



- FCF: 238 X 139AB G11-1010
- NOTES**
- INCUMBING PIPING TO SUMPS SHALL TERMINATE BELOW LOW WATER LEVEL TO PROVIDE A WATER SEAL UNLESS OTHERWISE SHOWN. OFF GAS LINE DRAINS SHALL BE SEALED AS ABOVE OR WITH LOOP SEAL SUFFICIENT TO PREVENT OFF GASES FROM ENTERING SUMP.
 - GE PIPING CODES ARE DEFINED AS FOLLOWS:
(REF 13) SEE GE PRESSURE INTEGRITY SPEC #A61-4030 (22A1495AB) AND NOTE 17 ON THIS DRAWING.
U=304 SS TUBING BWG GAGE 18
V=AC/AH-D
W=AE-B
X=AF-C
Y=AFX-C (316SS)
Z=AE-C
XX=AF-D
ZZ=AE-D
EXAMPLE: AE=PIPE MATERIAL & PRESSURE CLASS
B=QUALITY LEVEL CLASSIFICATION
 - SYSTEM DESIGN PRESSURE 150 PSIG @ 212 F°
 - ALL AIR OPERATED VALVES ARE SHOWN IN SHELF POSITION UNLESS OTHERWISE NOTED.
 - FOR PUMPS WITH TWO PIS NUMBERS, THE SECOND NUMBER IS USED ON GE DOCUMENTS.
 - ALL MOTOR & SOLENOID OPERATED VALVES, CENTRIFUGE AND LIGHTS SHALL BE PROVIDED WITH ONE SET OF STATUS INDICATING LIGHTS LOCATED AT THE OPERATOR UNLESS OTHERWISE NOTED.
 - DELETED
 - FOR LOCATION & IDENTIFICATION OF INSTRUMENTS SEE CENTRAL COMPONENT DATABASE (CCDB).
 - UNLESS OTHERWISE INDICATED, SINGLE ALARMS AND INDICATING LIGHTS ARE LOCATED IN RADWASTE CONTROL ROOM, WHERE TWO ALARMS OR LIGHTS ARE SHOWN, ONE IS IN RADWASTE CONTROL ROOM AND ONE IN MAIN CONTROL ROOM.
 - EQUIPMENT DRAINS & SUMP SEALS SHALL BE ROUTED TO EQUIPMENT DRAIN OR FLOOR DRAIN SYSTEM IN ACCORDANCE WITH DESIGN SPEC SD. RADIOACTIVE SLUDGE WILL NOT FLOW FREELY ACROSS THE FLOOR, UNLESS OTHERWISE NOTED.
 - UNLESS OTHERWISE SHOWN:
ALL INSTRUMENT PIS NUMBERS ARE PREFIXED BY G11
ALL VALVE & EQUIPMENT PIS NUMBERS ARE PREFIXED BY G1100
 - FLUSHING CONNECTIONS AND TEMPORARY STRAINER SCREENS SHALL BE PROVIDED ON THE SUCTION SIDE OF ALL PUMPS IN ACCORDANCE WITH MPL ITEM NO. A61-4020 SEC 9.
 - PIPE SIZES SHOWN ON THIS DRAWING ARE APPROXIMATE EXCEPT AT POINTS OF CONNECTION WITH APEX SUPPLIED EQUIPMENT OR PIPING. THE PIPING DESIGNER SHALL CHECK AND ADJUST PIPE SIZE IN ACCORDANCE WITH HIS PIPING LAYOUT FOR CONFORMANCE WITH THE SYSTEM DESIGN SPEC AND PROCESS DIAGRAM.
 - UNLESS IDENTIFIED WITH AN 'M' ALL INSTRUMENT SYMBOLS ARE GE-SEE REFERENCE 4(EDISON)
 - AN 'M' INDICATES EDISON INSTRUMENT SYMBOL-SEE REFERENCE 4(EDISON)
 - NUMBERS THUS [2335] INDICATE MECH. PIPING ISOMETRIC FOUR(4) LAST DIGITS, LD OR LC WITHIN A BOX INDICATES VALVE LOCKED POSITION EITHER LOCKED OPEN OR LOCKED CLOSED.
 - NEW PIPINGS FLAGGED AS [] ARE DESIGNED PER ANSI B31.1, UNDER RADWASTE MODIFICATION PROGRAM BY NUS CORP. (SEE GE-S-30776) THE NEW PIPINGS ARE CLASSIFIED PER NUS MATL. CODE (DECD FILE R3-854)
 - ORIGINAL QUALITY GROUP CLASSIFICATION IS GENERALLY SHOWN ON P&IDs AND PIPING ISOMETRICS. REPLACEMENT COMPONENT/PIPING CLASSIFICATION IS PER UFSAR TABLE 3.2-1, ITEM XVIII AND UFSAR TABLE 11.2-6.
 - AT THE BOUNDARY OF SAFETY CLASS '3' (GROUP C) TO ANY LOWER SAFETY CLASS, NO VALVES ARE NECESSARY IF FAILURE OF THE LOWER CLASS COMPONENT WILL NOT RESULT IN LOSS OF SAFETY FUNCTION OF THE HIGHER CLASS COMPONENT OR UNCONTROLLABLE RELEASE TO THE ENVIRONMENT OF GASES ACTIVITY NORMALLY REQUIRED TO BE HELD IN FOR DECAY.
 - FOR SYSTEM FUNCTIONAL OPERATING SKETCH SEE DRAWING 6M721-5710-1

- GENERAL ELECTRIC REFERENCE DOCUMENTS**
- | REF. NO. | DESCRIPTION | G.E. MPL ITEMS |
|----------|--|----------------|
| 1. | P&ID CRD HYDRAULIC SYS | C11-1010 |
| 2. | IED REACTOR PROTECTION SYS | C71-1010 |
| 3. | IED PROCESS RADIATION MON. | D11-1010 |
| 4. | P&ID RESIDUAL HEAT REMOVAL SYS | E11-1010 |
| 5. | RADWASTE SYSTEM FCD | G11-1030 |
| 6. | P&ID REACTOR WATER CLEANUP SYS | G33-1010 |
| 7. | P&ID FUEL POOL COOLING & CLEANUP SYS | G41-1010 |
| 8. | P&ID REAC BLDG CLOSED C.V. SYS | BY OTHERS |
| 9. | P&ID CONDENSATE TREATMENT SYS | BY OTHERS |
| 10. | DELETED | |
| 11. | PRESSURE INTEGRITY SPEC | A61-4030 |
| 12. | PLANT REQUIREMENTS | A61-4020 |
| 13. | PIPING & INSTRUMENT SYMBOLS | A41-1010 |
| 14. | PROCESS INSTRUMENT PIPING & TUBING INSTALLATION SPEC | A61-4070 |
| 15. | REAC WATER CLEANUP FILTER DEMIN DEVICE LIST | G33-2002 |
| 16. | NUCLEAR BOILER FCD | B21-1030 |
| 17. | FUEL POOL FILTER/DEMIN SYS | G41-2001 |
| 18. | P&ID CORE SPRAY SYSTEM | E21-1010 |
| 19. | NUCLEAR BOILER LEAK DETECTION SYS DESIGN SPEC | A61-4040 |
| 20. | RADWASTE ELEMENTARY DIAGRAM | G11-1040 |
- DETROIT EDISON REFERENCE DOCUMENTS**
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|----|----------------------------------|------------|
| 1. | TRIP POINTS AND LEVEL ALARMS | I-2259-1 |
| 2. | RADWASTE ELEMENTARY DIAGRAM | I-2255-1 |
| 3. | RADWASTE MOTOR SCHEMATICS | I-2251-1 |
| 4. | PIPING AND INSTRUMENT SYMBOLS | FILE R1-25 |
| 5. | LEGEND OF SYMBOLS & INST. IDENT. | M-2001 |
| 6. | DELETED | |

- 6M721-2031**
LATEST REVISION
- | NO. | DESCRIPTION | REFERENCE |
|-----|--|-----------|
| 7. | DIAGRAM-FLOOR DRAINS-TURB. HSE. | M-2535 |
| 8. | DIAGRAM-EQUIP. DRAINS-TURB. HSE. | M-2534 |
| 9. | DIAGRAM-FLOOR DRAINS-REACTOR BLDG. | M-2224 |
| 10. | DIAGRAM-EQUIPMENT DRAINS-REACTOR BLDG. | M-2223 |
| 11. | DIAGRAM-FLOOR DRAINS-R/W BLDG. | M-2551 |
| 12. | DIAGRAM-EQUIPMENT DRAINS-R/W BLDG. | M-2550 |
| 13. | DIAGRAM-LUBE OIL TRANSFER & WASTE | M-2042 |

THIS IS A MICROSTATION PRODUCED DRAWING. CHANGES OR REVISIONS MUST BE BROUGHT TO THE ATTENTION OF THE PLANT ENGINEERING DESIGN GROUP TO ENSURE THAT CONFIGURATION CONTROL IS MAINTAINED.

NON-NUCLEAR SAFETY RELATED

INC. CODE	DESCRIPTION	DATE
T	CHANGE DOCUMENT	

PREPARED BY	DATE	CHECKED BY	DATE

APPROVED BY	DATE	OTHER APPROVALS	DATE

INC. CODE	DESCRIPTION	DATE
6M721-2031	SUMP PUMP DIAGRADWASTE SYS SH 1	3.31.14

APERTURE CAMP TITLE: SMP PMP DIAG RADWASTE SYS SH 1
PLANT IDENTIFICATION SYSTEM NUMBER: G1100
ARMED RECIPIENT #
DOCUMENT TYPE CODE: DDDMEC
NUC OPS FILE NO: 1801
DATE ISSUED TO IS: 3.31.14
DRAWING NUMBER: 6M721-2031
REV: AN

THIS DRAWING WAS REFORMATTED BY MICROSTATION AT REVISION 'A'. ALL PREVIOUS APPROVAL SIGNATURES ARE ON FILE ON MICROFILM IN DOCUMENT CONTROL.

OTHER REVISIONS:
PER MC019 STEP 3.12, REMOVED ALT. I.D. (V-NUMBERS) AND REPLACED WITH APPROVED PIS NUMBERS. NO CLOUDING WAS DONE FOR CLARITY.
REF 13-106-125, REV. 9
PREPARED BY: C. BYRD
DATE: 3-16-14
CHECKED BY: [Signature]
DATE: 3/16/14
APPROVED BY: [Signature]
DATE: 3/16/14