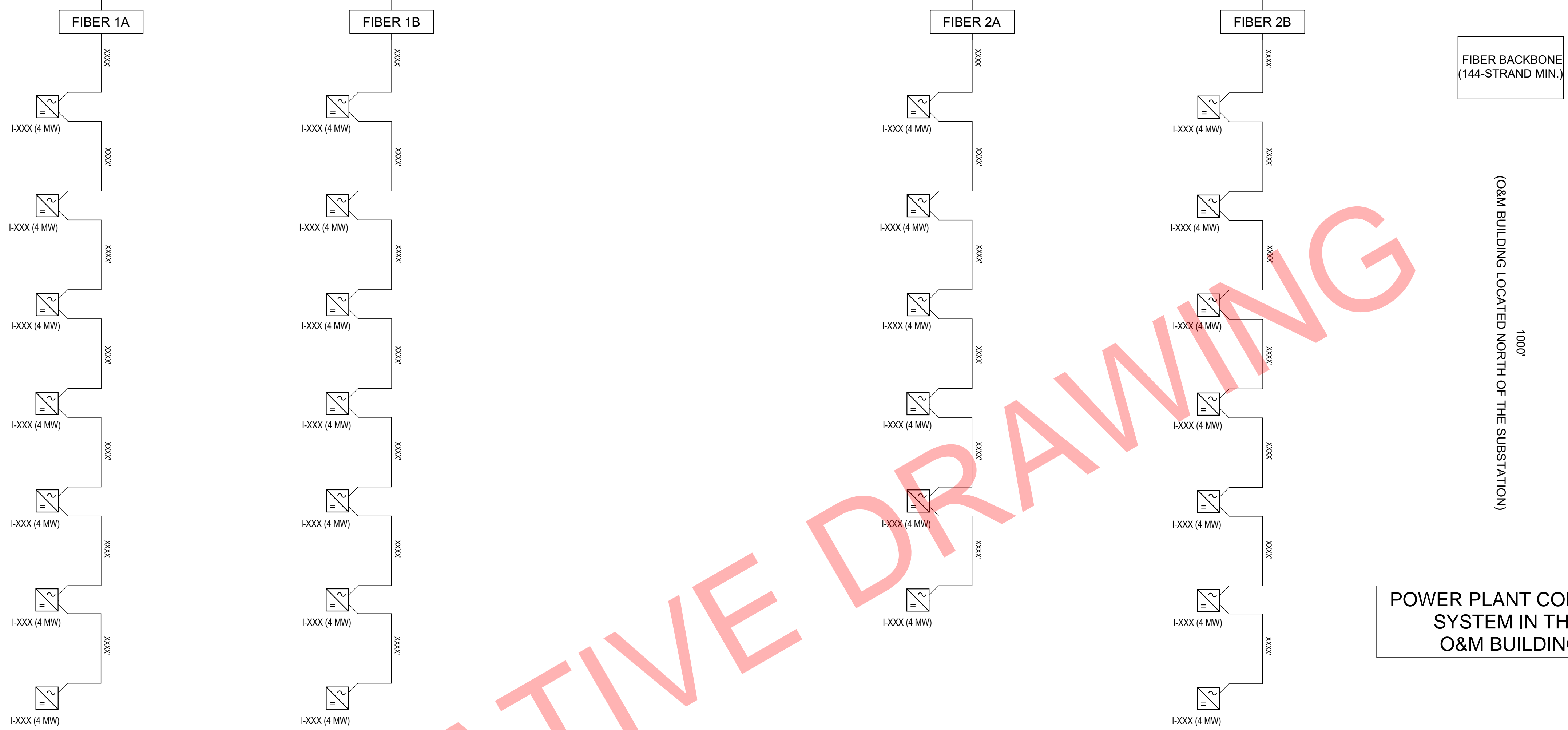






**SUBSTATION SCADA PANEL**




INDICATIVE DRAWING

- NOTES:**
- ALL FIBER IS 12-STRAND SINGLE MODE IN INNERDUCT UNLESS NOTED.
  - FIBER CABLES TO BE SUFFICIENTLY LONGER THAN THE ACTUAL DISTANCE BETWEEN CABLE TERMINATION LOCATIONS. THIS LENGTH IS NOT ACCOUNTED FOR IN THE DISTANCES SHOWN. DISTANCES SHOWN ARE FROM THE POWER ONE LINE.
  - CONTRACTOR IS RESPONSIBLE FOR RECORDING ALL INSTALLED FIBER DISTANCES BETWEEN TERMINATIONS. CONTRACTOR WILL PROVIDE THIS DATA TO ENGINEER UPON COMPLETION OF FIBER CABLE INSTALLATION.
  - FIBER COLOR COORDINATION.  

1-BLUE	4-BROWN	7-RED	10-VIOLET
2-ORANGE	5-SLATE	8-BLACK	11-ROSE
3-GREEN	6-WHITE	9-YELLOW	12-AQUA
  - UNLESS SPLICING FOR INDIVIDUAL STRANDS ARE SHOWN, ALL STRANDS WITHIN CABLES/TUBES SHALL BE SPLICED TO THE SAME COLOR STRAND ON THE DESTINATION CABLE/TUBE.
  - TERMINATE ALL FIBERS USING A FUSION SPLICER WITH PRE-TERMINATED PIGTAILS OR MECHANICAL CONNECTORS WITH FANOUT KITS.
  - DO NOT EXCEED MINIMUM BENDING RADIUS AND AVOID CABLE TWISTS AT ALL TIMES INCLUDING WHEN THE CABLE IS REMOVED FROM THE SPOOL.
  - WHEN PULLING, PULL ONLY BY THE STRONG CENTRAL MEMBER. DO NOT EXCEED THE MAXIMUM TENSION WHEN PULLING.
  - UPON ERECTION OF THE LOWER TOWER SECTION, THE FIBER CABLE SHALL BE REMOVED FROM THE TOWER FLOOR. IF POSSIBLE, THE CABLE SHOULD BE ROUTED AROUND THE POWER PANEL TO AVOID DAMAGE DURING THE ELECTRICAL INSTALLATION.

NO	REVISION	ZONE	DATE	BY	CHK	ENG	NO	REVISION	ZONE	DATE	BY	CHK	ENG
	REV. A - ISSUED FOR REVIEW: 8-9-21												

REFERENCE DRAWINGS		
DWG NO.	MANUFACTURER	DESCRIPTION

  
 NORTHERN STATES POWER COMPANY  
**XXXXXXX SOLAR / ENERGY STORAGE**  
 XXXXXX COUNTY, MINNESOTA

DWN:	DATE:	CHK:	DATE:
ENG:	DATE:	CHK:	DATE:
PM:	DATE:	PROJ. NO:	
APVD:	DATE:	SCALE: NONE	

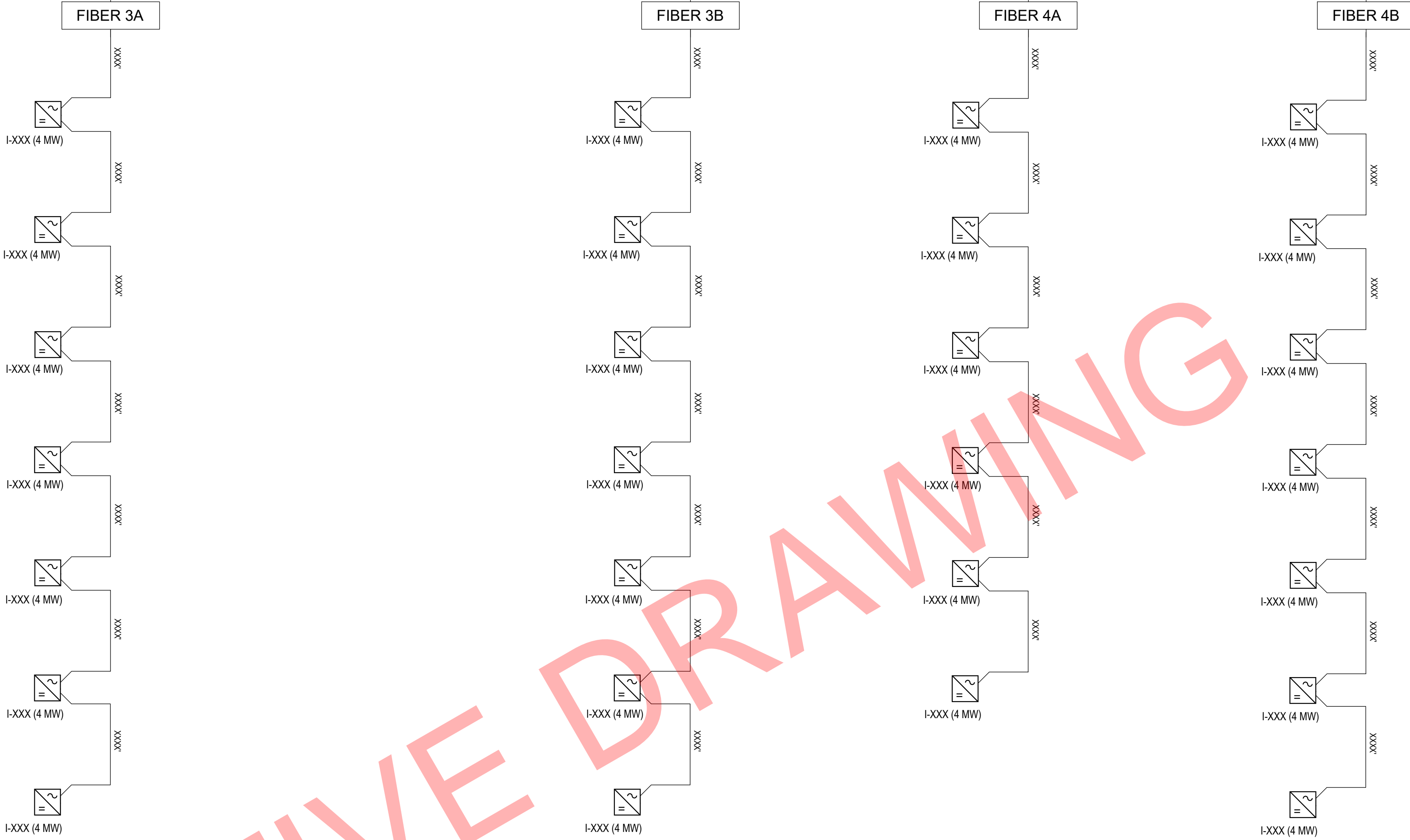
THIS MAP/DRAWING IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES, AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS AND MANUALS.

**ENERGY SUPPLY**  
ENGINEERING & CONSTRUCTION

**UNIT 0**  
 COLLECTION SYSTEM  
 FIBER OPTIC ONLINE DIAGRAM  
 FEEDERS 1 AND 2

NH- XXXXX-X

SUBSTATION SCADA PANEL



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NO	REVISION	ZONE	DATE	BY	CHK	ENG	NO
	REV. A - ISSUED FOR REVIEW: 8-9-21						

REVISION	ZONE	DATE	BY	CHK	ENG

REFERENCE DRAWINGS		
DWG NO.	MANUFACTURER	DESCRIPTION

**XcelEnergy**  
 NORTHERN STATES POWER COMPANY  
 XXXXXXXX SOLAR / ENERGY STORAGE  
 XXXXXXXX COUNTY, MINNESOTA

DWN:	DATE:	CHK:	DATE:
ENG:	DATE:	CHK:	DATE:
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**ENERGY SUPPLY**  
 ENGINEERING & CONSTRUCTION

<b>UNIT 0</b>	
COLLECTION SYSTEM FIBER OPTIC ONLINE DIAGRAM FEEDERS 3 AND 4	
NH-XXXXX-X	REV