RC=CEL:155.100IFORMATS.CEL AC=E7749

VENT TO ATMOSPHERE

FROM RELIEF VALVES M-014 (C-4)

FROM PSV-1656 M-020C (D-9)

FROM PSV-2085 M-020C (A-1)

4"-HBD-141 (D) AS223 4"-HBD-343 20 8"-HBD-285

16"-HBD-285 10"-HBD-285 AS1653A PSV 1653A

10"-HBD-285 AS1653B PSV 1653B (D) (D)

6"-HBD-201 M-020C (J-4)

6"-HBD-41 8"-HBD-41 6"-HBD-41

12"-HBD-37 16"-HBD-37 12"-HBD-37 50 PSIG 10"-HBD-37 6"-HBD-37

LR NOTE B

6"-HBD-37 M-020A (E-2) 1"-HBD-349 M-020A (E-4)

ST 84

AS416 1" AS384 (D)

ST 53

6"-HBD-40 (D) AS516 6"-HBD-40 4"-HBD-39 (V) AS495 AS297 3"-HBD-39 AS126 3" AS354 AS354A (D)

M-020C (B-71) M-020C (B-81)

TO CONDENSER HOTWELL HEATING

M-006F (J-9) M-006F (J-1) TO L.O. COOLER WASH-UP M-005C (C-12) TO DOMESTIC WATER HEATER M-011 (A-2)

FROM HIS-5215 M-021(F-3) 3" 1" AS387 (D) SD FROM TC-1685 M-021 (E-4)

AS76 AS77 F.G. AS1685A TV 1685A F.O. SV 1685A

FROM HIS-5216 M-021(G-3) 3" 1" AS388 (D) SD FROM TC-1685 M-021 (E-4)

AS74 AS73 F.G. AS1685B TV 1685B F.O. SV 1685B

6"-HBD-41 3"-HBD-41 AS78 AS75

LG 3728 E54-1 2½" AS3728A AS1694 PI 1694 AS299 (SD)

LG 3729 E54-2 2½" AS3729A AS2069 PI 2069 AS302 (SD)

TX PX (V) AS298 AS301

ST 37 ST 38 ST 89 ST 103

STATION HEATING WATER HEAT EXCHANGERS 1-1 & 1-2

¾"-HBD-59 1"

3"-HBD-59 4"-HBD-59 AS441 AS233 8"-HBD-49

FROM ST-12 M-020C (C-10) 1"-HBD-355 FROM ST-30 M-014 (F-2) ¾"-HBD-357

FROM DOMESTIC WATER HEATER M-011 (C-2) 2"-HBD-63

(V) AS496 (SD) AS455 ¾"-HBD-350 FROM ST-31 M-020C (C-8)

(V) AS454 AS240 1½"-HBD-239

(SD) AS248 (V) AS174 (V) AS221 4"-HBD-238 2"-HBD-65 FROM ST-93 M-020C (H-6) 1"-HBD-121

3"-HBD-48 M-020B (H-1)

4"-HBD-411 AS422 (V) AS421 AS3848B

STATION HEATING HEAT EXCHANGER DRAIN TANK T152 587 GAL. (SEE NOTE 6)

LG 3847 AS3847B AS3847A LSHH 3848 LSH 3848 LSL 3848 LAHH 3848 HIS NP1911 PI 3850 AS3850 AS3848A 3"-HBD-410 AS423 AS425 AS427 P191-1

(SD) AS420 HIS NP1912 AS424 AS426 AS428 AS3852 P191-2 PI 3852

STATION HEATING HEAT EXCHANGER DRAIN TANK PUMPS P191-1 & 2

2"-HBD-412 6"-HBD-60 2"-HBD-63

FROM ST-8 M-004B (E-5) FROM ST-9 M-004B (E-9) FROM ST-89 M-020C (C-5) FROM ST-40 M-017C (E-12) FROM ST-129 M-020C (D-5) M-022A (K-9)

LR NOTE B TUNNEL

M-020A (H-12) 2"-HBD-85 2½"-HBD-85 4"-HBD-411 2"-HBD-351 (V) AS514 2"-HBD-85 AS550 (D) AS528 AS529 AS524

1½"-HBD-244 AUX. BOILER COND. RECEIVER VENT CONDENSER E-195 1½"-HBD-244 AS471

4"-HBD-244 FROM LAH-1687 M-020B (H-2) LAH L024 L024 PI 6365 AS5363 LAH 2077 1½"-HBD-495 M-009A (E-10) 1½"-HBD-494 M-009A (F-5) 4"-HBD-244 M-020C (K-7)

TO OA-0009 M-020C (D-2)

5 PSIG CONDENSATE RECEIVER 1-1 T112 120 GAL. (SEE NOTE 6)

LG 2587 AS2587B AS2587A AS2077B AS2077A LSHH 2077 LSH 2077 LSL 2077 HIS NP1391 PI 1765 AS1765 2"-HBD-65 AS189 AS191 3"-HBD-64 AS187 1½" P139-1 1"-HBD-244 AS186 (SD)

5 PSIG CONDENSATE PUMPS 1-1 & 1-2

PI 1775 AS1775 HIS NP1392 AS188 1½" P139-2 AS190 AS192 3"-HBD-64 2"-HBD-65

1"-HBD-352 FROM ST-29 M-004C (A-6) FROM ST-6 M-004D (A-5)

AS408 AS404 AS2712A

FLASH TANK 1-1 T113 950 GAL. (SEE NOTE 6)

F.O. AS2067 HV 2067 ZS 2067 SV 2067 HIS NV2067 LG 2712 PI 2712 AS2712C AS2712B TRAP HEADER

AS2082B AS2082A LSHH 2082 LSH 2082 LSL 2082 LAH 2082 HIS NP1661 PI 1496 (SD) PDI 4847 AS5547 AS5545 AS5846 AS5847

2"-HBD-70 AS197 (SD)

6"-HBD-173 AS204 P166-1 4" 3" AS546 (D) AS206 AS208

HIS NP1662 AS402 PDI 4848 AS5548 AS5848 AS5548 AS5847 AS5547 AS5549 (D) P166-2 PI 1498 AS1498 AS207 AS209 4"-HBD-238 AS205 AS403 AS268

FLASH TANK PUMPS 1-1 & 1-2

SV 2080 HIS NV2080 HV 2080 ZS 2080 F.O. AS2080 F.O. AS244 (D) AS229

AS441 AS106 4"-HBD-238 M-020C (J-11) 4"-HBD-238 M-006F (H-13) TO DEAER. HTR. ¾"-HBD-238 AS5458 TO M-042A (A-3) SAMPLING SYSTEM

2"-HBD-63 4"-HBD-60 2"-HBD-60 3"-HBD-60 AS2081 PSV 2081 8"-HBD-54 M-020C (E-9) 6"-HBD-60 AS184 AS183 8"-HBD-161 M-004C (C-4) TO FW HEATER E2

4"-HBD-52 AS234 AS313 (V) AS193 M-020C (E-13) VENT L.O. AS138 2"-HBD-243 AS434 6"-HBD-243 M-020B (C-3) LAH 2082

1" VACUUM BREAKER

AUXILIARY BOILER COMBUSTION AIR HEATING COILS

E92 ½" VACUUM BREAKER AS63 AS62 AS59 AS58 AS65 AS64 AS61 AS60 ST 113 ST 114 ST 94 ST 95 DIRT POCKET (TYP.) 3"-HBD-62 1½"-HBD-63 3"-HBD-63(TYP.)

4"-HBD-62 6"-HBD-62 5 PSIG 8"-HBD-62 AS2068A PIC 2068 PV 2068 AS2068 F.O. AS55 AS54 AS53 AS90 AS69 (SD) 4" 3"-HBD-86 6"-HBD-86 M-020C (E-81)

2"-HBD-63 FROM ST-123 M-020C (B-21)

8"-HBD-62 VENT AS198

FROM HV-958 M-004C(E-2) SV 3748 FROM G.E. AIR RELAY DUMP VLV. HIS NV3748 ZS 3748 HV 3748 F.O. AS3748 F.O.

E74-1 E74-2 AS557 AS444 AS445 AS446 AS5535 AS543 1½"-HBD-62 2½"-HBD-62 ¾" (SD) 1½"-HBD-62 ¾"-HBD-61 ¾"-HBD-62 ST 64 ST 87 ST 65 1"-HBD-61 AS249

AUXILIARY BOILER ROOM UNIT HEATERS 1-1 & 1-2

NOTES:
1. FOR NOTES SEE DRAWING M-020A.

LR NOTES:

A. FOR GENERAL LICENSE RENEWAL NOTES REFER TO LR-M001-01.

B. COMPONENTS BEYOND THE HIGHLIGHTING ARE IN THE TURBINE BUILDING OR THE WATER TREATMENT BUILDING, AND THEREFORE NOT IN SCOPE.

LICENSE RENEWAL BOUNDARY DRAWING
LR-M020D REV. 0

SYSTEMS SHOWN ON THIS DRAWING:
24: NONSAFETY AFFECTING SAFETY

THIS DRAWING REV.0 SUPERSEDES IN PART DRAWING M-020 REV.47. WORK THIS DRAWING WITH M-020A, M-020B AND M-020C.

BECHTEL ASSOCIATES PROFESSIONAL CORPORATION (OHIO)
GAITHERSBURG, MARYLAND

DAVIS-BESSE NUCLEAR POWER STATION UNIT NO.1
THE TOLEDO EDISON COMPANY

PIPING & INSTRUMENT DIAGRAM
TURBINE BUILDING
AUXILIARY STEAM SYSTEM

JOB NO.	DRAWING NO.	REV.
12501	M-020D	20

REF DGN=DS11 . 1 . . DGN=TYPIDS\M020D.DGN LEVELS 1 2 3 5 6 7 8 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255

DB 11-05-03 14 34X44 ANSI D SIZE PSC= 11

01D27