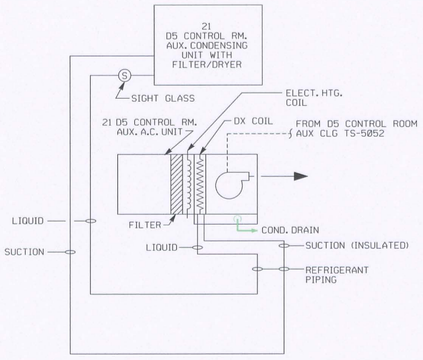
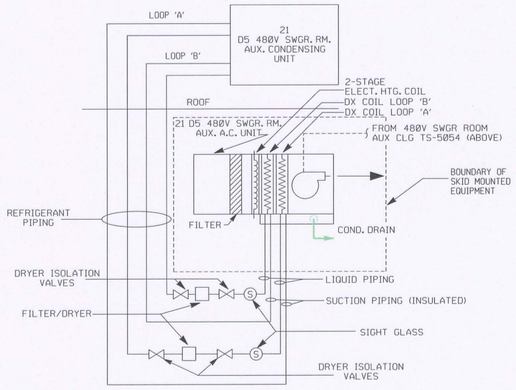
REVISIONS
0
DRAWN BY: JLB DATE: 1-24-07 PREPARED BY: MLR DATE: 1-24-07 REVIEWED BY: SRM DATE: 1-24-07
1
HIGHLIGHTED 2PDSL-5043, 2TE-5050 (øX1), AND ALL FIRE DAMPERS (øX3). DRAWN BY: JLB DATE: 8-10-07 PREPARED BY: WJI DATE: 8-10-07 REVIEWED BY: SRM DATE: 8-22-07

TO ATMOS
BIRDSCREEN
BD-7
BACKDRAFT DAMPERS ARROW UNITED INDUSTRIES TYPE 388, GALV. STEEL
BD-6
21 D5 LUBE OIL TANK ROOM EXHAUST FAN NON SAFETY RELATED
2CS 19900
2CS 19902
21 D5 FUEL OIL DAY TANK ROOM EXHAUST FAN NON SAFETY RELATED
FD-6
FD-8
150
D5 LUBE OIL STORAGE ROOM
UH-210 5 KW
CH-7
D5 FUEL OIL DAY TANK ROOM
UH-211 5 KW
CONVECTOR BUILT-IN THERMOSTAT (TYP.)
FD-5
FD-7
MD 32421 FO
35690 MAX
MD 32424 FO
EXHAUST AIR
EXHAUST AIR DAMPER
UH-209 15 KW
UNIT HEATER BUILT-IN THERMOSTAT
2TY 5050
2TY 5040
GRATING
NON DUCTED AIR FLOW
2TC 5040
MD 32420 FO
MD 32422 FC
21 D5 DIESEL ROOM VENT FAN NON-SAFTEY RELATED
2500 CFM
2TE 5040
2TE 5558
OUTSIDE AIR
RETURN AIR
2TSHL 5041
BD-5
2CS 19904
UH-205,UH-207 (15 KW)
UH-206,UH-208 (10 KW)
2TS 5042
EL. 707'-0"
GRATING
21 D5 DIESEL RM. COOLING FAN
2CS 5000
D.G. START SIGNAL
2TS
TS-5047 (UH-205)
TS-5048 (UH-207)
TS-5049 (UH-206)
TS-5059 (UH-208)
DIESEL GEN.
EL. 695'-0"
GRATING
1500
1500
VD-9 54500 CFM SOUTH SIDE
VD-10 54500 CFM NORTH SIDE
VD-11 3000 CFM
GENERATOR BEARING COOLING
DISCH. PLENUM
EL. 687'-0"
2PDSL 5043
A
TROUBLE
MD 32425 FC
RECIRC AIR DAMPER
21/23 D5 DG BLDG. ROLL FILTER NON-SAFETY RELATED
MD 32423 FO
OUTSIDE AIR DAMPER
OUTSIDE AIR 35690 MAX
2TSL 5056
21 D5 D.G. BLDG. RETURN AIR FAN
23 D5 D.G. BLDG. RETURN AIR FAN
21 D5 D.G. BLDG. SUPPLY AIR FAN
23 D5 D.G. BLDG. SUPPLY AIR FAN
BD-3
BD-4
BD-1
BD-2
2CS 50005
2CS 50004
2CS 50006
2TSL 5055
TEMP LO
35690
6980
14260
4170
6600
VD-4
VD-2
VD-1
VD-3
VD-6
VD-5
VD-7
VD-8
4170
31520
21240
10280
2TE 5050
2TC 5050
A
HIGH
D5 480V SWITCHGEAR ROOM
2TS 5054
TO AUX. CLG. UNIT (480V SWGR. RM. (BELOW)
AUX. COOLING W/HTG COIL
2TSH 5053
TEMP HI-HI
380
11300
D5 4KV SWITCHGEAR ROOM
FD-3
4KV BUS 27 ROOM
FD-4
11680
2530
2960
2530
D5 CABLE SPREADING
D5 NORMAL MCC ROOM
A
TROUBLE
5490
4070
1530
2540
2TSH 5051
TEMP HIGH
D5 CONTROL ROOM
TO CONTROL RM. A.C. UNIT
2TS 5052
AUX. COOLING W/HTG COIL
1550
D5 EXCITATION PANEL ROOM
D5 BATTERY ROOM (FUTURE)
600 FUTURE
FD-2
FD-1
D5 INVERTER ROOM
4170
4070
12"
12"
TO ATMOS.
600 FUTURE
CAP FOR FUTURE CONNECTION
FUTURE D5 BATTERY ROOM EXHAUST FAN NON-SAFETY RELATED
9560
21240

21 D5 CONTROL ROOM AUX. COOLING
(NON-SAFETY RELATED)



21 D5 480V SWGR. ROOM AUX. COOLING
(NON-SAFETY RELATED)



LEGEND

- FIRE DAMPER
- VD — BALANCING DAMPER
- BD — BACKDRAFT DAMPER (GRAVITY)
- M — MOTOR OPERATED DAMPER
- DUCTED FLOW
- NON-DUCTED FLOW
- FLEXIBLE CONN
- FILTER
- INSTRUMENT LOCATED ON D.G. CONTROL ROOM BENCHBOARD
- INSTRUMENT LOCATED ON LOCAL PANEL/RACK
- LOCALLY MOUNTED INSTRUMENT
- INSTRUMENT WITH INPUT TO COMPUTER
- NOT FURNISHED BY HVAC CONTR.
- INDICATING LAMPS

NOTE

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

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 - SYSTEM

ZG - DIESEL GENERATOR BUILDING VENTILATIØN

REFERENCE DWG NF-118254 REV. B

D-109

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 SPMTs.

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

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

LICENSE RENEWAL BOUNDARY DWG
D5 BUILDING HVAC SYSTEM
FLOW DIAGRAM

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

SCALE: | REV 1

LR-118254

$$USERNAME$$
$$$$$$SYTIME$$$$$$$$$$SYDATE$$$$$$
$$$$$$$$$$DESIGNFILE$$$$$$$$$

LR-118254.DGN [MSP GENERATION CAD]