RC=CEL:[55,100]FORMATS.CEL AC=E7749

STOP VALVES
CONTROL VALVES
STEM SEAL LEAK-OFF
STEAM SEAL HEADER
H.P. TURBINE 1-1
L.P. TURBINE 1-1
L.P. TURBINE 1-2
S.P.E. FANS 1-1 & 1-2
STEAM PACKING EXHAUSTER 1-1
26 GAL. (SEE NOTE 12)
SPE DRAIN TANK 1-1
COMBINED INTER. VALVE (TYP.)
H.P. CONDENSER 1-1
L.P. CONDENSER 1-2
E7-1
E7-2
K1
T41
E12
C8-1
C8-2

24" MAIN STM. LINE (TYP.)
28" MAIN STEAM INLET PIPING (TYP.)
36" MAIN STEAM LINE SEE M-003B (C-4)
36" MAIN STM. SEE M-003B (C-3)
12"-EBD-1
1½"-EBD-25
1"-EBD-25
2"-EBD-1 (TYP.)
1½"-EBD-1 (TYP.)
1½"-EBD-57
6"-EBD-24
1½"-EBD-162
1"-HBD-110
24"-HBD-110
2"-HBD-274
6"-HBD-159
6"-HBD-154
2"-HBD-276
2"-HBD-278
1½"-HBD-278
2"-HBD-161
2"-HBD-113
1"-HBD-109
1"-HBD-307
2"-HBD-157
1"-GBD-31
6"-GBD-31
1"-HBD-114
2"-HBD-15T FROM ST-45
¾"-HBD-311
2"-HBD-156
2½"-HBD-205
4"-HBD-277
3"-HBD-126
3"-HBD-130
6"-HBD-155
1½"-HBD-288 FROM TURB. BY-PASS LINE DRAINS
1½"-HBD-288 FROM TURB. BY-PASS LINE DRAINS
1½"-HBD-508
1½"-HBD-162
1½"-HBD-108
2½"-HBD-58
1"-HBD-129
10"-HBD-128
3"-HBD-130
1"-HBD-127
2"-HBD-1
12"-EBD-1
6"-HBD-154
2"-HBD-27
2"-EBD-1
1"-HBD-242
8"-HBD-110
10"-HBD-242
2"-HBD-124
1"-HBD-160
¾"-GBD-38
¾"-GBD-36
2"-HBD-276
3"-HBD-259
1"-GBD-4
2"-HCD-163
1"-HBD-289
1"-HBD-161
¾"-HBD-155
¾"-HBD-154
2"-HBD-124
1"-HBD-160
¾"-GBD-38
¾"-GBD-36
6"-HCD-170
1"-HBD-109
2"-HBD-276
2"-HBD-161
1"-HBD-161
2"-HBD-124
6"-HBD-154
2"-HBD-276
2"-HBD-278
1½"-HBD-278
2"-HBD-161
2"-HBD-113
1"-GBD-31
6"-GBD-31
1"-HBD-114
2"-HBD-15T FROM ST-45
¾"-HBD-311
2"-HBD-156
2½"-HBD-205
4"-HBD-277
3"-HBD-126
3"-HBD-130
6"-HBD-155
1½"-HBD-288 FROM TURB. BY-PASS LINE DRAINS
1½"-HBD-288 FROM TURB. BY-PASS LINE DRAINS

FROM GE AIR RELAY DUMP VALVE
FROM GE AIR RELAY DUMP VALVE (TYP.)
BEFORE SEAT DRAIN (TYP.)
BEFORE SEAT DRAIN
WARM-UP
STEM SEAL LEAK OFF
EQUALIZING LINE
TO H.P. TURBINE EXH. PIPE
M-003B (D-5)
TO SSH HEADER
THIS DWG(J-6)
THIS DWG(G-6)
THIS DWG(B-1)
THIS DWG(G-1)
FROM ZS-2300A N-024A (F-3)
FROM ZS-2302A N-024A (F-3)
FROM ZS-2301A N-024A (F-3)
FROM ZS-2303A N-024A (F-3)
FROM REHEATER
WASTE WTR. & OIL DRAIN
#1 STM. SEAL LEAKOFF (INT.)
#2 STM. SEAL LEAKOFF (INT.)
#1 STM. SEAL LEAKOFF (RHT)
#2 STM. SEAL LEAKOFF (RHT)
⅜" INTERNAL ORIFICE
¼" INTERNAL ORIFICE
OWNER
OWNER LOOP SEAL
FROM NFPT SEALS
FROM MAIN STM. LINE DRAINS
M-003A (G-8)
FROM TRAP ST-66 M-003A (G-3)
FROM TRAP ST-67 M-003A (G-6)
2ND STAGE RHT. LOW POINT DRAIN M-003B (B-4)
FROM TRAP ST-44 M-003A (H-5)
FROM TRAP ST-17 N-004D (E-4)
FROM TRAP ST-18
FROM TRAP ST-19
FROM AUX STEAM HEADER N-020C (C-11)
TO HTRS E-1-1 & -2
TO CNDS TANK T112
FROM CROSS-AROUND DRAINS M-003B (F-7)
FROM HEATER E5 EXT. LINE START-UP DRAIN M-004B (D-8)
FROM MOIST. SEP. RHTR. START-UP DR M-005 (E-12)
FROM MOIST. SEP. M-005 (E-2)
FROM 2ND STAGE RHT. LINE DRAINS M-003B (A-3)
FROM TRAPS ST-121,ST-125 M-003C (F-7)
FROM TRAPS ST-90,ST-131,ST-139 M-003C (G-6)
FROM TRAPS ST-39,ST-132 M-003C (E-5)
FROM TRAPS ST-133,ST-134 M-003C (G-8)
FROM TRAPS ST-137,ST-138 M-003C (F-10)
FROM TRAP ST-26 M-014 (G-2)
FROM TRAP ST-75 M-014 (K-11)
CHEMICAL CLEAN. CONN.
FROM TRAP ST-127 & ST-128 M-004C (G-4)
FROM ST-41 & ST-42 M-003A (J-6)
FROM ST-43 M-003A (J-7)
M-022B (H-1)
M-022B (A-2)
M-022B (E-3)
M-022B (B-6)
M-022B (A-6)
M-022B (B-11)
M-022B (G-4)
M-022B (G-3)
M-022B (F-6)
M-022B (H-12)
M-022B (K-3)
M-022B (F-2)
M-004C (G-4)
M-003B (K-4)
M-004B (D-8)
M-005 (E-12)
M-005 (E-2)
M-003B (C-7)
M-003B (A-3)
M-003A (H-7)
M-022B (F-6)
M-003C (D-3)
M-003C (D-9)
M-014 (G-2)
M-014 (K-11)
M-003C (F-7)
M-003C (G-6)
M-003C (E-5)
M-003C (G-8)
M-003C (F-10)
M-020D (H-3)
M-004D (E-4)
M-020C (C-11)
THIS DWG(A-3)
THIS DWG(F-2)
THIS DWG(D-2)
THIS DWG(B-5)
S/I BOUNDARY SHOWN ON FSK-M-HBD-27-7-H
ANCHOR SHOWN ON FSK-M-HBD-277-15-H
TO CNDS TANK T112
TO HTRS E-1-1 & -2

NOTES:
1. FOR ADDITIONAL NOTES SEE DWG. M-022B
2. WITH THE ELIMINATION OF THE WASTE WATER & OIL DRAIN LINES FROM THE BEARING CONES, PENETRATIONS 103 HAVE BEEN PERMANENTLY SEALED.
3. WITH THE ELIMINATION OF THE WASTE WATER & OIL DRAIN LINES FROM THE BEARING CONES, THE DRAINS HAVE BEEN CAPPED.

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

LICENSE RENEWAL BOUNDARY DRAWING
LR-M022A REV. 0

SYSTEMS SHOWN ON THIS DRAWING:
09: MAIN STEAM

THIS DRAWING REV.0 SUPERSEDES IN PART DRAWING M-022 REV.35. WORK THIS DRAWING WITH M-022B.

BECHTEL ASSOCIATES PROFESSIONAL CORPORATION (OHIO)
GAITHERSBURG, MARYLAND

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

PIPING & INSTRUMENT DIAGRAM
MAIN TURBINE
GLAND STEAM SEAL & DRAIN SYSTEM

JOB NO.	DRAWING NO.	REV.
12501	M-022A	17

DB 01-14-08 34X44 "C" SIZE

REF DFN=0511 . . DFN=I:/PIDS/M022A.DGN

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