LR-XH-1-664

ITEM	DESCRIPTION
1	EVAP. STEAM INLET
2	CONDENSATE OUTLET
3	EVAP. COND. COOLING WTR INLET
4	EVAP COND. COOLING WTR. OUTLET
5	DISTILLATE COOLING WATER INLET
6	DISTILLATE COOLING WATER OUTLET
7	WASTE FEED INLET
8	CONCENTRATED WASTE OUTLET
9	DISTILLATE OUTLET
10	CONDENSER VENT (TO PLANT VENT)
11	DRAIN CONN (EVAP COND)
12	EVAP CNDR. VENT (TO PLANT VENT)
13	FLUSH CONN (ABSORPTION TOWER)
14	EVAP DRAIN
15	EVAP FLUSH INLET
16	NITROGEN SUPPLY
17	DISTILLATE SAMPLE LINE (OUTLET)
18	RUPTURE DISC. (SIZE BASED ON 0 PSIG BACK PRESSURE)
19	CONCENTRATE SAMPLE (OUT)
20	CONCENTRATE SAMPLE (IN)
21	DRAIN CONN (DISTILLATE)
22	DRAIN CONN. (DISTILLATE PUMP)
23	DRAIN CONN (CONCENTRATE PUMP)
24	FLUSH CONN (CONCENTRATE PUMP)
25	FLUSH CONN (EVAP COND.)
26	DISTILLATE SAMPLE LINE (INLET)
27	DISTILLATE VENT
28	BOSSES FOR FIELD TESTING (¼ N.P.T. PLUGGED)

REVISIONS

Ø
DRAWN BY: JLB
DATE: 8-24-07
PREPARED BY: WJO
DATE: 8-24-07
REVIEWED BY: SRM
DATE: 8-27-07

COMPONENT COOLING SEE LR-39245

TO PLANT VENT SEE LR-39600

¾" GLOBE VA. VC-37-1

TO WASTE COND. TANKS SEE LR-39248

31568 PI 327 54213 WEV 27 ¾"-WL-382

27174 FE 328

54212 WEV 26 31564 LCV 326 31565

DISTILLATE COOLER CC WD

COMPONENT COOLING SEE LR-39245

WL-9-22

¾"-WL-379

54015 LS 326

54016 LS 326 LT 326

EVAPORATOR CONDENSER

TE 22040 TI 341 54205

DEMIN. WTR. SEE LR-39242

3" CUSTOMER LINE REF 31563 FCV 329 LS-C LS-O

ABSORPTION TOWER

COMPONENT COOLING SEE LR-39245

DEMIN. WTR. SEE LR-39242

31560 LS-C LS-O

21216 54210 PIC 337 PT 337 PA 337 31557 FCV 337

54211 CONTROL VLV. SUPPLIED SEPARATELY REFIELD INSTALLATION BY OTHERS. SUPPLIED BY OTHERS TO BE

ONE REQ. AT VALVE REDUCED FR. 9.00 SUPPLY LINE SET @ 65 PSIG VC-363

PROCESS STEAM SEE LR-39605-1

TO PLANT VENT

LEVEL CONTROL SUPPLIED BY OTHERS

SEE LR-39605-1

27154 FE 329 25103 FT 329 54200 FX 329

25005 CC 350 54201 CI 350 54202 CA 350 PI 332 11351 FE 331 27175

24097

FLUSH NOZZLES

EVAPORATOR

24176 LT 333 54206 LIC 335 LA 335 54207 31559 LCV 335

SEE LR-39248

31562

31566 PCV 333 31567 LS-C LS-O

DEMIN. WTR SEE LR-39242

SEE LR-39247

LCWD

DEMIN. WTR ⅜" TUBING SEE LR-39242

MIXING TANK

54208 TA 336 54209 TIC 336 27176 FE 336

ELECTRICAL HEATER

31558 LS-C LS-O

DISTILLATE PUMP

PI 340 11332 DEMIN WTR SEE LR-39242

31561 LS-C LS-O

TO WASTE CONCENTRATE TANK (LR-39248)

WL-70-1

CONCENTRATE PUMP (PUMP TO BE HEAT TRACED BY OTHERS)

WL-70-2

WL-9-23

¾"-WL-980

WL-9-25

TO AERATED SUMP TANK (VIA FLOOR DRAIN SYSTEM) W.N.E.S SPIN NO. WDEVWD

NOTE:

1- LINES HEAT TRACED BY OTHERS

2- ALL LINES MARKED * ARE CLASS 1S1R THIS IS A DESIGNATION ONLY & NO ADDITIONAL INSPECTION HAS BEEN PERFORMED ON THIS PIPING. ALL OTHER PIPE IS CLASS 1S1.

3- T.P. INDICATES "TERMINAL POINT"

4- VALVES MARKED ● TO BE RELOCATED FOR EASE OF OPERATION.

5- ALL PIPING TO BE QA TYPE III UNLESS OTHERWISE NOTED.

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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

WD - WASTE DISPOSAL
CC - COMPONENT COOLING
CG - MISCELLANEOUS GAS

REFERENCE DWG. X-HIAW-1-664 REV A

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.

SIGNIFICANT NO.	8630			2	M280 9070	1	9100	
GROUP	1	2	3	4	5	CL	6	

DWN | DATE
CHECKED
PROJECT NO.
APP'D & CERT.
FILMED

LICENSE RENEWAL BOUNDARY DWG
RADIOACTIVE WASTE EVAPORATOR
FLOW DIAGRAM

NORTHERN STATES POWER COMPANY
Xcel Energy
PRAIRIE ISLAND NUCLEAR GENERATING PLANT
RED WING, MINNESOTA

SCALE | REV Ø

LR-XH-1-664

LR-XH-1-664.DGN NSP GENERATION CAD

D-126

$$$$USERNAME$$$$ $$$$SYSTIME$$$$ $$$$DESIGNFILE$$$$ $$$$LEVELS$$$$