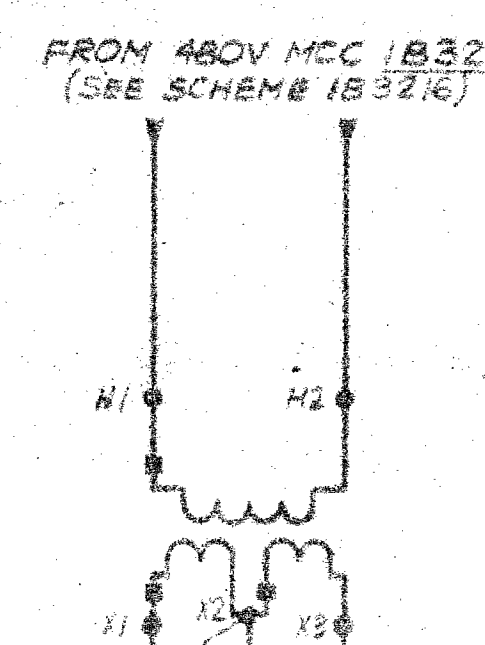
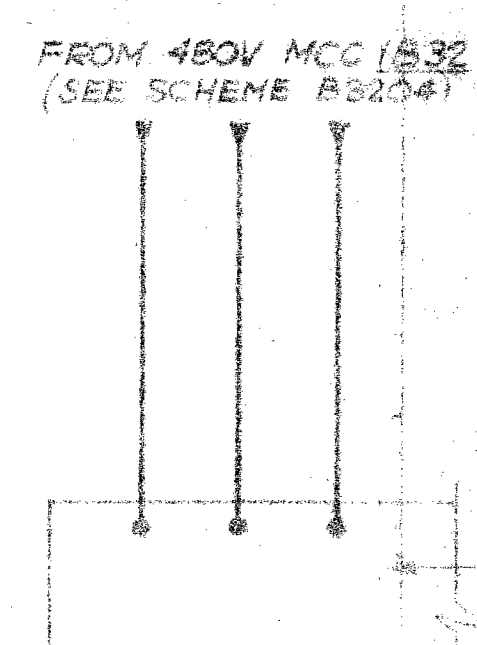
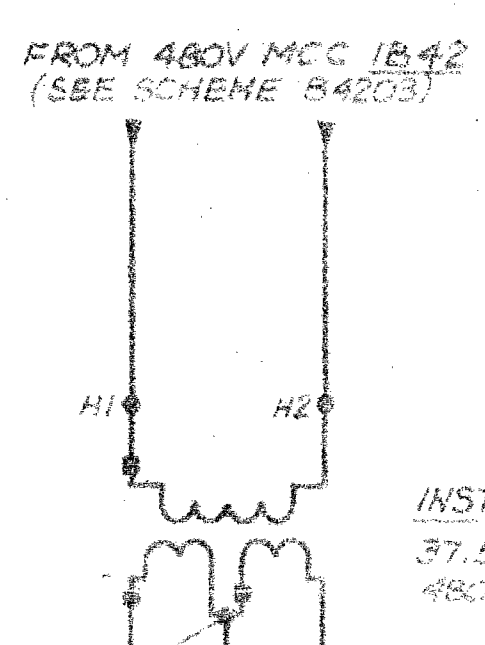


INSTRUMENT AC TRANS (Y)
37.5 KVA, 10 60HZ
480V - 120/240VINSTRUMENT AC TRANSFORMER (Y)
37.5 KVA, 10 60HZ
480V - 120/240V

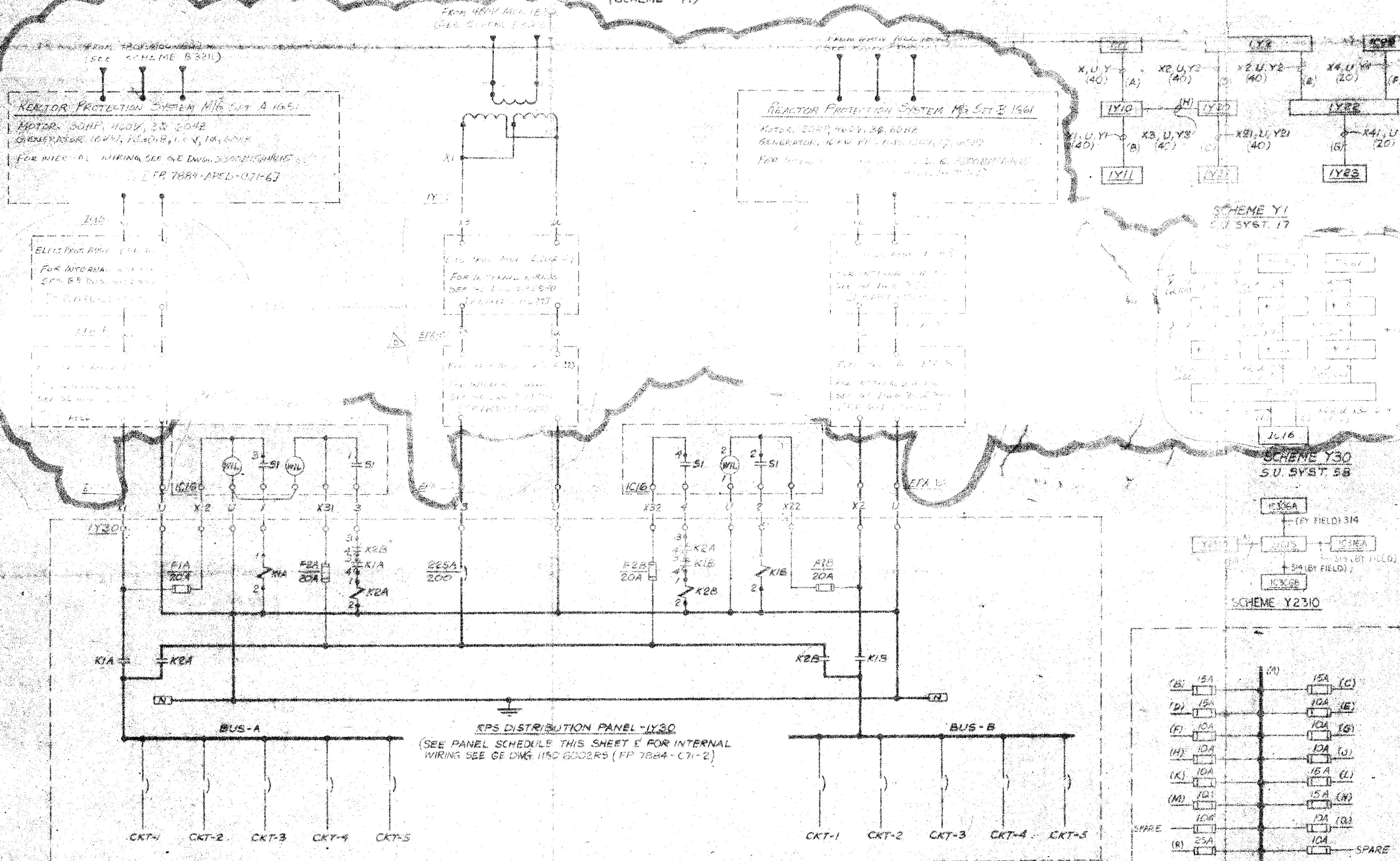
SCHEME Y2132

UNINTERRUPTIBLE AC
110 V 50/60 HZ
SEE DWG E-112, SH. 3SCHEME Y1133
(TYP FOR Y2133)SCHEME Y1107
(TYP FOR Y2107)SCHEME Y1101
(TYP FOR ALL Y11XX SCHEMES)SCHEME Y2101
(TYP FOR ALL Y21XX SCHEMES)INSTRUMENT AC DISTRIBUTION PANEL (Y11)
(120/240V AC, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|--|-------|------------|
| Y1101 | 1 | 100 | REACTOR WATER CLEANUP & REACTOR BENCH BOARD | IC04 | 2-06 |
| Y1102 | 2 | | AREA RADIATION MONITOR CABINET | IC11 | |
| Y1103 | 3 | | PROCESS INSTRUMENT EQUIP VERT BOARD | IC19 | |
| Y1104 | 4 | | REACTOR CONTROL BENCH BOARD | IC05 | |
| Y1105 | 5 | | GEN & PLANT AUX RELAY VERT BOARD | IC31 | |
| Y1106 | 6 | | DIVISION I RHR RELAY VERT BOARD | IC32 | |
| Y1107 | 7 | | DRYWELL COOLING SYSTEM A PANEL | IC18 | |
| Y1108 | 8 | | CRD ACCUMULATOR MONITOR PHIL BANK 1 & 2 | IC54 | |
| Y1109 | 9 | | TIP (REACTOR NEUTRON MAPPING) CONT CAB | IC13 | |
| Y1110 | 10 | | NETEOLPHOL PANEL | IC22 | 2-06 |
| Y1111 | 11 | | AREA 5 PROCESS RADIATION RECORDING VERT BOARD | IC02 | 2-06 |
| Y1112 | 12 | | NUCLEAR STEAM SUPPLY TEMP RECORDING VERTICAL BOARD, DIV. 1 | IC61 | |
| Y1113 | 13 | | FEDWATER & CONDENSATE BENCH BOARD | IC06 | |
| Y1114 | 14 | | TURBINE PLANT INSTRUMENT VERT BOARD | IC03 | |
| Y1115 | 15 | | REACTOR CORE COOLING SYSTEM BENCH BOARD | IC03 | |
| Y1116 | 16 | | REACTOR CORE COOLING SYSTEM AUX. RELAY CUBICLE | IC18A | |
| Y1117 | 17 | | OFF GAS SYSTEM BENCH BOARD | IC24 | |
| Y1118 | 18 | | SPARE | | |
| Y1119 | 19 | | TURBINE BLDG 4 CONTROL RM HVAC A PANEL | IC26 | 2-06 |
| Y1120 | 20 | | REACTOR WATER CLEANUP FILTER DEMIN. SYSTEM FUSE & A | IC02 | 2-06 |
| Y1121 | 21 | | FEDWATER & REACTOR EQUIP VERT BOARD | IC18 | |
| Y1122 | 22 | | REACTOR FUEL ROD SET (FRS) AUX. RELAY CUBICLE WINDING OVERTEMP. RELAYS | IC18A | |
| Y1123 | 23 | | CAD SYSTEM VERTICAL BOARD | IC35A | 2-10 |
| Y1124 | 24 | | TURBINE BENCH BOARD | IC07 | 2-02 |
| Y1125 | 25 | | RADIATION PANEL | IC54 | 2-06 |
| Y1126 | 26 | | SPARE | | |
| Y1127 | 27 | | SPARE | | |
| Y1128 | 28 | | SPARE | | |
| Y1129 | 29 | | SPARE | | |
| Y1130 | 30 | | SPARE | | |
| Y1131 | 31 | | INSTRUMENT EXCESSIVE FLOW | IC29 | 2-10 |
| Y1132 | 32 | | INSTRUMENT EXCESSIVE FLOW | IC29 | 2-10 |
| Y1133 | 33 | | SPARE | | |
| Y1134 | 34 | | SHUTDOWN OUTSIDE CONT RM INST RACK | IC08 | 2-10 |
| Y1135 | 35 | | SPARE | | |
| Y1136 | 36 | | SPARE | | |
| Y1137 | 37 | | SPARE | | |
| Y1138 | 38 | | SPARE | | |
| Y1139 | 39 | | CONTROL TRANSFER UNIT & CENTRAL MULTIPLEX TERMINAL | IN01 | 2-10 |
| Y1140 | 40 | | OFF GAS SAMPLING & DRYWELL RAD MON. | IC18A | 2-06 |
| Y1141 | 41 | | SPARE | | |
| Y1142 | 42 | | SPARE | | |

INSTRUMENT AC DISTRIBUTION PANEL (Y21)
(120/240V AC, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|--|-------|------------|
| Y2101 | 1 | 100 | REACTOR WATER CLEANUP & REACTOR BENCH BOARD | IC04 | 2-06 |
| Y2102 | 2 | | SPARE | | |
| Y2103 | 3 | | SPARE | | |
| Y2104 | 4 | | SPARE | | |
| Y2105 | 5 | | SPARE | | |
| Y2106 | 6 | | DIVISION II RHR RELAY VERTICAL BOARD | IC33 | 2-06 |
| Y2107 | 7 | | DRYWELL COOLING SYSTEM B PANEL | IC18 | |
| Y2108 | 8 | | CRD ACCUMULATOR MONITOR BANK 3 & 4 | IC54 | |
| Y2109 | 9 | | CRD TEMP RECORDER PANEL | IC59 | |
| Y2110 | 10 | | JET PUMP INST VERTICAL BOARD | IC38 | |
| Y2111 | 11 | | AREA 5 PROCESS RADIATION RECORDING VERTICAL BOARD | IC02 | |
| Y2112 | 12 | | REACTOR FUEL ROD SET (FRS) AUX. RELAY CUBICLE WINDING OVERTEMP. RELAYS | IC18A | |
| Y2113 | 13 | | NUCLEAR STEAM SUPPLY TEMP RECORDING VERT BOARD | IC61 | |
| Y2114 | 14 | | SPARE | | |
| Y2115 | 15 | | REACTOR CORE COOLING SYSTEM BENCH BOARD | IC03 | 2-06 |
| Y2116 | 16 | | REACTOR CORE COOLING SYSTEM AUX. RELAY CUBICLE | IC18A | |
| Y2117 | 17 | | SRM-IRM DRIVE CONTROL RELAY RACK | IC06 | |
| Y2118 | 18 | | SPARE | | |
| Y2119 | 19 | | TURBINE BLDG 4 CONTROL RM HVAC B PANEL | IC26 | |
| Y2120 | 20 | | CMD SELECTION RELAY VERTICAL BOARD | IC28 | 2-06 |
| Y2121 | 21 | | FEDWATER & REACTOR EQUIP VERT BOARD | IC18 | |
| Y2122 | 22 | | REACTOR FUEL ROD SET (FRS) AUX. RELAY CUBICLE WINDING OVERTEMP. RELAYS | IC18A | |
| Y2123 | 23 | | CAD SYSTEM VERTICAL BOARD | IC35A | 2-10 |
| Y2124 | 24 | | GEN. AUX. POWER BENCH BOARD | IC06 | 2-06 |
| Y2125 | 25 | | SPARE | | |
| Y2126 | 26 | | SPARE | | |
| Y2127 | 27 | | SPARE | | |
| Y2128 | 28 | | SPARE | | |
| Y2129 | 29 | | SPARE | | |
| Y2130 | 30 | | SPARE | | |
| Y2131 | 31 | | HYDRO CONTROL PANEL (IC23(B)) | IC23 | 2-10 |
| Y2132 | 32 | | VHF RADIO, CLOSED CRT, IV, CTU4 CRT | IN01 | 2-10 |
| Y2133 | 33 | | O2 & H2 SAMPLING & DRYWELL RAD MON. | IC18B | 2-06 |
| Y2134 | 34 | | DRYWELL & TUBUS AHS PRESS (NOTE 4) | IN01A | 2-10 |
| Y2135 | 35 | | SPARE | | |
| Y2136 | 36 | | SPARE | | |
| Y2137 | 37 | | SPARE | | |
| Y2138 | 38 | | SPARE | | |
| Y2139 | 39 | | SPARE | | |
| Y2140 | 40 | | SPARE | | |
| Y2141 | 41 | | SPARE | | |
| Y2142 | 42 | | SPARE | | |

INSTRUMENT AC & UNINTERRUPTIBLE AC DISTRIBUTION SYSTEMS
(SCHEME - Y1)REACTOR PROTECTION AC DISTRIBUTION SYSTEM
(SCHEME Y3C)FUSE PANEL Y21A
(SCHEMES Y21C)
(SUPPLIED BY FIELD)
SEE E-206, ITEM B1FOR WIRE NOS. & CABLE CODE
SEE E-206, ITEM B1SCHEME Y2101
(TYP FOR ALL Y21XX SCHEMES)DISTRIBUTION PANEL Y30 BUS-A
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "A" | IC16 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "A" | IC39 | 2-06 |
| Y303 | 3 | | SPARE | | |
| Y304 | 4 | | INBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "A" | IC39 | 2-10 |

DISTRIBUTION PANEL Y30 BUS-B
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "B" | IC17 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "B" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "B" | IC39 | 2-10 |

DISTRIBUTION PANEL Y30 BUS-C
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "C" | IC18 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "C" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "C" | IC39 | 2-10 |

DISTRIBUTION PANEL Y30 BUS-D
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "D" | IC19 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "D" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "D" | IC39 | 2-10 |

DISTRIBUTION PANEL Y30 BUS-E
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "E" | IC20 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "E" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "E" | IC39 | 2-10 |

UNINTERRUPTIBLE AC DISTRIBUTION PANEL Y22
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y2201 | 1 | 100 | REACTOR WATER CLEANUP & REACTOR BENCH BOARD | IC04 | 2-06 |
| Y2202 | 2 | | SPARE | | |
| Y2203 | 3 | | SPARE | | |
| Y2204 | 4 | | SPARE | | |
| Y2205 | 5 | | SPARE | | |
| Y2206 | 6 | | SPARE | | |
| Y2207 | 7 | | SPARE | | |
| Y2208 | 8 | | SPARE | | |
| Y2209 | 9 | | SPARE | | |
| Y2210 | 10 | | SPARE | | |
| Y2211 | 11 | | SPARE | | |
| Y2212 | 12 | | SPARE | | |
| Y2213 | 13 | | SPARE | | |
| Y2214 | 14 | | SPARE | | |
| Y2215 | 15 | | SPARE | | |
| Y2216 | 16 | | SPARE | | |
| Y2217 | 17 | | SPARE | | |
| Y2218 | 18 | | SPARE | | |
| Y2219 | 19 | | SPARE | | |
| Y2220 | 20 | | SPARE | | |
| Y2221 | 21 | | SPARE | | |
| Y2222 | 22 | | SPARE | | |
| Y2223 | 23 | | SPARE | | |
| Y2224 | 24 | | SPARE | | |
| Y2225 | 25 | | SPARE | | |
| Y2226 | 26 | | SPARE | | |
| Y2227 | 27 | | SPARE | | |
| Y2228 | 28 | | SPARE | | |
| Y2229 | 29 | | SPARE | | |
| Y2230 | 30 | | SPARE | | |

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y2201 | 1 | 100 | REACTOR WATER CLEANUP & REACTOR BENCH BOARD | IC04 | 2-06 |
| Y2202 | 2 | | SPARE | | |
| Y2203 | 3 | | SPARE | | |
| Y2204 | 4 | | SPARE | | |
| Y2205 | 5 | | SPARE | | |
| Y2206 | 6 | | SPARE | | |
| Y2207 | 7 | | SPARE | | |
| Y2208 | 8 | | SPARE | | |
| Y2209 | 9 | | SPARE | | |
| Y2210 | 10 | | SPARE | | |
| Y2211 | 11 | | SPARE | | |
| Y2212 | 12 | | SPARE | | |
| Y2213 | 13 | | SPARE | | |
| Y2214 | 14 | | SPARE | | |
| Y2215 | 15 | | SPARE | | |
| Y2216 | 16 | | SPARE | | |
| Y2217 | 17 | | SPARE | | |
| Y2218 | 18 | | SPARE | | |
| Y2219 | 19 | | SPARE | | |
| Y2220 | 20 | | SPARE | | |
| Y2221 | 21 | | SPARE | | |
| Y2222 | 22 | | SPARE | | |
| Y2223 | 23 | | SPARE | | |
| Y2224 | 24 | | SPARE | | |
| Y2225 | 25 | | SPARE | | |
| Y2226 | 26 | | SPARE | | |
| Y2227 | 27 | | SPARE | | |
| Y2228 | 28 | | SPARE | | |
| Y2229 | 29 | | SPARE | | |
| Y2230 | 30 | | SPARE | | |

DISTRIBUTION PANEL Y30 BUS-F
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "F" | IC21 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "F" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "F" | IC39 | 2-10 |

DISTRIBUTION PANEL Y30 BUS-G
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "G" | IC22 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "G" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "G" | IC39 | 2-10 |

DISTRIBUTION PANEL Y30 BUS-H
(120V, 10 60/60)

| SCHEME NO. | CRK NO. | CRK RATING AMP/AMP | LOAD DESCRIPTION | LOC. | CABLE CODE |
|------------|---------|-----------------------|---|------|------------|
| Y301 | 1 | 100 | TRIP SYSTEM - "H" | IC23 | 2-06 |
| Y302 | 2 | | POWER RANGE NEUTRON MONITOR CABINET "H" | IC39 | 2-06 |
| Y303 | 3 | | PROCESS RADIATION MONITORS VERT BOARD | IC10 | 2-10 |
| Y304 | 4 | | OUTBOARD VALVE RELAY VERTICAL BOARD | IC6 | 2-10 |
| Y305 | 5 | | RADIATION MONITOR CABINET "H" | IC39 | 2-10 |

POOR ORIGINAL

FOR DCR 1044

USE ONLY

REVISOR'S NAME

DATE

BY

DATE

BY

BECHTEL

DUANE ARNOLD ENERGY CENTER - UNIT NO. 1

IOWA ELECTRIC LIGHT AND POWER COMPANY

CEDAR RAPIDS, IOWA

INSTRUMENT AC UNINTERRUPTIBLE AC

E-206, ITEM B1

E-206, ITEM B1

E-206, ITEM B1