UNIT #1 REACTOR BLDG.

UNIT #2 REACTOR BLDG.

— PIPING PENETRATIONS

— SHIELD BLDG WALL

6-CS-11

6-CS-8

6-CS-7

6" CS 10

29A

29B

#121 SPENT FUEL PIT FILTER

TO SPENT FUEL PIT SEE DWG LR-XH-1-29

2' SPENT FUEL PUMP DISCH SEE DWG LR-XH-1-29

SPENT FUEL DEMINERALIZER PIPING SEE DWG LR-XH-1-29

CS 9 CS-10 CS 39 CS 40

3/4"-CS-16 TEST/VENT CS-14

3/4"-CS-17 TEST/VENT CS-13

3/4"-2CS-16 TEST/VENT CS-44

3/4"-2CS-17 TEST/VENT CS-43

6-CS-30 6-CS-33 6-2CS-33 6-2CS-30

CS 18 CS 19 CS 48 CS49

FI 18246 FI 18247

2-CS-13 2-CS-12 2-CS-2 6-CS-6 6-CS-9 6-2CS-9 6-2CS-6 2-2CS-12 2-2CS-13

2" TEST LINE FROM SAFETY INJECTION PUMP DWG. LR-XH-1-45

2" TEST LINE FROM SAFETY INJECTION PUMPS SEE DWG. LR-XH-1001-7

3" OVERFLOW TO AERATED SUMP TANK FOR CONT SEE DWG LR-39248

3" OVERFLOW TO AERATED SUMP TANK FOR CONT SEE DWG LR-39248

SEE DWG. LR-XH-1-45

SEE DWG. LR-XH-1001-7

FE 27246 FE 27247

SI-17-3 2-SI-97 SF-23-1 2SF-23-1

3/4" VENT 3/4-CS-24 3/4"-2CS-24

#11 REFUELING WATER STORAGE TANK SEE DWG LR-XH-1-45 (I/1)

#21 REFUELING WATER STORAGE TANK SEE DWG LR-XH-1001-7 (I/1)

FUTURE SPRAY ADDITIVE CONN'S (TYP)

FE 27150 FE 27151 FE 27153 FE 27152

CS-26-1 CS-26-2 CS-26-3 CS-26-4 2CS-26-1 2CS-26-2 2CS-26-3 2CS-26-4

3/4-CS-30 3/4-CS-31 3/4-2CS-30 3/4-2CS-31

VENT CS-28-1 CS-28-2 2CS-28-1 2CS-28-2

CS-181-1 CS-181-2 CS-181-3 CS-181-4 2CS-181-1 2CS-181-2 2CS-181-3 2CS-181-4

FI 18150 FI 18151 FI 18153 FI 18152

6-CS-31 6-CS-34 6-2CS-31 6-2CS-34

CS-27-1 CS-27-2 2CS-27-1 2CS-27-2

2-CS-9 6-2CS-9

CS-24-1 CS-24-2 2CS-24-1 2CS-24-2

CS-25-1 CS-25-2 2CS-25-1 2CS-25-2

CS-29-1 CS-29-2

CS 11 CS 12 CS 41 CS 42

PI 11359 PI 11363

MV 32105 MV 32116 MV 32114

ES 19621 ES 19623 ES 19622

PI 11947 PI 11989 PI 11365 PI 11989

PI 11360 PI 11361

PI 11948 PI 11949

ES 46560 ES 46741 ES 46740

1"X1½" RELIEF VLV SET AT 210 PSIG (TYP)

1 1/2-CS-26 CS-6

CS-32-1 CS-32-3 2CS-32-1

SF 23-3 2SF 23-3

SF-22-1 2SF-22-1

SF-21-1 2SF-21-1

3/8-CS-25 3/4 3/8-2CS-25 3/4

PI 11622 PI 11621 PI 11265 PI 11266 PI 11624 PI 11623

ES 19618 ES 19620 ES 19619

3/8-CS-21 3/8-2CS-20

CS-19 CS-15 2CS-3 CS-45

SF-18-1 2SF-18-1

3/4-CS-22 3/4-2CS-22

SF-23-2 2SF-23-2

#11 CONTAINMENT SPRAY PUMP (I/1)

#12 CONTAINMENT SPRAY PUMP (I/1)

#21 CONTAINMENT SPRAY PUMP I/1)

#11 REFUELING WATER PURIFICATION PUMP (II/3)

#21 REFUELING WATER PURIFICATION PUMP (II/3)

MV 32109 MV 32108 MV 32111 MV 32110 MV 32106

PT 17090 PT 17092 PT 17096 PT 17094

ES 46606 ES 46607 ES 46608 ES 46609 ES 46610 ES 46611

1-CS-15 1-CS-14 2-CS-4 1-2CS-15 1-2CS-14

CS-22-1 CS-22-2 2CS-22-1 2CS-22-2

CS-30-6 CS-30-7 2CS-30-6 2CS-30-7

CS-32-2 CS-32-4 2CS-32-2 2CS-32-4

CS-47 2CS-47

CS-30-5 CS-30-8 2CS-30-5 2CS-30-8

CS-31-1 CS-31-2 2CS-31-1 2CS-31-2

CS-30-9 CS-30-10 2CS-30-9 2CS-30-10

CS-26-5 CS-26-6 2CS-26-5 2CS-26-6

CS-32-5 2CS-32-5

CS-22-3 2CS-22-3

CS-16 CS-46 2CS-46

CS-5 2CS-5

2" FLUSH CONN. 8-CS-4 8-2CS-4

VLV STEM LEAK-OFF TO COLLECTION TROUGH (TYP)

TO UNIT #1 CHARGING PUMPS SEE DWG LR-XH-1-39

TO UNIT #2 CHARGING PUMPS SEE DWG LR-XH-1001-5

6-RH-10A 6-2RH-10A 2-RH-46 6-RH-10B 2-RH-52

3¾" ORIFICE (TYP)

FROM REACTOR COOLANT SYS. SEE DWG. LR-XH-1-31

FROM REACTOR COOLANT SYS. SEE DWG. LR-XH-1001-8

FROM UNIT 1 RESIDUAL HEAT EXCHANGERS SEE DWG. LR-XH-1-31

FROM UNIT 2 RESIDUAL HEAT EXCHANGERS SEE DWG. LR-XH-1001-8

2" FROM CAUSTIC STANDPIPE FOR CONT SEE DWG. LR-39252

TO SAFETY INJECTION PUMPS SEE DWG. LR-XH-1-45

TO RESIDUAL HEAT PUMPS SEE DWG. LR-XH-1-31 & 45

TO RESIDUAL HEAT PUMPS SEE DWG. LR-XH-1001-7 & LR-XH-1001-8

TO SAFETY INJECTION PUMPS SEE DWG. LR-XH-1001-7 &

REVISIONS
0 DRAWN BY: JLB DATE: 5-15-87 PREPARED BY: MLR DATE: 5-15-87 REVIEWED BY: SRM DATE: 5-15-87
1 REVISED SF PMP DISCH LINK FROM LR-XH-1-31 TO LR-XH-1-29 DRAWN BY: JLB DATE: 6-20-87 PREPARED BY: WJO DATE: 6-20-87 REVIEWED BY: SRM DATE: 6-22-87
2 REVISED TEST LINE FROM SI TO 11/21 RWST FROM (a)(2) TO (a)(3) AND SF TO 11/21 RWST FROM (a)(1) TO (a)(2). DRAWN BY: JLB DATE: 8-28-87 PREPARED BY: WJI DATE: 8-28-87 REVIEWED BY: SRM DATE: 8-28-87
3 ADDED BOUNDARY FLAGS & ADDED RH TO LR SYSTEM LEGEND DRAWN BY: JLB DATE: 12-10-87 PREPARED BY: WJI DATE: 12-10-87 REVIEWED BY: SRM DATE: 12-10-87

LR - LEGEND

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

REFERENCE PIPING DWG. NRS.

CONTAINMENT SPRAY –
NF-39332-1 (UNIT 1)
NF-39332-2 "
NF-39333-1 (UNIT 2)
NF-39333-2 "
REFUELING WATER PURIFICATION
NF-39331-1 (UNIT 1 & 2)

LR - SYSTEMS

SF - SPENT FUEL POOL COOLING
SI - SAFETY INJECTION
WD - WASTE DISPOSAL
CS - CONTAINMENT SPRAY
RH - RESIDUAL HEAT REMOVAL

LEGEND

P-DENOTES CONTAINMENT SPRAY ACTIVATION SIGNAL

◄►►DENOTES LIMITS OF Q A TYPES
(I)(II)(III) DENOTES THE EQUIPMENT Q A TYPES
IA,IB&III DENOTES THE PIPING Q A TYPES
⬡ DENOTES CONTAINMENT PENETRATION NUMBER
CAT 1 DENOTES CATEGORY I VENTILATION ZONE

D-036

REFERENCE DWG NF-39237 REV.AG

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		750	1	M440 9010	1	4800
CHECKED		GROUP	1	2	3	4	5	Q1	6
PROJECT NO.									
APPD & CERT.									
FILMED									

LICENSE RENEWAL BOUNDARY DWG CONTAINMENT INTERNAL SPRAY SYSTEM

NORTHERN STATES POWER COMPANY
PRAIRIE ISLAND NUCLEAR GEN. PLANT
RED WING, MINNESOTA

SCALE NTS REV 3

LR- 39237

LR-39237.DGN MSP GENERATION CAD

LR- 39237