REVISIONS

0
DRAWN BY: JLB
DATE: 3-6-07
PREPARED BY: RAB
DATE: 3-6-07
REVIEWED BY: SRM
DATE: 3-12-07

1
REVISED (a)(1) - (a)(2) BOUNDARIES FOR 121 & 122 SFP HX's

DRAWN BY: JLB
DATE: 7-23-07
PREPARED BY: WJI
DATE: 7-23-07
REVIEWED BY: SRM
DATE: 8-1-07

2
HIGHLIGHTED LA-639 & ADDED BOUNDARY FLAGS
DRAWN BY: JLB
DATE: 9-19-07
PREPARED BY: WJI
DATE: 9-19-07
REVIEWED BY: SRM
DATE: 9-24-07

REACTOR FUEL POOL CLEAN UP SYSTEM

FUEL POOL CLEAN UP FILTER (TYP)

FILTER VENT (TYP.)

DISCHARGE

SUCTION

DRAIN 1"

FUEL POOL CLEAN UP PUMP

4" x 3" RED.

UNIT #1 REACTOR FUEL POOL

DRAIN

SPENT FUEL PIT FILTER ITEM: FLSF (III/3)

SPENT FUEL PIT DEMINERALIZER ITEM: DMSF

REFUELING WATER STORAGE TANK (LR-39237)

TO AERATED WASTE VIA FLOOR DRAIN

LOCAL SAMPLE

TO AERATED WASTE

FROM RESIN FILL TANK

REFUELING WATER PURIFICATION PUMP SEE LR-39237

FOR CONT. SEE LR-39242

TO RESIN FLUSH LINE LR-39236

DEMINERALIZED WATER (LR-39242)

TO AERATED WASTE (LR-39248)

DRAIN TO AERATED WASTE

TO AERATED WASTE

TO AERATED WASTE

SPENT FUEL PIT HEAT EXCHANGER & ASSOCIATED PIPING & VALVES BY PIONEER

3/4x1 RELIEF VA.

COMPONENT COOLING WATER (LR-39245)

121 SPENT FUEL PIT HEAT EXCHANGER ITEM: AHSF

HOLDUP TANK (CVCS) (LR-XH-1-40)

TO AERATED WASTE (LR-39248)

FURNISHED BY P.S.&E.

REACTOR MAKEUP WATER (LR-39242)

SPACER (IN PLACE FOR FUTURE VALVE)

BORIC ACID BLENDER (CVCS) (LR-XH-1-39)

SKIMMER FILTER ITEM: FLSKI (III/3)

121 SPENT FUEL PIT SKIMMER FILTER DPI

TEMPORARY STRAINER (TYP.)

ITEM APSF1

SPENT FUEL PIT PUMPS (III/3)

ITEM APSF2

(III/3) STRAINER NOTE 2

SKIMMER ITEM: MESK1

SKIMMERS ITEM: MESK2

SPENT FUEL PIT NO. 1

SPENT FUEL PIT NO. 2

TRANSFER CANAL

RECIRCULATION PUMP (CVCS) (LR-XH-1-40)

121 SPENT FUEL PIT SKIMMER DPI

SUCTION CLEANING CONNECTION

121 SPENT FUEL PIT SKIMMER STRAINER ITEM: SRSK1

SKIMMER PUMP ITEM: APSK1 (III/3)

CASING DRAIN

TO AERATED WASTE SEE LR-39248

UNIT #2 REACTOR FUEL POOL

FUEL POOL CLEAN UP PUMP

4" x 3" RED.

SUCTION

DRAIN

DISCHARGE

FILTER VENT (TYP.)

FLOOR DRAIN

REACTOR FUEL POOL CLEAN UP SYSTEM

NOTES:

1. ALL ITEM NO.'S INCLUDE PREFIX NSPAC.
2. LOCATE STRAINER 4 FEET BELOW NORMAL WATER LEVEL.
3. DRILL ½INCH HOLE 4 FEET BELOW NORMAL WATER LEVEL
4. TERMINATE PIPE 10 FEET BELOW NORMAL WATER LEVEL.
5. TERMINATE PIPE NEAR BOTTOM OF TRANSFER CANAL.
6. ALL PIPE ON THIS DWG. TO BE Q.A. TYPE IC UNLESS OTHERWISE NOTED.
7. (—) NUMBERS IN PARENTHESES DENOTE P.S. & E. LINE NUMBERS.
8. DENOTES CATEGORY I VENTILATION ZONE — CATEGORY I
9. P - DENOTES PURGE CONNECTION.
10. (I/I) DENOTES EQUIPMENT QA TYPE/DESIGN CLASS

REFERENCE DRAWINGS:

| DESCRIPTION | WEST. NO. | P.S. & E. NO. |
|---|---|---|
| 1. LEGEND | 110E015 | X-HIAW-1-105 |
| 2. LINE LIST | 206C928 | X-HIAW-1-703 |
| 3. PHYSICAL | --- | NF-39296-1 & 2 |

LR NOTE:
SF SKIMMER FLOATS ON THE POOL SURFACE WITH THE ATTACHED HOSE UNDERWATER. THESE COMPONENTS ARE NOT IN SCOPE FOR LR, THEY PROVIDE NO 5(2) INTERACTIONS.

LR - LEGEND

- IN SCOPE FOR LR PER 10 CFR 54.4(a)(1) 10 CFR 54.4(a)(3)
- IN SCOPE FOR LR PER 10 CFR 54.4(a)(2)
- OUT OF SCOPE
- DENOTES SYSTEM BOUNDARY BREAK

LR - SYSTEMS

CC - COMPONENT COOLING
SF - SPENT FUEL POOL COOLING
VC - CHEMICAL AND VOLUME CONTROL
WD - WASTE DISPOSAL
DE - WATER TREATMENT

D-115

THIS DIAGRAM REPLACES WESTINGHOUSE DWG. NO. 110E009, REV. 6

REFERENCE XH-1-29 REV. AC

This map /document is a tool to assist employees in the performance of their jobs. Your personal safety is provided for by using safety practices, procedures and equipment as described in safety training programs, manuals and SPAR's.

| DWN | DATE | SIGNIFICANT NO. | 8630 | | 350 | 100 | J109 9240 | 1 | 4920 |
|---|---|---|---|---|---|---|---|---|---|
| CHECKED | | GROUP | 1 | 2 | 3 | 4 | 5 | CL | 6 |
| PROJECT NO. | | | | | | | | | |
| APPD & CERT. | | | | | | | | | |
| FILMED | | | | | | | | | |

LICENSE RENEWAL BOUNDARY DWG
UNIT 1&2 FLOW DIAGRAM
SPENT FUEL COOLING SYSTEM

NORTHERN STATES POWER COMPANY
PRAIRIE ISLAND NUCLEAR GENERATING PLANT
RED WING, MN.

SCALE NONE REV 2

LR-XH-1-29

LR-XH-1-29.DGN [NSP GENERATION CAD]