TO SPRING CREEK 4H8 & 4H9 & 6H10 OCBS

TO BYRON 8S14 & 8S15 GCBS

TO RED ROCK 8P27 & 8P28 GCBS

TO BLUE LAKE 8M28 & 8M34 GCBS

TO RED ROCK 8P25 GCB & 8P24 GCB

NO. 10 22400Δ 116-115/32%

345KV BUS 2

AS-RC

13.8 Δ 56000

161 345

3-15 10 TR AUX. 13.8 Y :120/.240

I-300 STA. AUX. PREF. A 13.8 Y :120/.240

3-10 GROUND DETECTION 13.8 Y :120/.240

STA. AUX. EMERG. B — FROM 4.16KV BUS 14

SCC JURISDICTION / PLANT JURISDICTION

161KV BUS 1

TRAINING CENTER

I-500 BUS 32 12.5 Y :120/.208

I-500 :120/.208

D I-10 13.8 :120/.240

E MET. TOWER 13.8 :120/.240

TO SCREEN HOUSE

1H1 1H2 1H3

8H7 8H8 8H9 8H10 8H12 8H13 8H14 8H15 8H16 8H17 8H18

2RS I-61600Δ 34.5

345 34.5Δ

2RSY 2RSX

AREAS INDICATED ARE FOR AUTHORIZING SWITCHING AND PROVIDING CLEARANCE FOR WORK

GROUND DETECTION :120/.240Δ 13.8 Y 3-10

NO. 1 COOLING TOWER AREA I-36000 345 Δ 13.8

1H4 1H5

AS-MO

CT 1 BUS 13.8KV — CT1 CTCH — CT1 CTS12 — CT2 CTS12 — CT2 CTCH — CT 2 BUS 13.8KV

TO CTS-12TR 13.8-.48KV

13.8Δ CT-11 4.16 Y I-20000 — CT11-1 — CT11-6

TO CT 121 TR 13.8-.480KV — TO CT 122 TR 13.8-.480KV — TO CT 123 TR 13.8-.480KV — TO CT 124 TR 13.8-.480KV

CT-BT-112

13.8Δ CT-12 4.16 Y I-20000 — CT12-7 — CT12-6

CT 11 BUS 4.16KV — CT 12 BUS 4.16KV

AREAS INDICATED ARE FOR AUTHORIZING SWITCHING AND PROVIDING CLEARANCE FOR WORK

34.5Δ 2RY 4.16 Y I-22400 — 2RY

34.5Δ 2RX 4.16 Y I-22400 — 2RX

12RXBT

IR AUX. I-44800 161 / 4.16 — 1RX 1RY

1RYBT

12RYBT

2RYBT

1MY 1MX 1M STA. AUX. I-44800

2MX 2MY 2M STA. AUX. I-44800

NO. 2 GEN. I-667000 345 Δ 20

NO. 1 GEN. I-672000 345 Δ 20

NOTE 3

I-50 N NO. 2 520000-W 520000-S

I-50 N NO. 1 520000-W 520000-S

D NO. 4 2600 I-75 4.16 Y :240 EXCITER

D NO. 3 2600 I-75 4.16 Y :240 EXCITER

D NO. 6 6750 — D NO. 5 6750 — D NO. 2 3000 — D NO. 1 3000

22 BUS 4.16KV — 21 BUS 4.16KV — 12 BUS 4.16KV — 11 BUS 4.16KV

23 BUS 4.16KV — 24 BUS 4.16KV — 26 BUS 4.16KV — 27 BUS 4.16KV — 25 BUS 4.16KV — 16 BUS 4.16KV — 15 BUS 4.16KV — 14 BUS 4.16KV — 13 BUS 4.16KV

41 BUS 4.16KV — 42 BUS 4.16KV — 32 BUS 4.16KV — 31 BUS 4.16KV

PLANT

AREAS INDICATED ARE FOR AUTHORIZING SWITCHING AND PROVIDING CLEARANCE FOR WORK

SCC JURISDICTION / PLANT JURISDICTION

* —— * KEY INTERLOCKED SO THAT ONLY ONE DISCONNECT CAN BE CLOSED AT A TIME.

NOTE 1 8H16 & 8H17 *1 GEN. ACB'S TRIP FOR
NO. 1 GEN. DIFFERENTIAL
NO. 1 GEN. GROUND
NO. 1 GEN. NEGATIVE PHASE SEQUENCE
NO. 1 GEN. VOLTAGE/FREQUENCY TRIP
NO. 1 GEN. LOSS OF FIELD
NO. 1 GEN. OVER EXCITATION
NO. 1 GEN. SUDDEN PRESSURE
NO. 1 GEN. TR. DIFFERENTIAL
NO. 1 GEN. TR. GROUND
NO. 1 TURBINE TRIP
NO. 1 TURBINE THRUST BEARING FAILURE
NO. 1 M STA. AUX. TR. SUDDEN PRESSURE
NO. 1 M STA. AUX. TR. DIFFERENTIAL
NO. 1 M STA. AUX. TR. OVER CURRENT
NO. 1 M STA. AUX. TR. GROUND
NO. 1 REACTOR TRIP
NO. 1 GEN. UNDERFREQUENCY

NOTE 2 8H13 & 8H14 *2 GEN. ACB'S TRIP FOR
NO. 2 GEN. DIFFERENTIAL
NO. 2 GEN. GROUND
NO. 2 GEN. NEGATIVE PHASE SEQUENCE
NO. 2 GEN. VOLTAGE/FREQUENCY TRIP
NO. 2 GEN. LOSS OF FIELD
NO. 2 GEN. OVER EXCITATION
NO. 2 GEN. TR. SUDDEN PRESSURE
NO. 2 GEN. TR. DIFFERENTIAL
NO. 2 GEN. TR. GROUND
NO. 2 TURBINE TRIP
NO. 2 TURBINE THRUST BEARING FAILURE
NO. 2 M STA. AUX. TR. SUDDEN PRESSURE
NO. 2 M STA. AUX. TR. DIFFERENTIAL
NO. 2 M STA. AUX. TR. OVER CURRENT
NO. 2 M STA. AUX. TR. GROUND
NO. 2 REACTOR TRIP
NO. 2 GEN. UNDERFREQUENCY

NOTE 3 H = HORIZONTAL REMOVABLE LINKS
V = VERTICAL REMOVABLE LINKS

NOTE 4 345KV MOD'S. ARE RC FROM PLANT CONTROL ROOM ONLY

AREA NOT OTHERWISE INDICATED IS SCC JURISDICTION FOR AUTHORIZING SWITCHING AND PROVIDING CLEARANCE FOR WORK. INTERJURISDICTIONAL SWITCHING DIRECTION PROVIDED BY SCC.

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
- IN SCOPE FOR LR TRANSMISSION SYSTEM PORTION OF SUBSTATION

REFERENCE DWG. NE-119871 REV. G
IC/R OLD DIAGRAM *GE-1680

REVISIONS
0 — DRAWN BY: JLB DATE: 8-9-07 PREPARED BY: RAH DATE: 8-9-07 REVIEWED BY: JCR DATE: 8-9-07
1 — ADDED REFERENCE DWG. # NE-119871 REV. G DRAWN BY: JLB DATE: 9-4-07 PREPARED BY: WJI DATE: 9-4-07 REVIEWED BY: JCR DATE: 9-4-07
2 — COMPLETED (with) HIGHLIGHTS INCLUDING BREAKER 1H5. DRAWN BY: JLB DATE: 2-21-08 PREPARED BY: WJI DATE: 2-21-08 REVIEWED BY: JCR DATE: 2-21-08
3 — REVISED DWG AND LR LEGEND TO INCLUDE LR TRANSMISSION SYSTEM PORTION OF SUBSTATION. DRAWN BY: JLB DATE: 5-16-08 PREPARED BY: WJI DATE: 5-16-08 REVIEWED BY: JCR DATE: 5-16-08

SIGNIFICANT NO.	6006				2980	
GROUP	1	2	3	4	5	6

LICENSE RENEWAL BOUNDARY DWG.
PRAIRIE ISLAND SUB. (PRI)
SUBSTATION OPERATING ONELINE DIAGRAM

NORTHERN STATES POWER CO. ENGINEERING DEPARTMENT MINNEAPOLIS

SCALE — REV. 3

LR-119871

D-02