



WWW.NORCALCONTROLS.NET
 6048 ENTERPRISE DRIVE
 DIAMOND SPRINGS, CA 95619
 PHONE: 530.621.1255

TEAM INFORMATION:

OWNER: SUNENERGY1



192 RACEWAY DRIVE
 MOORESVILLE, NC 28117
 PHONE: 704.662.0375

CONTROLS ENGINEER: NOR-CAL CONTROLS ES. INC.



6048 ENTERPRISE DRIVE
 DIAMOND SPRINGS, CA. 95619
 PHONE: 530.621.1255

CONTRACTOR: SUNENERGY1



192 RACEWAY DRIVE
 MOORESVILLE, NC 28117
 PHONE: 704.662.0375

Preliminary -Meteorological
 Station -Dixon Run Solar,
 LLC (subject to change)

METEOROLOGICAL STATION
 (MET)

VERSION: AB



TAHOE METEOROLOGICAL STATION VERSION LOG

VER. NO.:	DATE:	DESCRIPTION	DRAWN BY:
0	10.09.2017	50% SUBMITTAL TO CLIENT	FC
IFC	10.16.2017	100% ISSUED FOR CONSTRUCTION	FC
ASD	12.5.2017	AS SHIPPED	FC
AB	5.25.2018	AS BUILT	FC

SCALE: NTS	ENGINEER: AB DRAWN BY: FC	PROJECT NO.: 17409	VERSION NO.: AB	SHEET NO.: MET-1000
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METEOROLOGICAL STATION
 METEOROLOGICAL STATION PROJECT INDEX AND INFORMATION

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METEOROLOGICAL STATION SHEET INDEX

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MET-1002	METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL
MET-1003	METEOROLOGICAL STATION ELEVATIONS
MET-1004	METEOROLOGICAL STATION ENCLOSURE-ELEVATIONS AND DIMENSIONS
MET-1005	METEOROLOGICAL STATION ENCLOSURE ELEVATION-SECTIONS
MET-1006	MET ENCLOSURE GENERAL ARRANGEMNET-CALLOUIT
MET-1007	METEOROLOGICAL STATIONS POWER DIST DIAGRAM
MET-1008	METEOROLOGICAL STATIONS POWER DIST AND PINOUT DIAGRAMS
MET-1009	TYPICAL METEOROLOGICAL STATION SENSOR-CABLE GRIP DESIGNATION
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VERSION: AB

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PROJECT:

CLIENT:
SUNENERGY1



METEOROLOGICAL STATION PROJECT INDEX
 AND INFORMATION

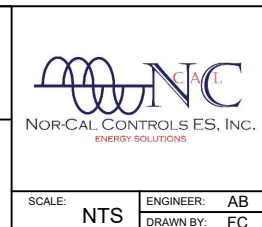
METEOROLOGICAL STATION
METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL

MET STATION				
ITEM #	DESCRIPTION	AMT REQD	MANUFACTURER	PART NUMBER
SENSORS				
1	ALL IN ONE WEATHER STATION SENSOR, W/10M/32FT COMM. & POWER CABLES	3	LUFFT	WS601-UMB
2	BACK OF MODULE BOM TEMPERATURE SENSOR W/ 61M/200FT CABLE	6	INGENIEURBURO (IMT)	TM-RS485-MB
3	IRRADIANCE SENSOR POA W/ 50M/164FT CABLE FOR BLOCKS	6	KIPP & ZONEN	SMP11-A-50M
4	IRRADIANCE SENSOR GHI W/ 10M/32FT CABLE FOR MET STATION	3	KIPP & ZONEN	SMP11-A-10M
MOUNTING				
SKID MOUNT ASSEMBLY (CUSTOMER TO PROVIDE 10' x 2-1/4" OD PIPE MOUNTED TO SKID WITH GROUNDING CLAMP)		3		
5	TOWER STIFFARM 1" EMT CONDUIT 5FT LONG	3	PLATT	065797
6	TERMINAL STRIKE DEVICE (LIGHTNING ROD) 48IN BY 5/8IN DIA	3	ERICO	ERO-LPC248BST
COMMUNICATION				
POWER				
120 VAC ASSEMBLY		3		
7	POWER SUPPLY, PRIMARY-SWITCHED, TRIO POWER, DIN RAIL, SINGLE, OUTPUT 24VDC/20A	3	PHOENIX CONTACT	2903151
STANDARD CONTROL PANEL				
CONTROL PANEL ASSEMBLY		3		
8	COMM. ENCLOSURE (24L X 24W X 10D)	3	ALLIED MOULDED PRO.	AM24240RL
9	PERFORATED BACK PLATE	3	NOR-CAL	BP01
10	REDLION DATA STATION PLUS ZR	3	REDLION	DSPZR000
11	2GB COMPACT FLASH MEMORY CARD	3	SWISSBIT	SFCF2048H2BU2TO-1-MS-527-STD UNSPSC Code 43202005
12	4 PORT ETHERNET SWITCH	3	N-TRON	304TX
13	TITE SOLAR MASTHEAD II LIQUID TIGHT CORDGRIP	3	HEYCO	M4524GBW-SM

VERSION: AB			
<small>TAHOE METEOROLOGICAL STATION VERSION LOG</small>			
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PROJECT: _____

CLIENT: **SUNENERGY1**

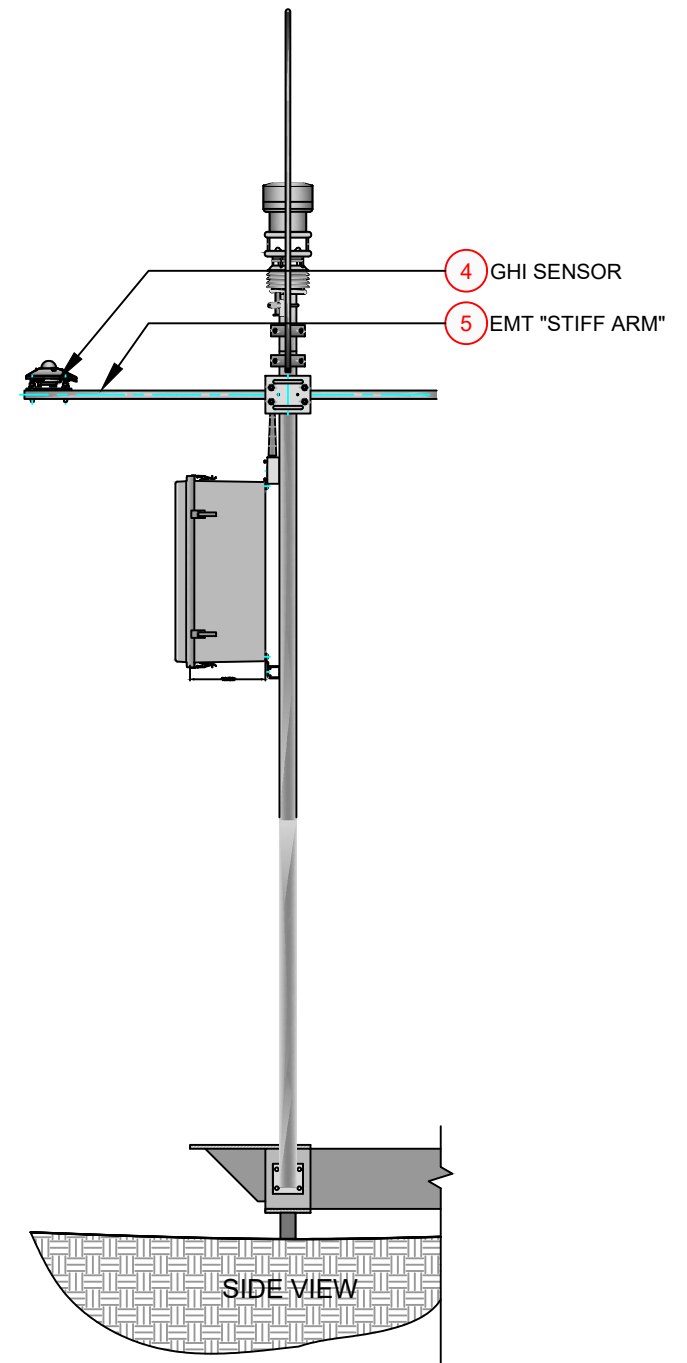
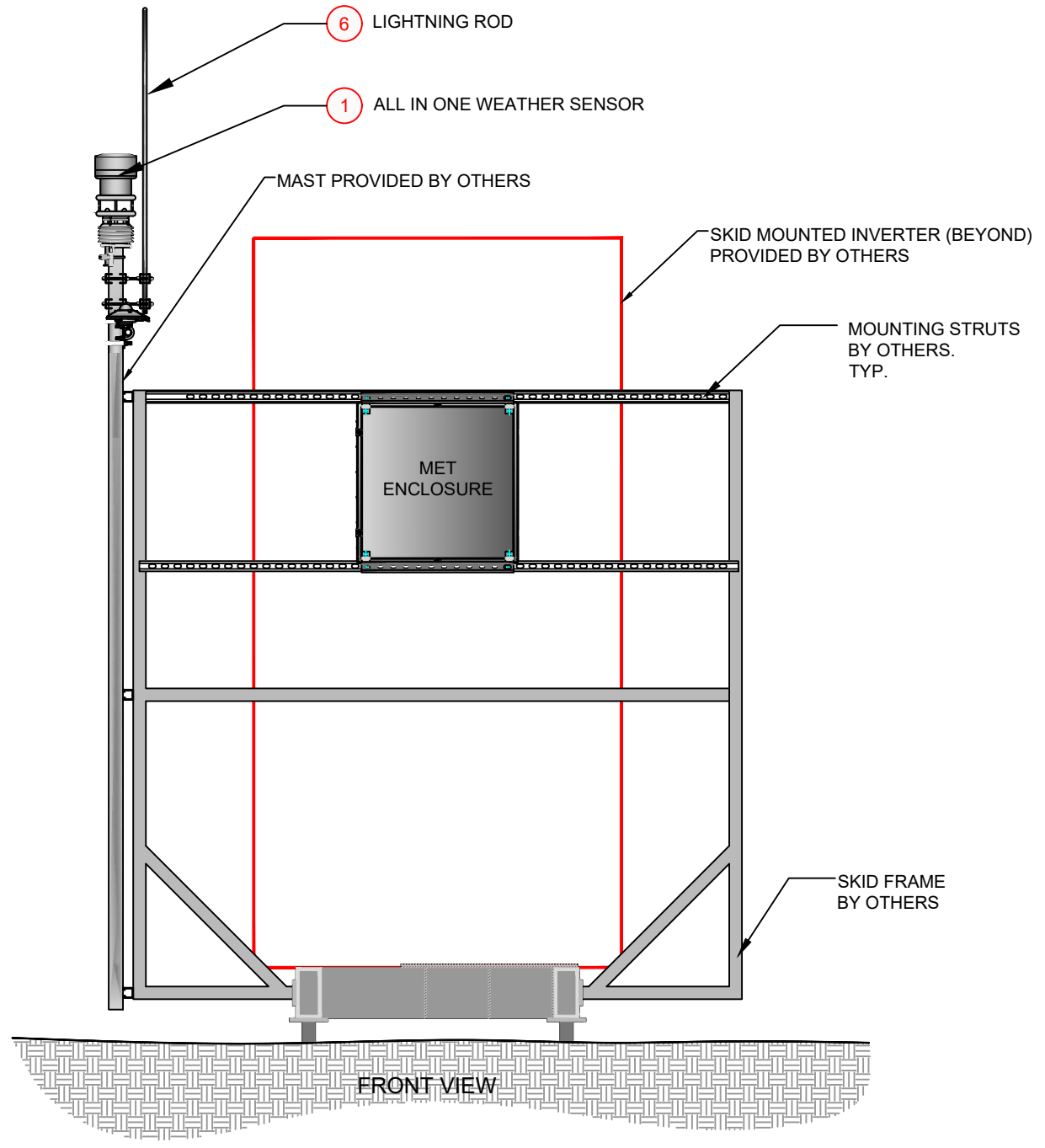


**METEOROLOGICAL STATIONS & FIELD ARRAY
SENSORS-BILL OF MATERIAL**

SCALE: NTS	ENGINEER: AB DRAWN BY: FC	PROJECT NO.: 17409	VERSION NO.: AB	SHEET NO.: MET-1002
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METEOROLOGICAL STATION

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FRONT VIEW

SIDE VIEW

FRONT ELEVATION

SIDE ELEVATION

METEOROLOGICAL STATIONS 101-10X TOWER/SKID MOUNTED-ELEVATION

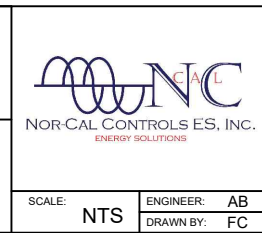
LEGEND/PROJECT NOTES:
1. SEE SHEET MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL

GENERAL NOTES:

VERSION: AB

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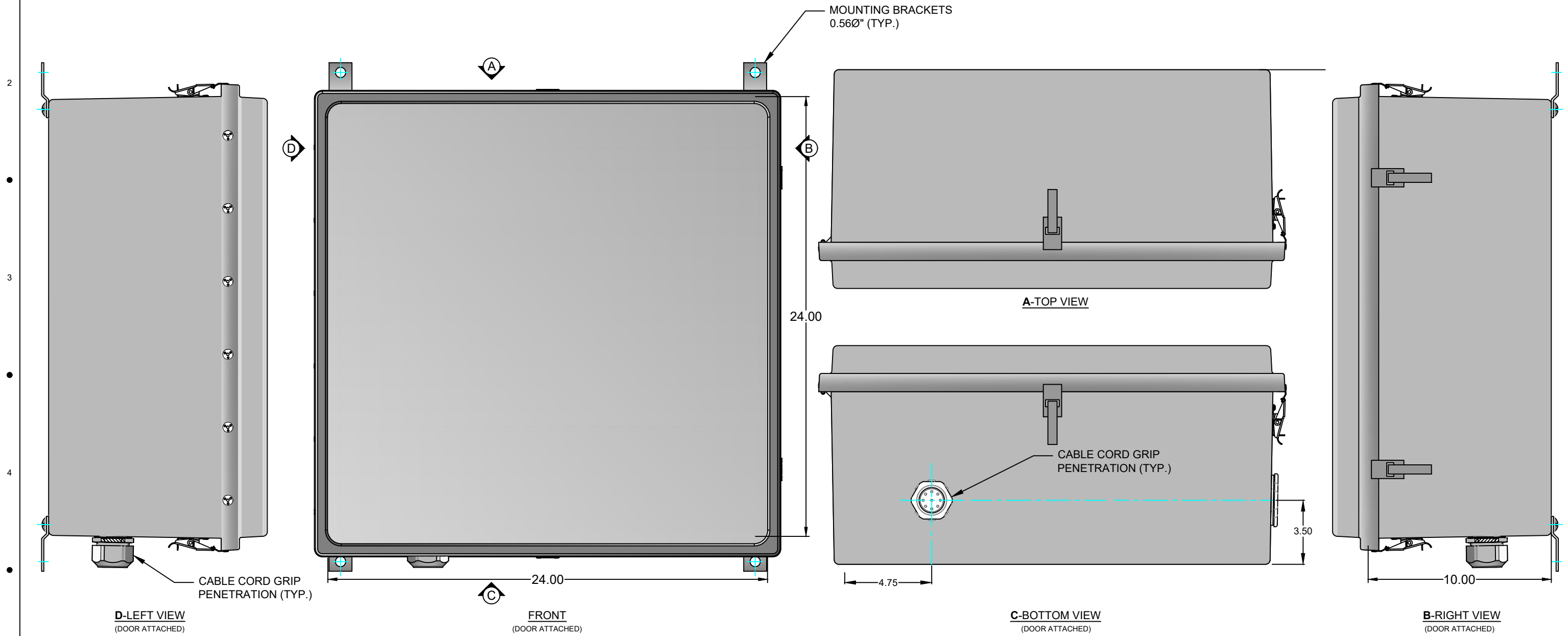
PROJECT:
CLIENT:
SUNENERGY1



METEOROLOGICAL STATION ELEVATIONS

SCALE: NTS	ENGINEER: AB	PROJECT NO.: 17409	VERSION NO.: AB	SHEET NO.: MET-1003
	DRAWN BY: FC			

METEOROLOGICAL STATION
 METEOROLOGICAL STATION ENCLOSURE-ELEVATIONS AND DIMENSIONS



METEOROLOGICAL STATION ENCLOSURE

LEGEND/PROJECT NOTES:

- SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL

GENERAL NOTES:

- ENCLOSURE IS NEMA 4X RATED.
- VENTILATION AND CORD GRIPS INSTALLED BY NOR-CAL CONTROLS.

VERSION: AB

TAHOE METEOROLOGICAL STATION VERSION LOG			
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AB	5.25.2018	AS BUILT	FC

PROJECT:

CLIENT:

SUNENERGY1



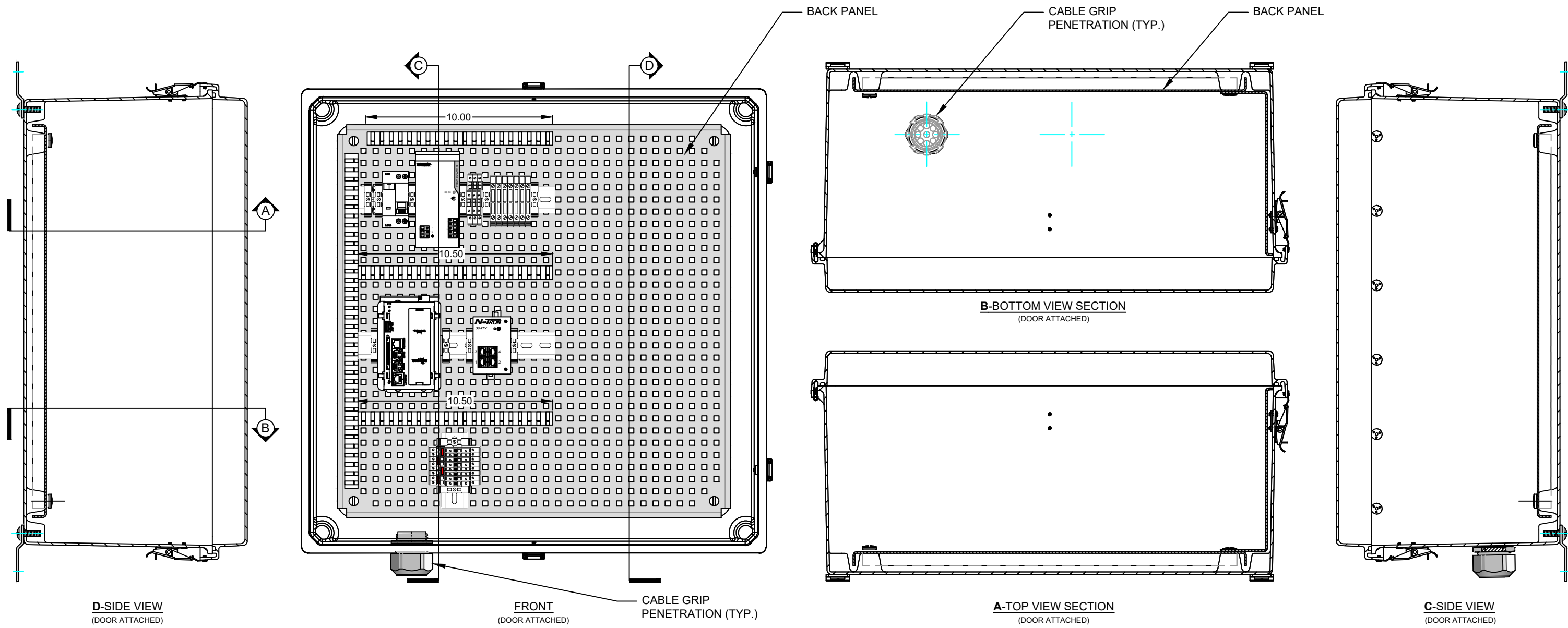
METEOROLOGICAL STATION
 ENCLOSURE-ELEVATIONS AND DIMENSIONS

SCALE: NTS ENGINEER: AB PROJECT NO.: 17409 VERSION NO.: AB SHEET NO.: MET-1004
 DRAWN BY: FC

METEOROLOGICAL STATION
 METEOROLOGICAL STATION ENCLOSURE ELEVATION-SECTIONS

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A B C D E F G H



METEOROLOGICAL STATION ENCLOSURE

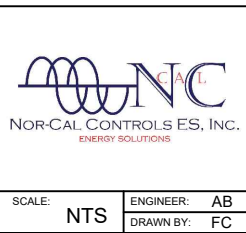
LEGEND/PROJECT NOTES:
 1. SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL.

GENERAL NOTES:
 1. ENCLOSURE IS NEMA 4X RATED.

VERSION: AB

TAHOE METEOROLOGICAL STATION VERSION LOG			
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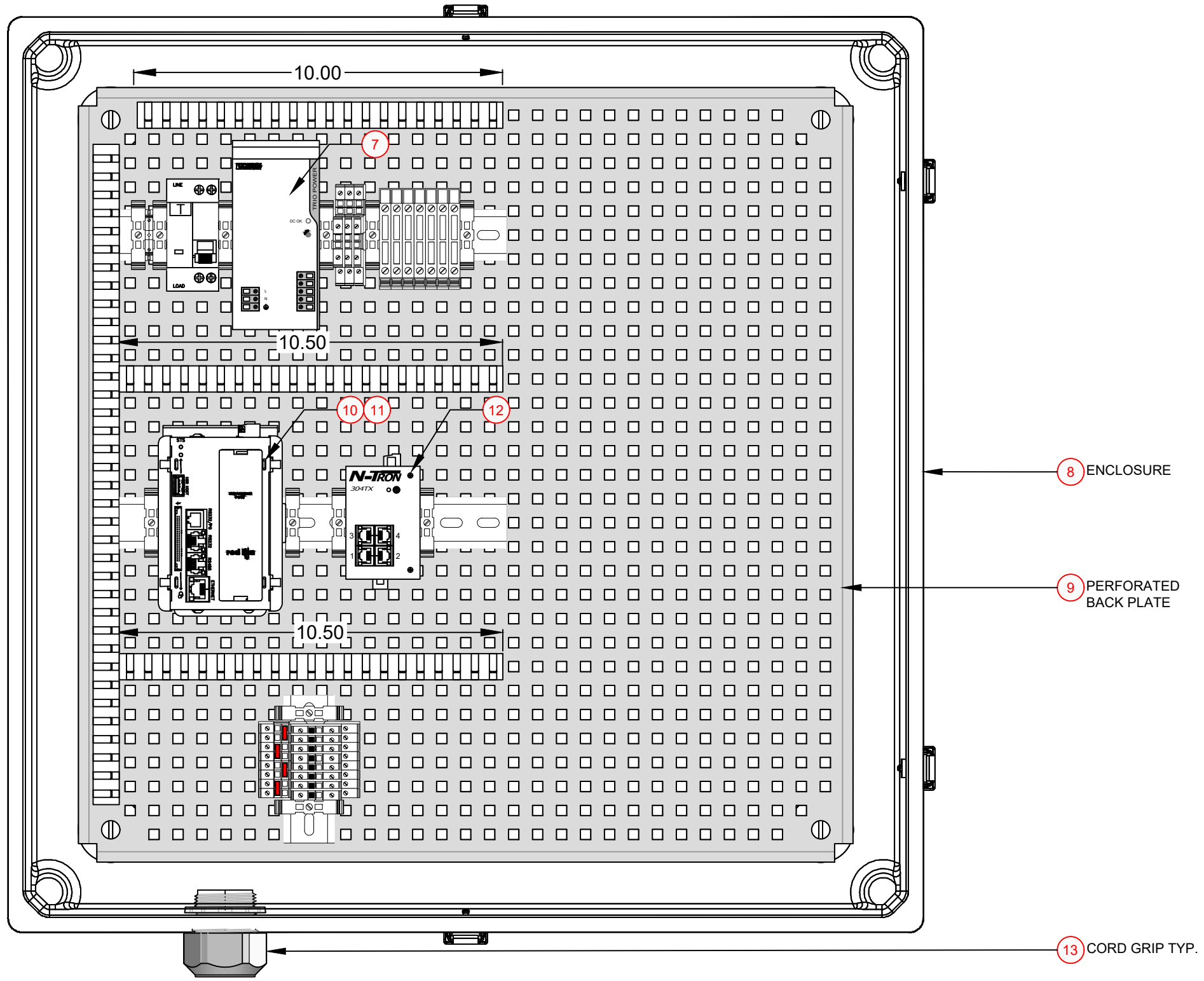
PROJECT:
 CLIENT:
 SUNENERGY1



METEOROLOGICAL STATION ENCLOSURE
 ELEVATION-SECTIONS

SCALE: NTS ENGINEER: AB PROJECT NO.: 17409 VERSION NO.: AB SHEET NO.: MET-1005
 DRAWN BY: FC

METEOROLOGICAL STATION
MET ENCLOSURE GENERAL ARRANGEMNET-CALLOUT



METEOROLOGICAL STATION ENCLOSURE

LEGEND/PROJECT NOTES:

- SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL.

GENERAL NOTES:

- ENCLOSURE IS NEMA 4X RATED.

VERSION: AB

TAHOE METEOROLOGICAL STATION VERSION LOG			
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PROJECT:

SUNENERGY1



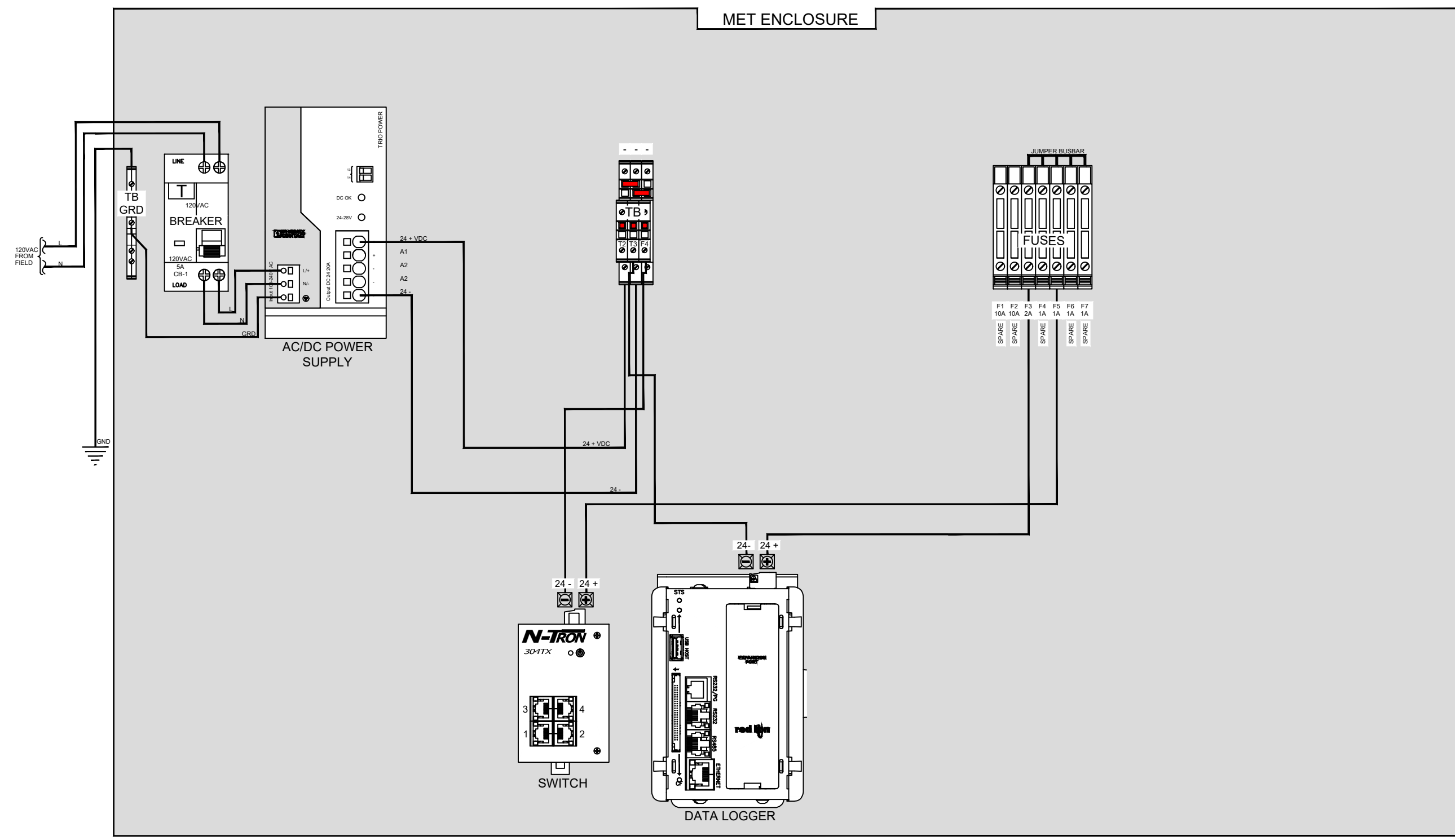
MET ENCLOSURE GENERAL ARRANGEMNET-CALLOUT

METEOROLOGICAL STATION METEOROLOGICAL STATIONS POWER DIST DIAGRAM

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A B C D E F G H

MET ENCLOSURE



POWER DISTRIBUTION

LEGEND/PROJECT NOTES:
1. SEE SHEET MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL.

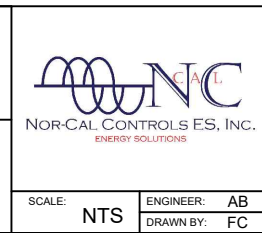
GENERAL NOTES:

VERSION: AB

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PROJECT:

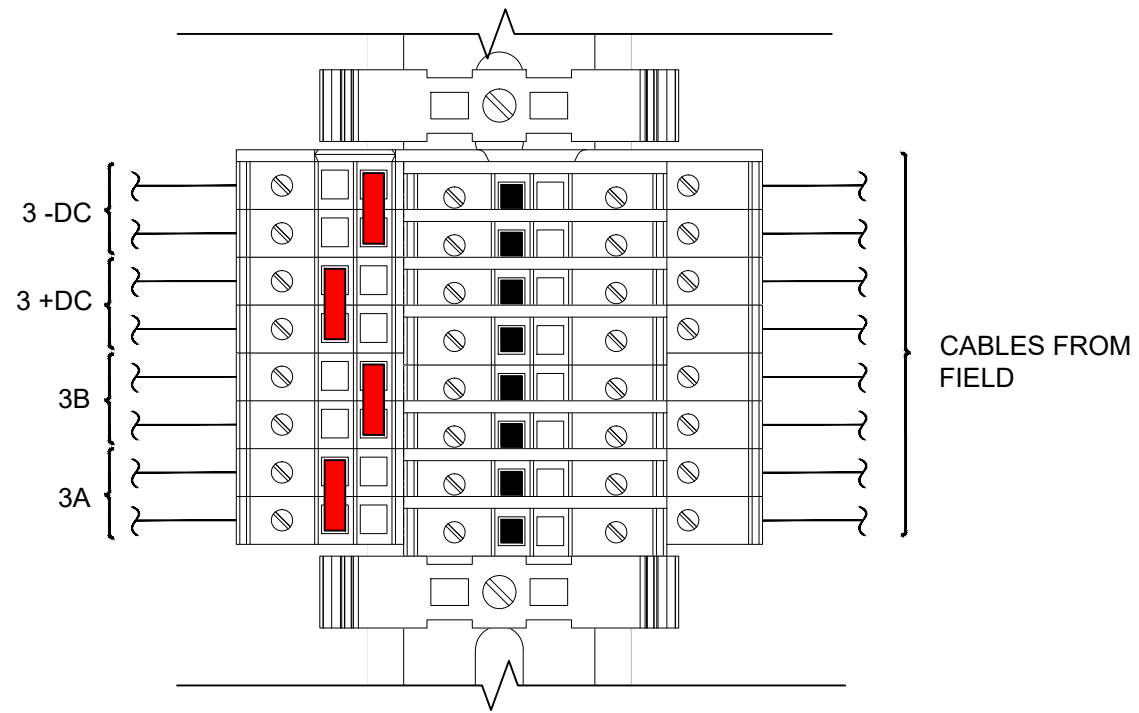
CLIENT: SUNENERGY1



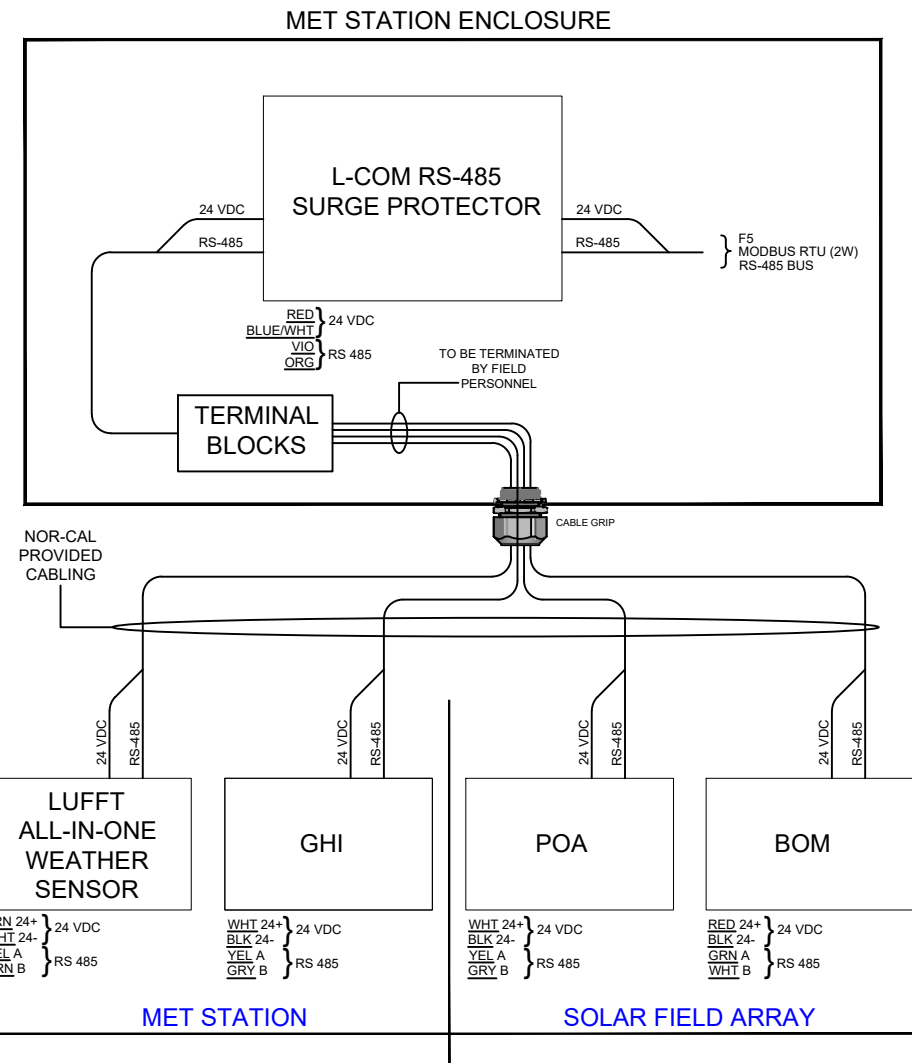
METEOROLOGICAL STATIONS POWER DIST DIAGRAM

SCALE: NTS	ENGINEER: AB DRAWN BY: FC	PROJECT NO.: 17409	VERSION NO.: AB	SHEET NO.: MET-1007
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METEOROLOGICAL STATION
 METEOROLOGICAL STATIONS POWER DIST AND PINOUT DIAGRAMS



TERMINAL BLOCK PINOUT DIAGRAM



SENSOR CONNECTION DETAIL

LEGEND/PROJECT NOTES:

- SEE SHEET MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL.

GENERAL NOTES:

VERSION: AB

TAHOE METEOROLOGICAL STATION VERSION LOG			
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PROJECT:

CLIENT:

SUNENERGY1

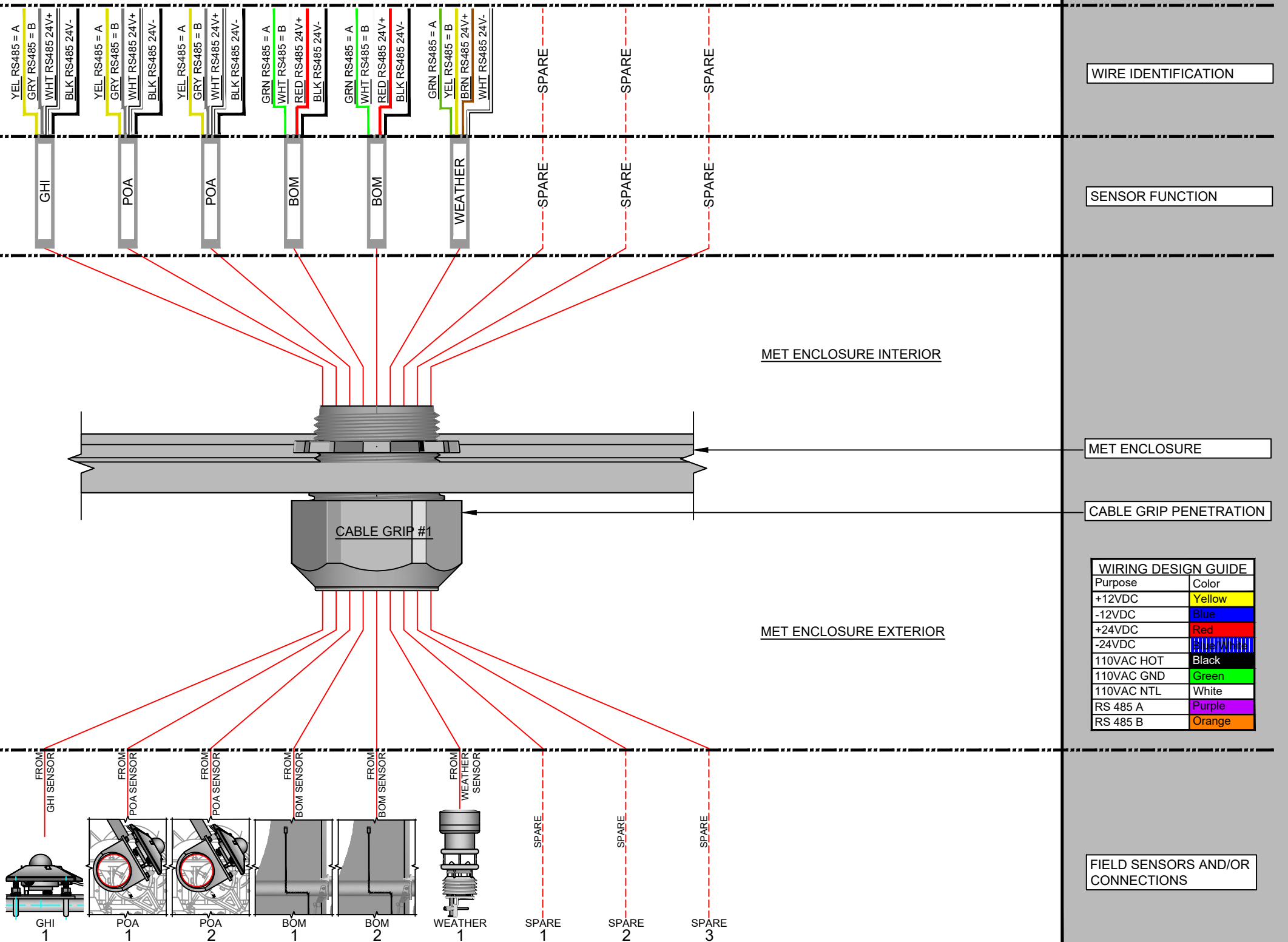


METEOROLOGICAL STATIONS POWER DIST AND PINOUT DIAGRAMS

SCALE: NTS ENGINEER: AB PROJECT NO.: 17409 VERSION NO.: AB SHEET NO.: MET-1008
 DRAWN BY: FC

METEOROLOGICAL STATION

TYPICAL METEOROLOGICAL STATION SENSOR-CABLE GRIP DESIGNATION



LEGEND/PROJECT NOTES:

- SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL.

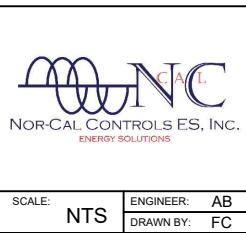
GENERAL NOTES:

VERSION: AB

TAHOE METEOROLOGICAL STATION VERSION LOG			
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1FC	10.16.2017	100% ISSUED FOR CONSTRUCTION	FC
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PROJECT: SUNENERGY1

CLIENT: SUNENERGY1

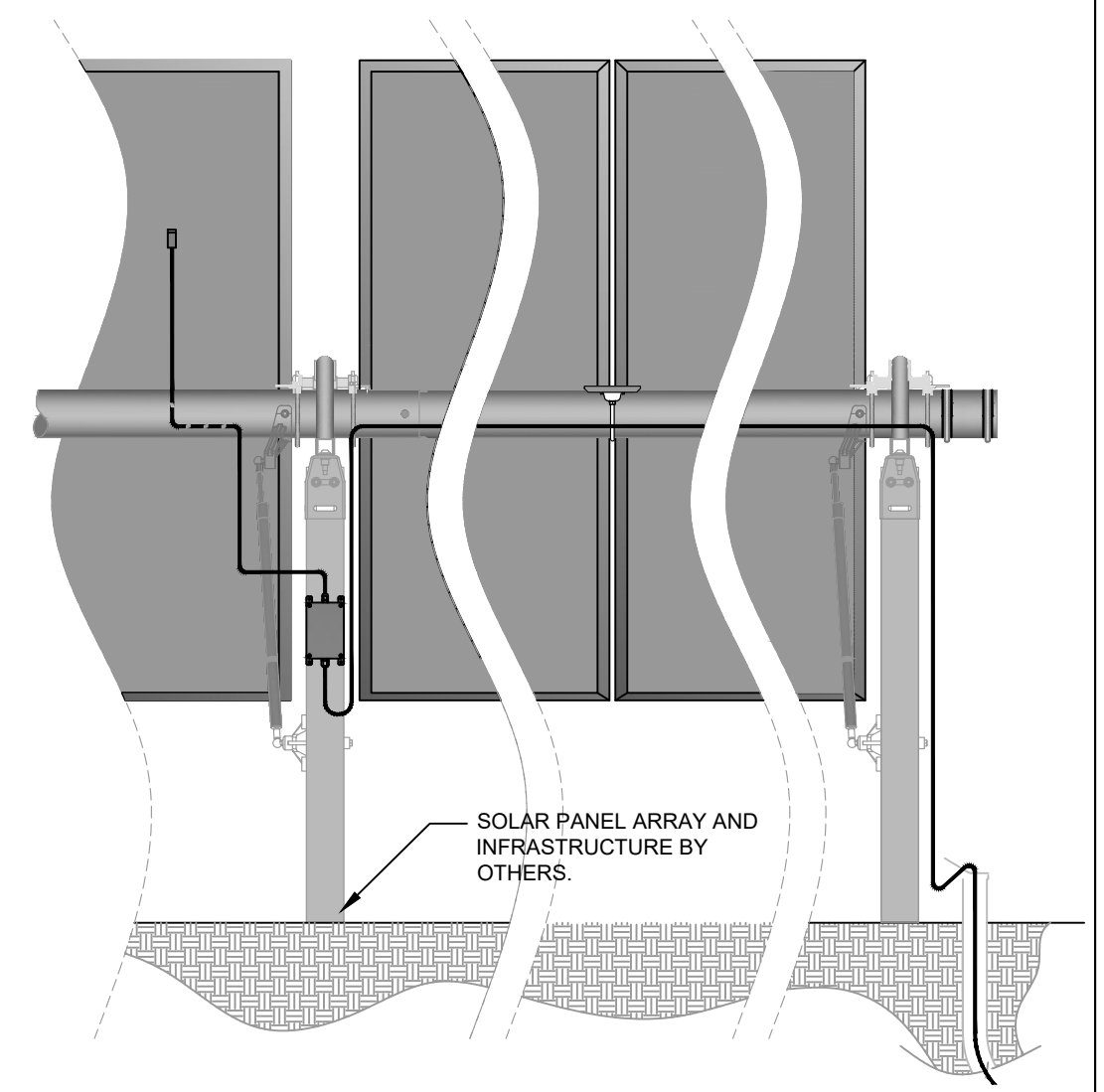
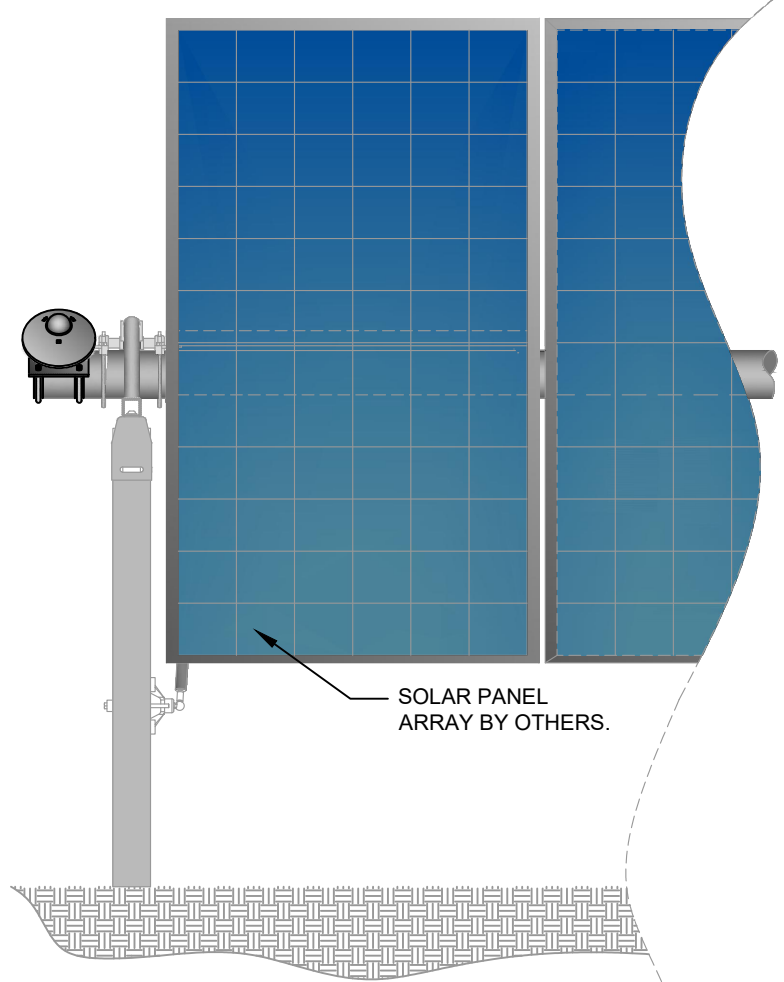
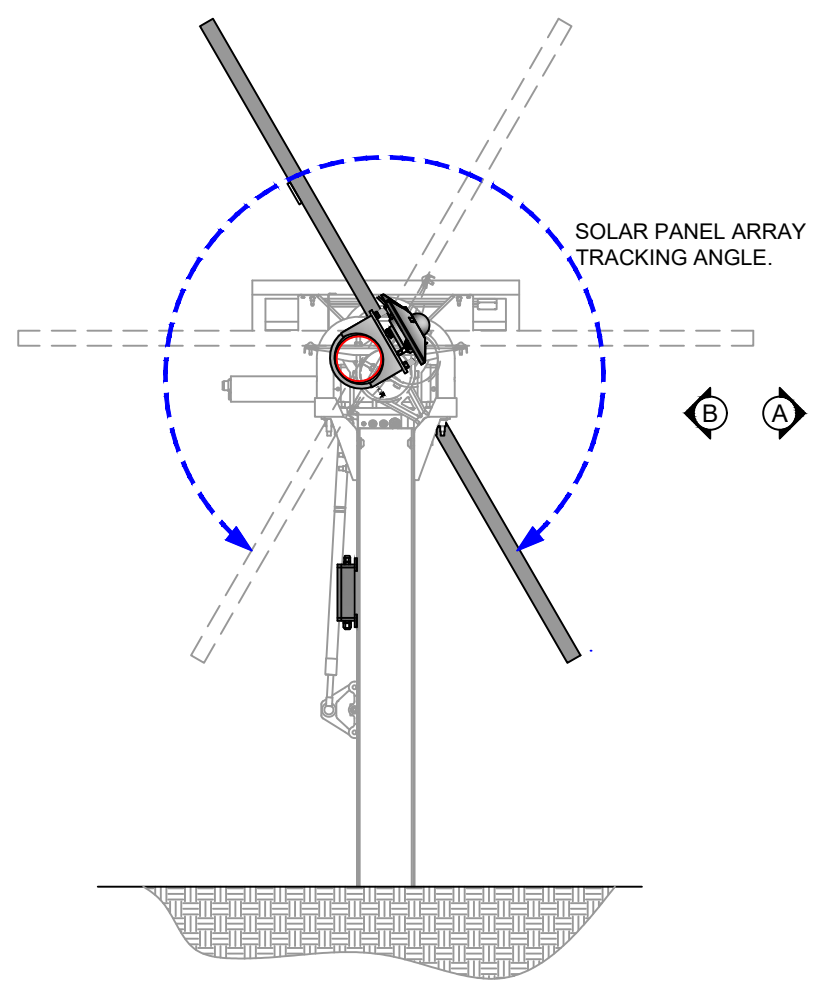


TYPICAL METEOROLOGICAL STATION
SENSOR-CABLE GRIP DESIGNATION

SCALE: NTS	ENGINEER: AB	PROJECT NO.: 17409	VERSION NO.: AB	SHEET NO.: MET-1009
	DRAWN BY: FC			

METEOROLOGICAL STATION PLANE OF ARRAY ELEVATION_SINGLE AXIS TRACKER-FOR REFERENCE ONLY

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LEGEND/PROJECT NOTES:

- SEE MET-1011 - PLANE OF ARRAY (POA) SENSOR-SINGLE AXIS TRACKER
- SEE MET-1012 - BACK OF MODULE (BOM) ARRAY SENSOR(S)-SINGLE AXIS TRACKER
- SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL

GENERAL NOTES:

- SOLAR ARRAY AND STRUCTURE FOR REFERENCE ONLY.

VERSION: AB

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PROJECT:

CLIENT: SUNENERGY1

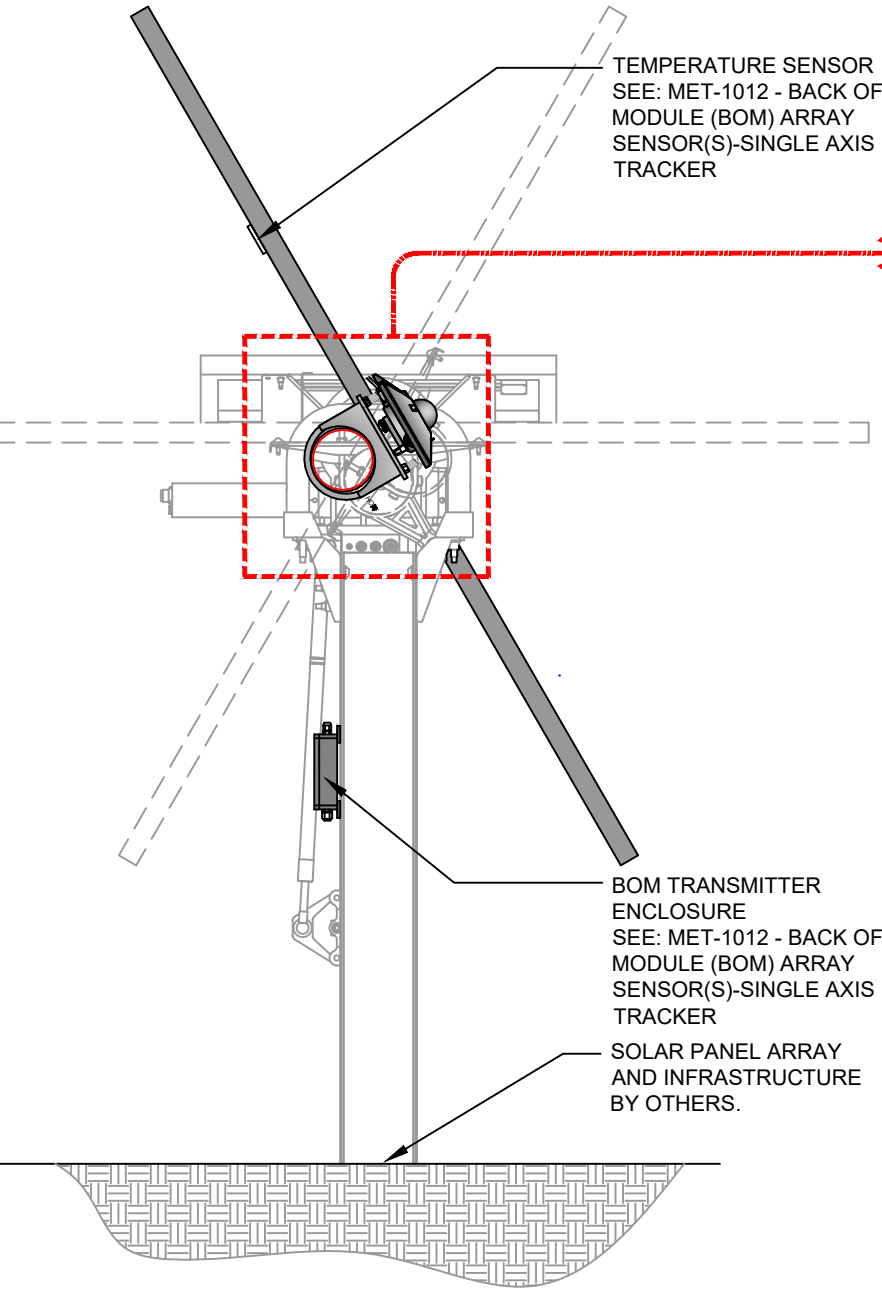
NOR-CAL CONTROLS ES, INC.
ENERGY SOLUTIONS

PLANE OF ARRAY ELEVATION_SINGLE AXIS TRACKER-FOR REFERENCE ONLY

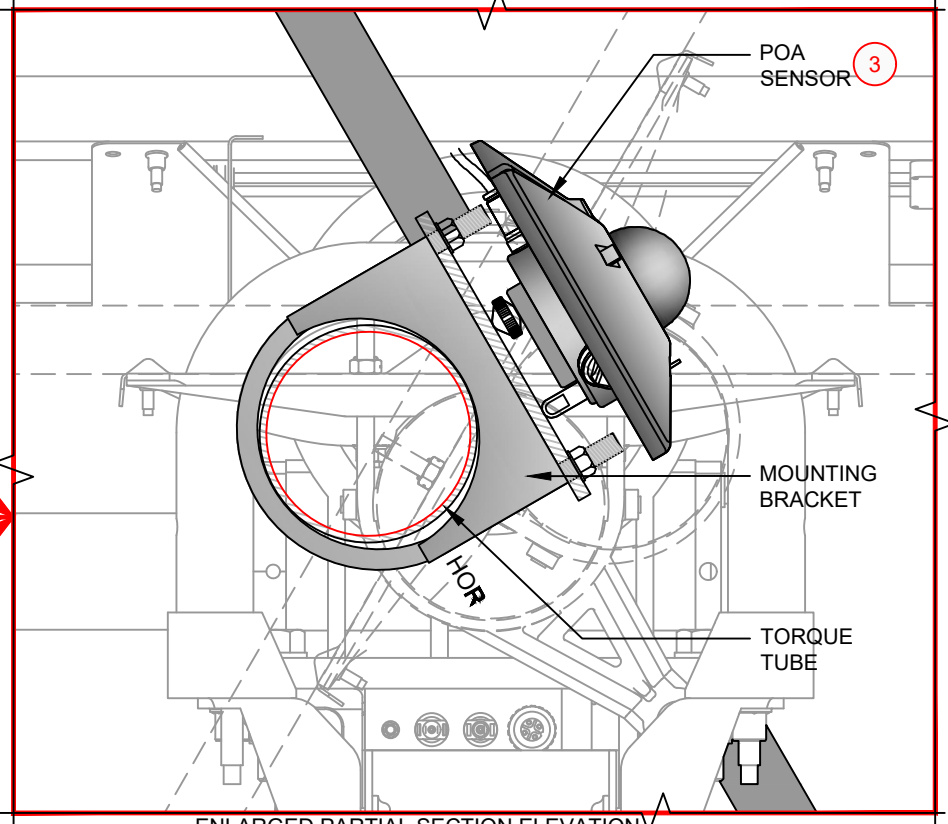
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DRAWN BY: FC

METEOROLOGICAL STATION PLANE OF ARRAY (POA) SENSOR-SINGLE AXIS TRACKER

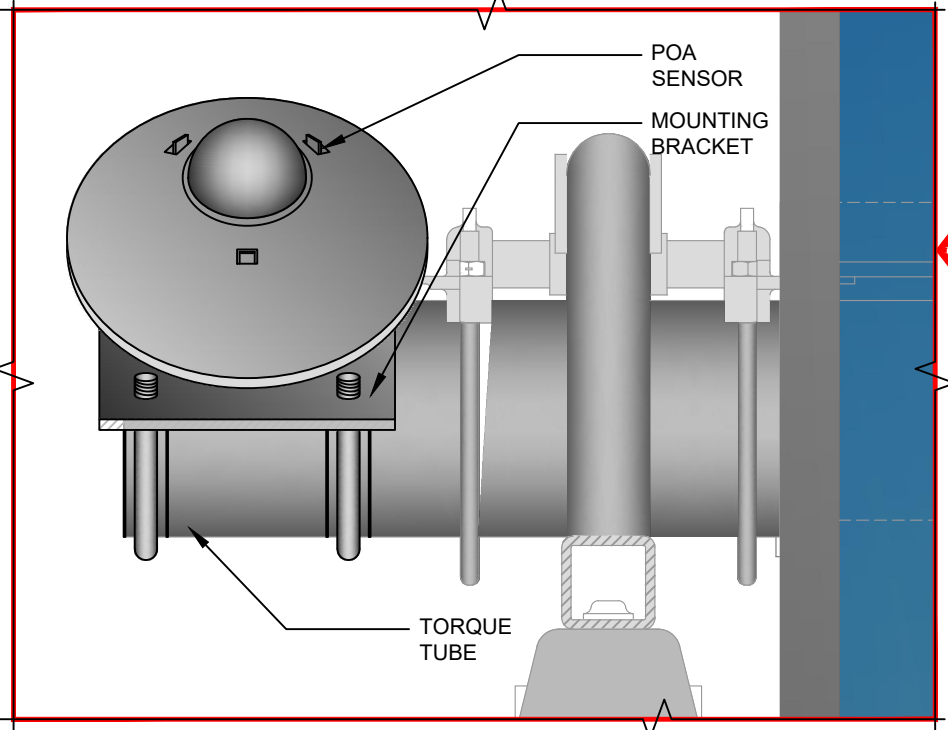
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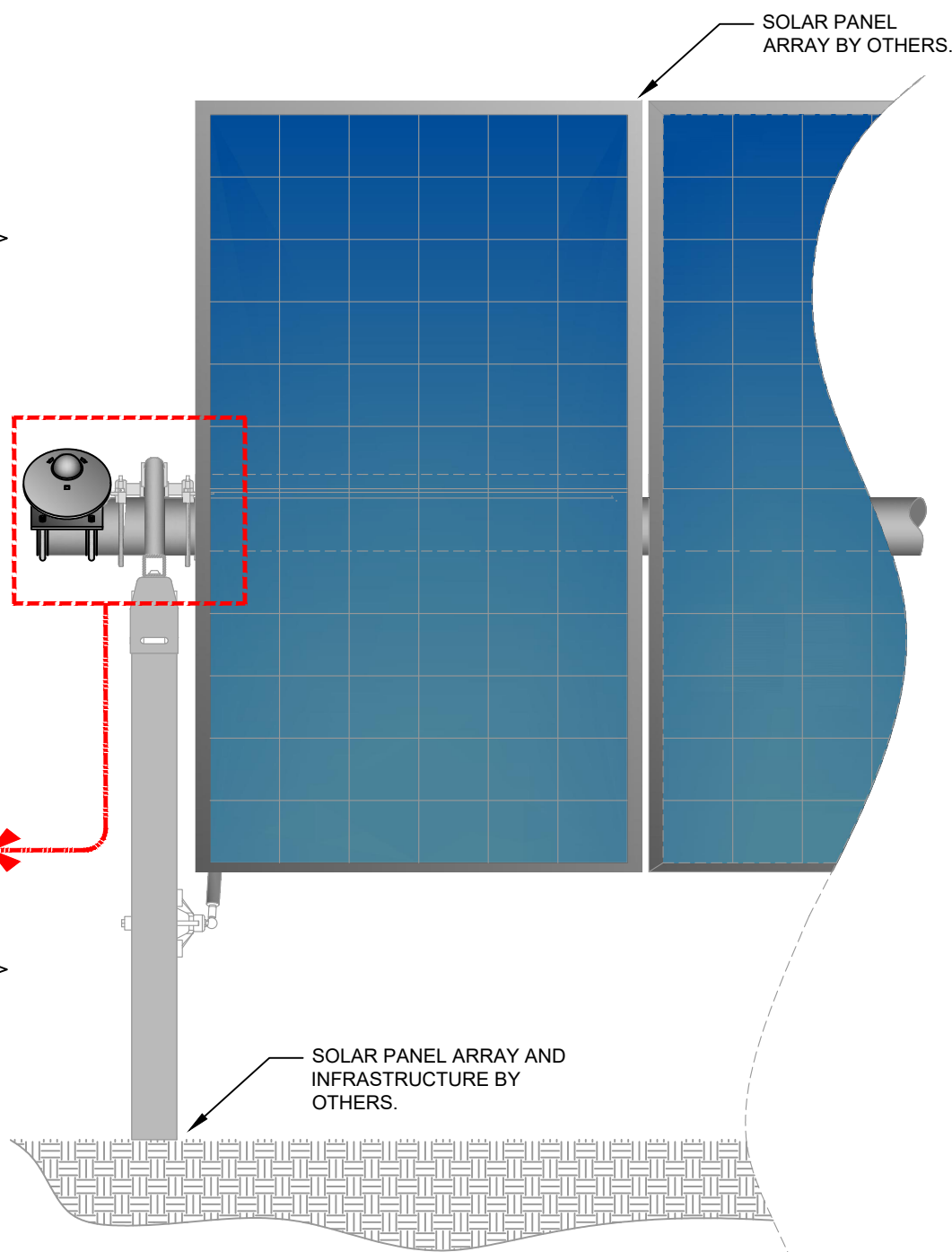
SECTION/ELEVATION



ENLARGED PARTIAL SECTION ELEVATION



ENLARGED PARTIAL SOUTH ELEVATION



PARTIAL SOUTH ELEVATION

LEGEND/PROJECT NOTES:

- SEE MET-1012 - BACK OF MODULE (BOM) ARRAY SENSOR(S)-SINGLE AXIS TRACKER
- SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL

GENERAL NOTES:

- SOLAR ARRAY AND STRUCTURE FOR REFERENCE ONLY.
- POA SENSOR MOUNTING PROVIDED BY NOR-CAL CONTROLS.
- FOR CABLE SENSOR LENGTHS, SEE: MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL.

VERSION: AB

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PROJECT:

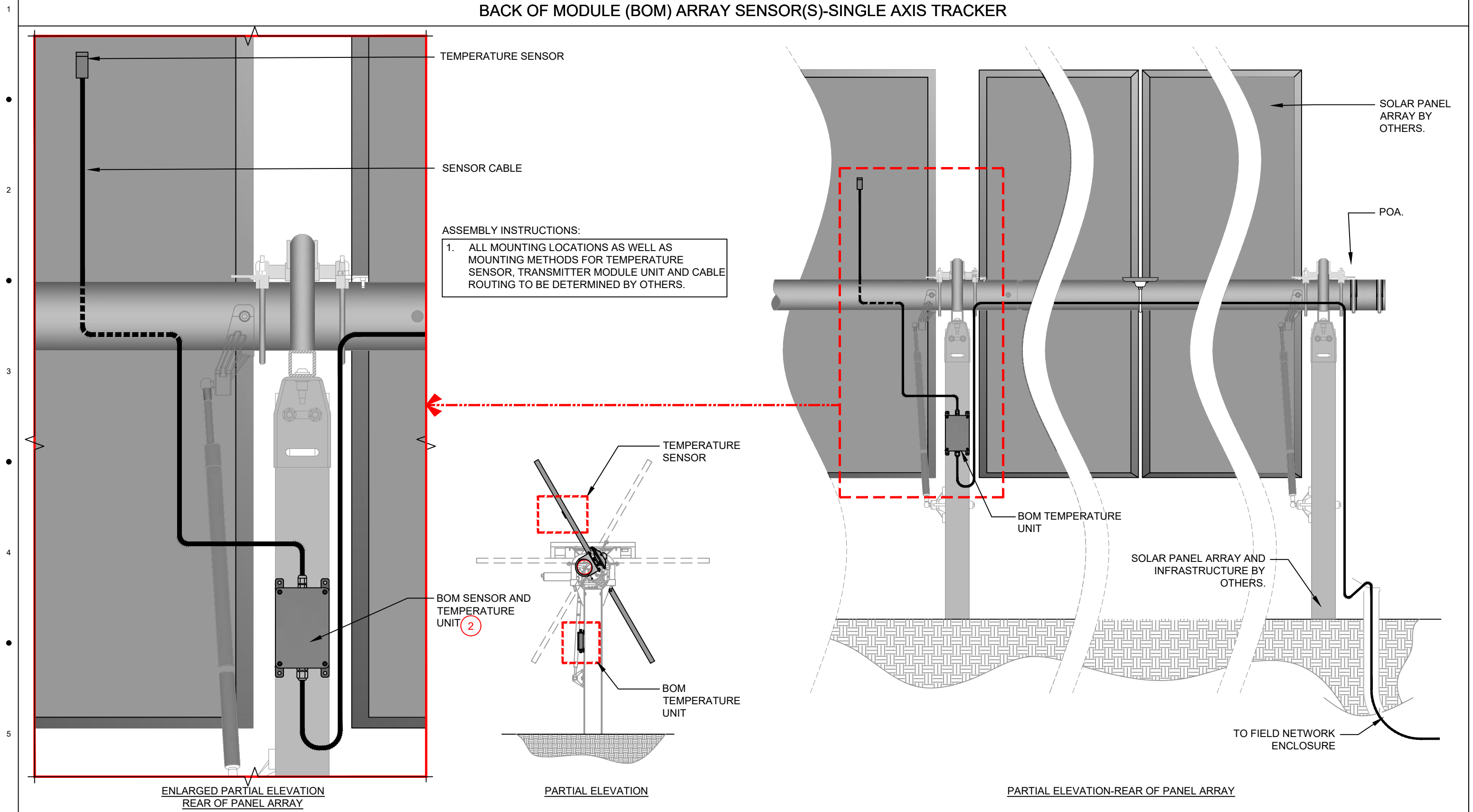
CLIENT:
SUNENERGY1

NOR-CAL CONTROLS ES, INC.
ENERGY SOLUTIONS

PLANE OF ARRAY (POA) SENSOR-SINGLE AXIS TRACKER

SCALE: NTS ENGINEER: AB PROJECT NO: 17409 VERSION NO.: AB SHEET NO.: MET-1011
DRAWN BY: FC

METEOROLOGICAL STATION BACK OF MODULE (BOM) ARRAY SENSOR(S)-SINGLE AXIS TRACKER



LEGEND/PROJECT NOTES:

1. SEE MET-1011 - PLANE OF ARRAY (POA) SENSOR-SINGLE AXIS TRACKER
2. SEE MET-1002 - METEOROLOGICAL STATIONS & FIELD ARRAY SENSORS-BILL OF MATERIAL

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PROJECT:

CLIENT: SUNENERGY1



BACK OF MODULE (BOM) ARRAY SENSOR(S)-SINGLE AXIS TRACKER

SCALE: NTS ENGINEER: AB PROJECT NO.: 17409 VERSION NO.: AB SHEET NO.: MET-1012
 DRAWN BY: FC