REVISIONS
0 DRAWN BY: JLB DATE: 5-24-07 PREPARED BY: MLR DATE: 5-24-07 REVIEWED BY: SRM DATE: 5-24-07
1 REVISED PER REV 78, HIGHLIGHTED INSTRUMENT PRESSURE BOUNDARIES, REVISED (a)(3) - (a)(2) BOUNDARIES DRAWN BY: JLB DATE: 7-23-07 PREPARED BY: WJI DATE: 7-23-07 REVIEWED BY: SRM DATE: 7-23-07

UNIT #1 ↔ UNIT #2

UNIT #1 SCREENHOUSE INSTR. AIR SERVICES SEE NF-39774-1 & 2

UNIT #2 SCREENHOUSE INSTR. AIR SERVICES SEE NF-39774-1 & 2

SCREENHOUSE

TURBINE BUILDING

AUX. BLDG.

INSIDE CONT'MT OUTSIDE CONT'MT

INSIDE SHIELD WALL OUTSIDE SHIELD WALL

UNIT 1 CONTROL ROOM PANEL E-1

UNIT 2 CONTROL ROOM PANEL E-2

ACCUMULATOR

78 PSI

82 PSI

LOW PRESS.

HIGH PRESS.

LOW PRESS. HDR. ISOL. CLOSE MV-32315 AT 80 PSI

LOW PRESS. HDR. ISOL. CLOSE MV-32314 @ 80 PSI

SHUT-OFF STA. AIR AT 85 P.S.I. CLOSE MV-32318

*121 INSTR. AIR AFTER-FILTER (1/2)

*121 INSTR. AIR AIR DRYER (1/2)

*121 INSTR. AIR PRE-FILTER (1/2)

*121 STATION AIR AFTERCOOLER (1/2)

*122 INSTR. AIR PRE-FILTER (1/2)

*122 INSTR. AIR AIR DRYER (1/2)

*122 INSTR. AIR AFTER-FILTER (1/2)

ABANDONED IN PLACE

*121 COMP. TROUBLE

*122 COMP. TROUBLE

*123 COMP. TROUBLE

*121 STATION AIR RECEIVER (1/2)

*122 STATION AIR RECEIVER (1/2)

*123 STATION AIR RECEIVER (1/2)

*121 STATION AIR COMPRESSOR (1/2)

*122 STATION AIR COMPRESSOR (1/2)

*123 STATION AIR COMPRESSOR (1/2)

SAFETY VLV. SET @ 125 PSIG (TYP.)

SAFETY REL. VLV. SET @ 115 PSIG

MOISTURE SEPARATOR

AIR INTAKE FILTER *

GAUGE GLASS

UNLOADING REGULATOR

¾" TEMP./THROTTLE FLOW CONTROL VALVE (TYP.)

1" MANUAL BLOWDOWN

PREFERRED LOAD

LOAD 1ST STANDBY COMP. @ 90 PSI

LOAD 2ND STANDBY COMP. @ 85 PSI

TO SUMP

CONTROL

HIGH WTR. TEMP.

LOW OIL PRESS.

HIGH PRESS.

*121 STATION AIR RECEIVER (1/2) SET @ 150 PSIG MUFFLER

CHAMBER A 057-031

CHAMBER B 057-032

CHAMBER A 057-033

CHAMBER B 057-034

069-481

069-482

069-491

069-492

NO.121 1A DRYER

NO.122 1A DRYER (SEE NOTE 2)

ID# 026-021

ID# 026-022

SEE PNEUMATIC PRODUCTS P&ID * NX-62925-2 FOR SKID DETAIL

DEW POINT TEST CONN.

FLR. DRAIN

BY NMC

CAPPED COUPLING FOR TEMP. DRYER

TO #121 POTABLE WTR. PRESS. TANK, SEE LR-39241-1

TO EVAP. CONTROL PNL.

RESIN DISPOSAL BLDG (NF-39346-14)

RAD. WASTE BLDG. (NF-39785-1)

INSTR. AIR SERVICE SEE NF-39785-1

TO WASTE EVAP. CONTROL PNL.

TO 121 ADT EVAPORATOR

TO UNIT 2 FUEL TRANSFER CONTROL PNL.

TO UNIT 1 FUEL TRANSFER CONT. PNL.

TO HOT INSTR. LAB ROOM

TO HOT CHEM. LAB WATER CHILLER PKG.

TO TURB. BLDG. LOUVER DAMPERS & ADMIN. BLDG.

TO GAS ANALYZER PNL.

TO HOT CHEM. LAB STM GEN BLOW-DN MONITOR PNL.

TO FILTER DEMIN AREA (JB-80, JB-81) SEE LR-39253-1 @ LOC. C-4

TO ANLYTCL. PNL. SEE LR-39241-4 & 7

TO BRINE PMP. PNL. SEE LR-39241-3

TO FEED PMP. PNL. SEE LR-39241-1

TO RO PNL., SEE LR-39241-5 & 6

TO CDI PNL., SEE LR-39241-6 & 7

TO #123 AIR COMPR. UNLOADER SUPPLY CONT. PNL

TO ENGAGE-DISENGAGE FOR FUEL ASSEMBLY CLAMP

TO REACTOR INFLATABLE SEAL

TO AIR HOSE CONN. FOR MANIPULATOR CRANE

FOR HDR. DWG. TO AUX. BLDG. & CONTAINMENT JB'S. SEE NF-39771-6

FOR HDR. DWG. TO AUX BLDG JUNCTION BOXES SEE NF-39771-6 & NF-39771-7

FOR HDR. DWG TO TURBINE BLDG. J.B. SEE NF-39774-3

TO TIME PATTERN TRANSMITTER & INSTRUMENT AIR SERVICES SEE NF-39772-2

TO TIME PATTERN TRANSMITTER & INSTR. AIR SERVICES SEE NF-39774-3

TO REACTOR BLDG. VENT SYS POST LOCA HYDROGEN CONTROL SEE LR-39251

TO BORIC ACID EVAP. CONT. PNL.

TO INSTR WORKSHOP

TO HOT CHEM. LAB

TO BORIC ACID EVAP. CNTL PNL

TO TC-26016 THRU TC-26024

TO VAC. DEGAS PMPS. PNL. SEE LR-39241-4

TO WTR. SOFTNR PNL. SEE LR-39241-3

TO SV-33115 & SV-33116

TO SV-33001 & SV-33002

TO COLD CHEM. LAB.

TO CV-31962 THRU CV-31965

TO CV-31966 THRU CV-31969

TO STATION AIR SYS. SEE DWG. LR-39243

3" FROM AIR COMPRESSORS NO. 124 & 125 SEE LR-39253-3

2" FROM NO. 124 & 125 AIR COMP. SEE LR-39253-3

FROM UNIT 2 COOLING WATER SUPPLY SEE DWG. LR-39217-1

TO UNIT 2 COOLING WATER RETURN SEE DWG. LR-39217-1

FROM UNIT 1 COOLING WATER SUPPLY SEE DWG. LR-39216-2

TO UNIT 1 COOLING WATER RETURN SEE DWG. LR-39216-2

FROM FIRE PROTECTION LINE SEE LR-39228-1

1½" FISHER GOVERNOR TYPE 655 ED PRV, INLET PRESS. 90/150, OUTLET PRESS. 75 PSIG

SEE NF-39770

SEE NF-39771-4

SEE NF-39771-5

SEE NF-39771-6

SEE NF-39771-4

SEE NF-39772-3

SEE NF-39787

SEE NF-39772-2

SEE NF-39772-1

SEE NF-39772-3

SEE LR-39218

SEE LR-39219

SEE LR-39253-1 @ LOC. A-4

SEE LR-39241-4 & 7

SEE LR-39241-3

SEE LR-39241-1

SEE LR-39241-5 & 6

SEE LR-39241-6 & 7

SEE NF-39772-3

SEE NF-39772-2

SEE NF-39772-3

SEE NF-39772-1

SEE NF-39772-2

SEE NF-39772-3

SEE LR-39253-1 @ LOC. C-4

SEE LR-39253-3

SEE LR-39251

SEE LR-39253-1 @ LOC. A-4

SEE LR-39253-3

SEE LR-39243

SEE LR-39253-3

SEE DWG. LR-39217-1

SEE DWG. LR-39217-1

SEE DWG. LR-39216-2

SEE DWG. LR-39216-2

SEE LR-39228-1

LR DETAIL (TYP)

LR DETAIL (TYP)

LEGEND

F DENOTES FILTER
M DENOTES MOTOR
S DENOTES SOLENOID
DENOTES SIGHT FLOW
* DENOTES FURNISHED WITH EQUIPMENT
DENOTES LIMITS OF Q.A. TYPES
IA, IIB, & III DENOTES THE PIPING Q.A. TYPES
(I/2) DENOTES THE EQUIPMENT Q.A. TYPE/DESIGN CLASS ALL PIPING TO BE TYPE IIB UNLESS OTHERWISE NOTED
CAT.I DENOTES CATEGORY I VENTILATION ZONE
DENOTES THROTTLE VALVE

LR - SYSTEMS

SA - STATION AND INSTRUMENT AIR
CL - COOLING WATER
FP - FIRE PROTECTION
HC - CONTAINMENT HYDROGEN CONTROL

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

NOTES:

1. 3-WAY VALVE TO ISOLATE ACCUMULATOR AND BLEED AIR FROM CONTROL VALVE.

INTERLOCK LOGIC DRAWING NO. NF-40313

D-051

REFERENCE PIPING DWG. NO'S	
SYSTEM	DWG. NO.
STATION & INSTRUMENT AIR PPG. UNIT 1 & 2	NF-39305-1 -2 -3 -4 -5
COOLING WATER PPG.	NF-39291-1 -3 NF-39216-2 NF-39217-1

ACCOUNT NO. 53-12-1-01 UNIT 1
53-12-2-01 UNIT 2

REFERENCE DWG NF-39244 REV. 78

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

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

SIGNIFICANT NO.	8630		400	100	4410	1	8320
GROUP	1	2	3	4	5	CL	6

LICENSE RENEWAL BOUNDARY DWG
FLOW DIAGRAM
INSTRUMENT AIR PIPING

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

SCALE NONE | REV 1

LR-39244

LR-39244.DGN MOP GENERATION CAD

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