REVISIONS

Ø	DRAWN BY: JLB DATE: 1-24-07 PREPARED BY: MLR DATE: 1-24-07 REVIEWED BY: SRM DATE: 1-24-07
1	HIGHLIGHTED 2PDSL-6043, 2TE-6050 (øXI), AND ALL FIRE DAMPERS (øX3). REMOVED HIGHLIGHTS FROM COMPONENT TAGS. DRAWN BY: JLB DATE: 8-13-07 PREPARED BY: WJI DATE: 8-13-07 REVIEWED BY: SRM DATE: 8-22-07

BIROSCREEN
TO ATMOS
BD-7 BD BACKDRAFT DAMPERS ARROW UNITED INDUSTRIES TYPE 388, GALV. STEEL
BD-6 BD
22 D6 LUBE OIL TANK ROOM EXHAUST FAN NON SAFETY RELATED
2CS 19901
2CS 19903
22 D6 FUEL OIL DAY TANK ROOM EXHAUST FAN NON SAFETY RELATED
FD-6 F 150
FD-8 F 150
D6 LUBE OIL STORAGE ROOM
UH-225 5 KW
D6 FUEL OIL DAY TANK ROOM
UH-226 5KW
CONVECTOR WITH BUILT-IN THERMOSTAT
FD-5 F
FD-7 F
MD 32427 FO
MD 32430 FO
35690 MAX
EXHAUST AIR
EXHAUST AIR DAMPER
UNIT HEATER BUILT IN THERMOSTAT
UH-216 15 KW
2TY 6050
2TY 6040
2TC 6040
GRATING
NON DUCTED AIR FLOW
MD 32426 FO
MD 32428 FC
22 D6 DIESEL ROOM VENT FAN NON-SAFTEY RELATED
2500 CFM
OUTSIDE AIR
RETURN AIR
2TE 6040
2TE 6558
2TSHL 6041
BD-5
2CS 19905
UH-213,UH-215 (15 KW)
UH-212,UH-214 (10 KW)
UNIT HEATER
2TS 6042
EL. 707'-0"
GRATING
22 D6 DIESEL RM. COOLING FAN
2CS 60007
D.G. START SIGNAL
DIESEL GEN.
2TS
TS-6047 (UH-213)
TS-6048 (UH-215)
TS-6049 (UH-212)
TS-6059 (UH-214)
EL. 695'-0"
GRATING
1500
1500
GENERATOR BEARING COOLING
VD-9 54500 CFM SOUTH SIDE
VD-10 54500 CFM NORTH SIDE
VD-11 3000 CFM
DISCH. PLENUM
EL. 687'-0"
2PDSL 6043
A
TROUBLE
MD 32431 FC
RECIRC AIR DAMPER
22/24 D6 D6 BLDG. ROLL FILTER NON-SAFETY RELATED
MD 32429 FO
OUTSIDE AIR DAMPER
OUTSIDE AIR 35690 MAX
BD-3 BD
22 D6 D.G. BLDG. RETURN AIR FAN
BD-4 BD
24 D6 D.G. BLDG. RETURN AIR FAN
35690
2CS 60005
2CS 60004
BD-1 BD
22 D6 D.G. BLDG. SUPPLY AIR FAN
BD-2 BD
24 D6 D.G. BLDG. SUPPLY AIR FAN
2CS 60006
2TSL 6055
TEMP LO
VD-4
VD-2
VD-1
VD-3
VD-5
VD-6
VD-7
VD-8
4170
31520
21240
10280
2TE 6050
2TC 6050
A
HIGH
2RI 74
2RE 74
2TS 6054
TO AUX. CLG. UNIT 480V SWGR. RM. (BELOW)
AUX. COOLING W/HTG COIL
TEMP HI-HI
2TSH 6053
D6 480V SWITCHGEAR ROOM
6980
14260
6600
380
11300
D6 4KV SWITCHGEAR ROOM
2RE 73
2RI 73
UH-217 UH-218 7.5 KW EACH
UNIT HEATER BUILT-IN THERMOSTAT
FD-3 F
4KV BUS 27 ROOM
FD-4 F
21 CRDM BUS RM
2RM 74
2RM 73
2RM 73
11680
2530
2RI 72
2RE 72
2960
2530
D6 CABLE SPREADING
UH-222 UH-223 UH-224 3ø4KW EACH
CONVECTOR BUILT-IN THERMOSTAT
D6 NORMAL MCC ROOM
A
TROUBLE
9560
5490
4070
1530
2540
4170
D6 CONTROL ROOM
2TSH 6051
2TS 6052
AUX. COOLING W/HTG COIL
TO CONTROL RM. A.C. UNIT
D6 EXCITATION PANEL ROOM
UH-221 5 KW
D6 BATTERY ROOM
UH-220 5 KW
600 FUTURE
F FD-2
UNIT HEATER BUILT-IN THERMOSTAT
D6 INVERTER ROOM
UH-219 5 KW
F FD-1
UNIT HEATER BUILT-IN THERMOSTAT
1550
CONVECTOR WITH BUILT-IN THERMOSTAT
4070
12" Ø
12" Ø 600 FUTURE
TO ATMOS.
FUTURE D6 BATTERY ROOM EXHAUST FAN NON-SAFETY RELATED
CAP FOR FUTURE CONNECTION

22 D6 CONTROL ROOM AUX. CONDENSING UNIT WITH FILTER/DRYER
SIGHT GLASS
ELECT. HTG. COIL
22 D6 CONTROL RM. AUX. A.C. UNIT
DX COIL
FROM D6 CONTROL ROOM AUX CLG TS-6052
LIQUID
SUCTION
FILTER
COND. DRAIN
LIQUID
SUCTION (INSULATED)
REFRIGERANT PIPING

22 D6 CONTROL ROOM AUX. COOLING
(NON-SAFETY RELATED)

LOOP 'A'
LOOP 'B'
22 D6 480V SWGR. RM. AUX. CONDENSING UNIT
2-STAGE ELECT. HTG. COIL
DX COIL LOOP 'B'
DX COIL LOOP 'A'
ROOF
22 D6 480V SWGR. RM. AUX. A.C. UNIT
FROM 480V SWGR ROOM AUX CLG TS-6054 (ABOVE)
BOUNDARY OF SKID MOUNTED EQUIPMENT
REFRIGERANT PIPING
FILTER
COND. DRAIN
DRYER ISOLATION VALVES
LIQUID PIPING
SUCTION PIPING (INSULATED)
FILTER/DRYER
SIGHT GLASS
DRYER ISOLATION VALVES

22 D6 480V SWGR. ROOM AUX. COOLING
(NON-SAFETY RELATED)

LEGEND

- F — FIRE DAMPER
- VD — BALANCING DAMPER
- BD — BACKDRAFT DAMPER (GRAVITY)
- M — MOTOR OPERATED DAMPER
- DUCTED FLOW
- NON-DUCTED FLOW
- FLEXIBLE CONN
- FILTER

- A — INSTRUMENT LOCATED ON D.G. CONTROL ROOM BENCHBOARD
- INSTRUMENT LOCATED ON LOCAL/PANEL RACK
- LOCALLY MOUNTED INSTRUMENT
- INDICATING LAMPS
- NOT FURNISHED BY HVAC CONTR.
- INSTRUMENT WITH INPUT TO COMPUTER

NOTE

HVAC SYSTEM, UNLESS OTHERWISE NOTED, IS SAFTEY RELATED ELECTRICAL HEATING ARE NON-SAFETY RELATED.

SYSTEM

ZG - DIESEL GENERATOR VENTILATION

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

ZG - DIESEL GENERATOR BUILDING VENTILATION

REFERENCE DWG NF-118255 REV. B

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 SPARs.

SIGNIFICANT NO.	8630		410	2	4410	1	8110	
GROUP	1	2	3	4	5	CL	6	

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

LICENSE RENEWAL BOUNDARY DWG
D6 BLDG. HVAC SYSTEM
FLOW DIAGRAM

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

SCALE | REV 1

LR-118255

$$USERNAME$$
$$$$$$SYTIME$$$$$$$$$$$$SYDATE$$$$$$
$$$$$$$$$$DESIGNFIL$$$$$$$$$

LR-118255.DGN NOT GENERATION CAD

D-110