

DESCRIPTION:
AGGREGATED PV MONITORING
SCHEMATIC

SYSTEM TYPE:
GENERIC

BY	DATE	DESCRIPTION
KM	08.21.23	SINGLE LINE PUBLISHED
LL	09.26.24	ENCLOSURE DETAILS UPDATED

REV.	DESCRIPTION
1	SINGLE LINE PUBLISHED
2	ENCLOSURE DETAILS UPDATED



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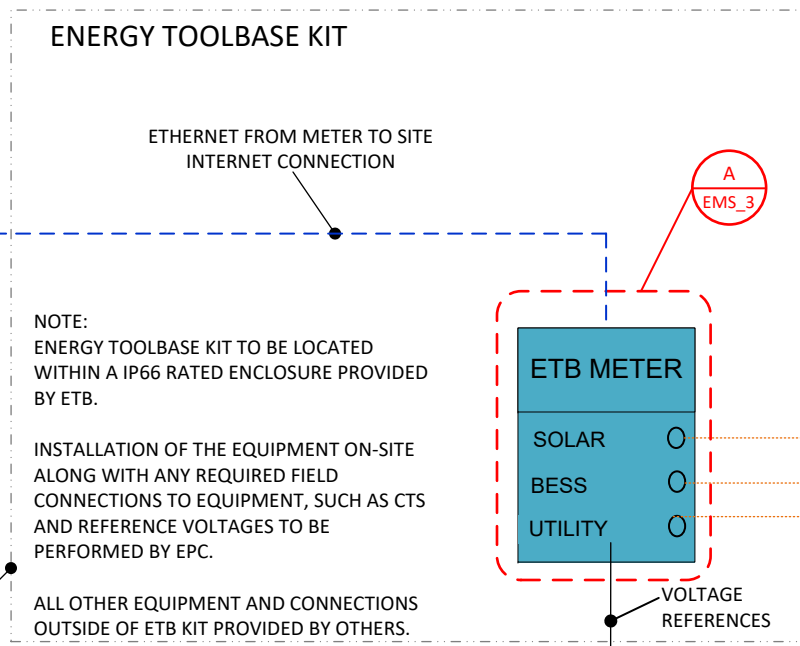
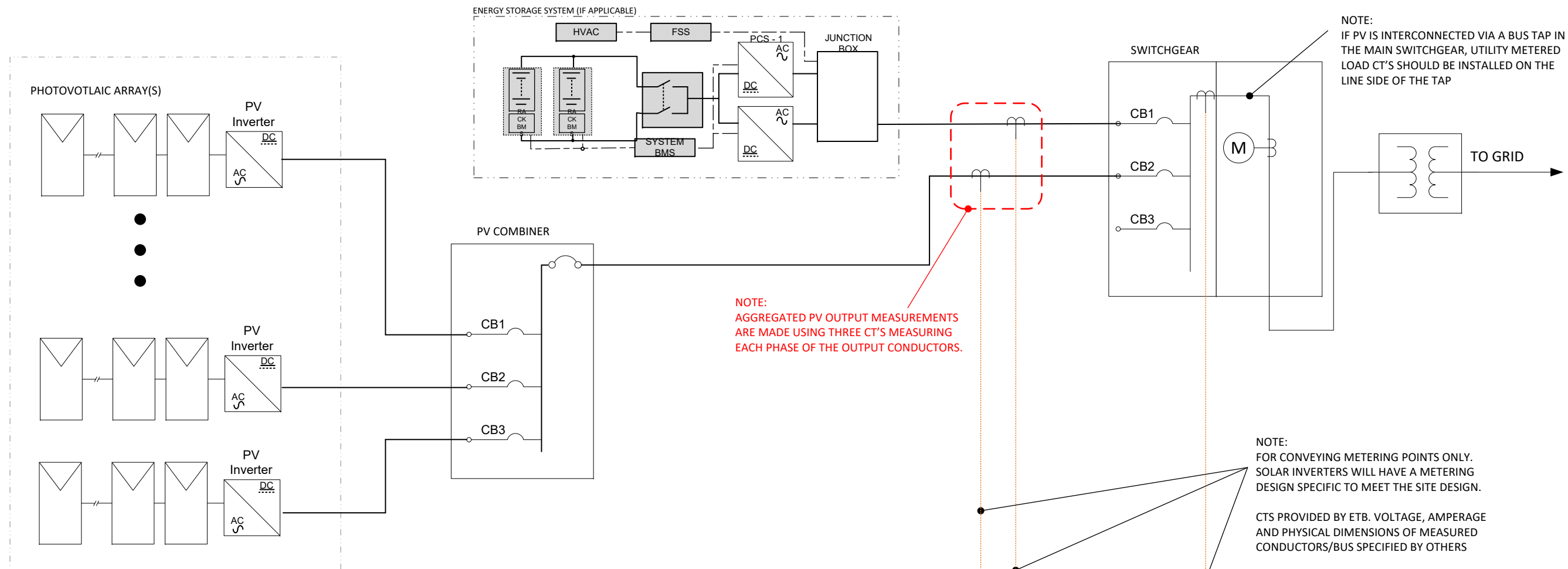
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MONITORING ONLY
SINGLE LINE

DRAWING NUMBER:
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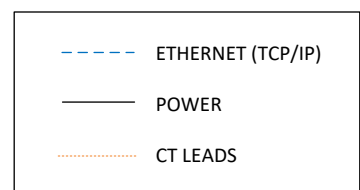
SCALE:
NS

SHEET:
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CODE ENFORCEMENT.



NOTE: ENERGY TOOLBASE HARDWARE KIT MAY INCLUDE MULTIPLE METERS AND VARIOUS HARDWARE KITS THAT MAY DIFFER FROM WHAT IS SHOWN HERE. SITE SPECIFIC HARDWARE TO BE DETERMINED DURING FORMAL QUOTING PROCESS



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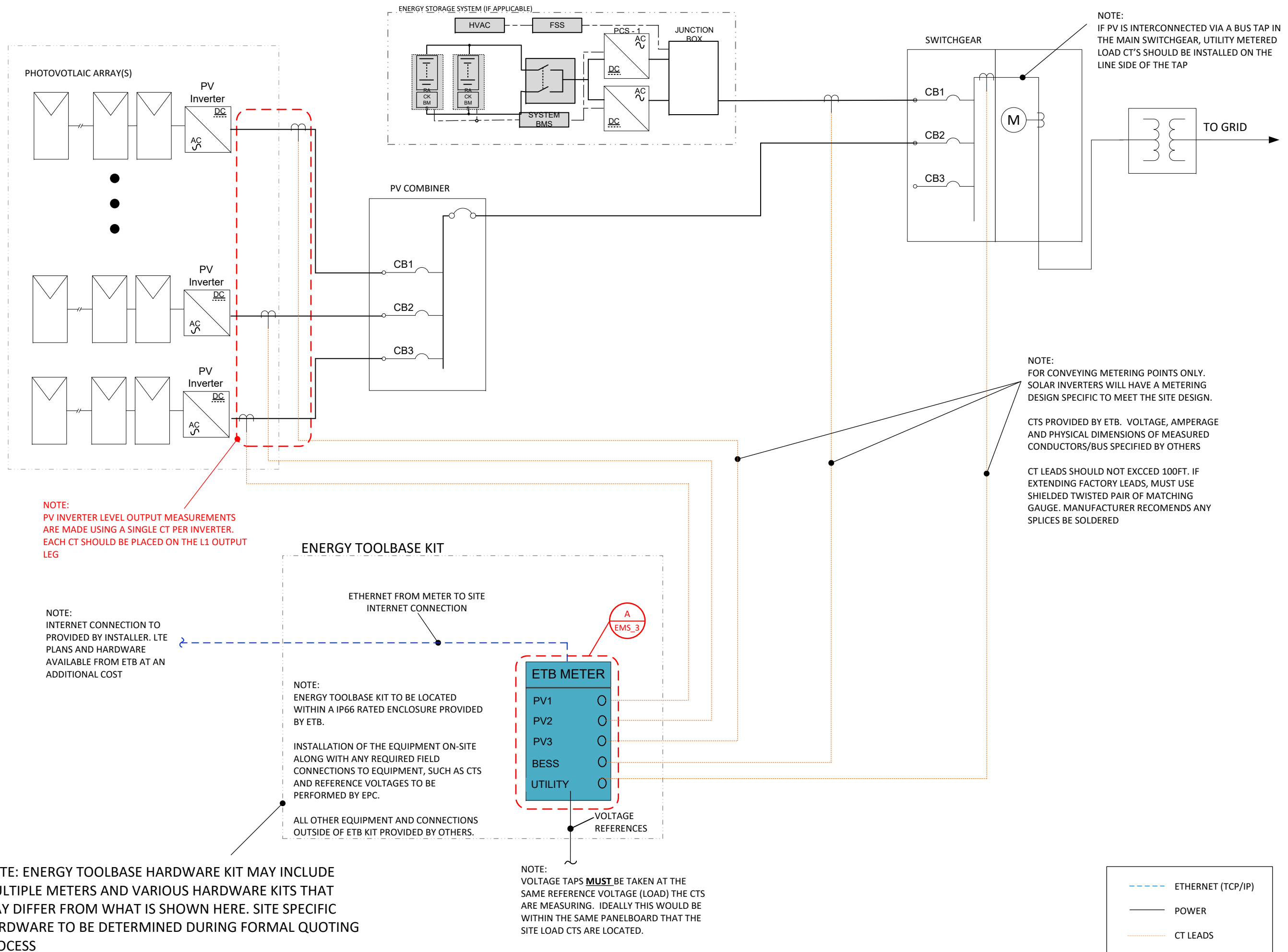
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DRAWING NUMBER:
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SCALE:
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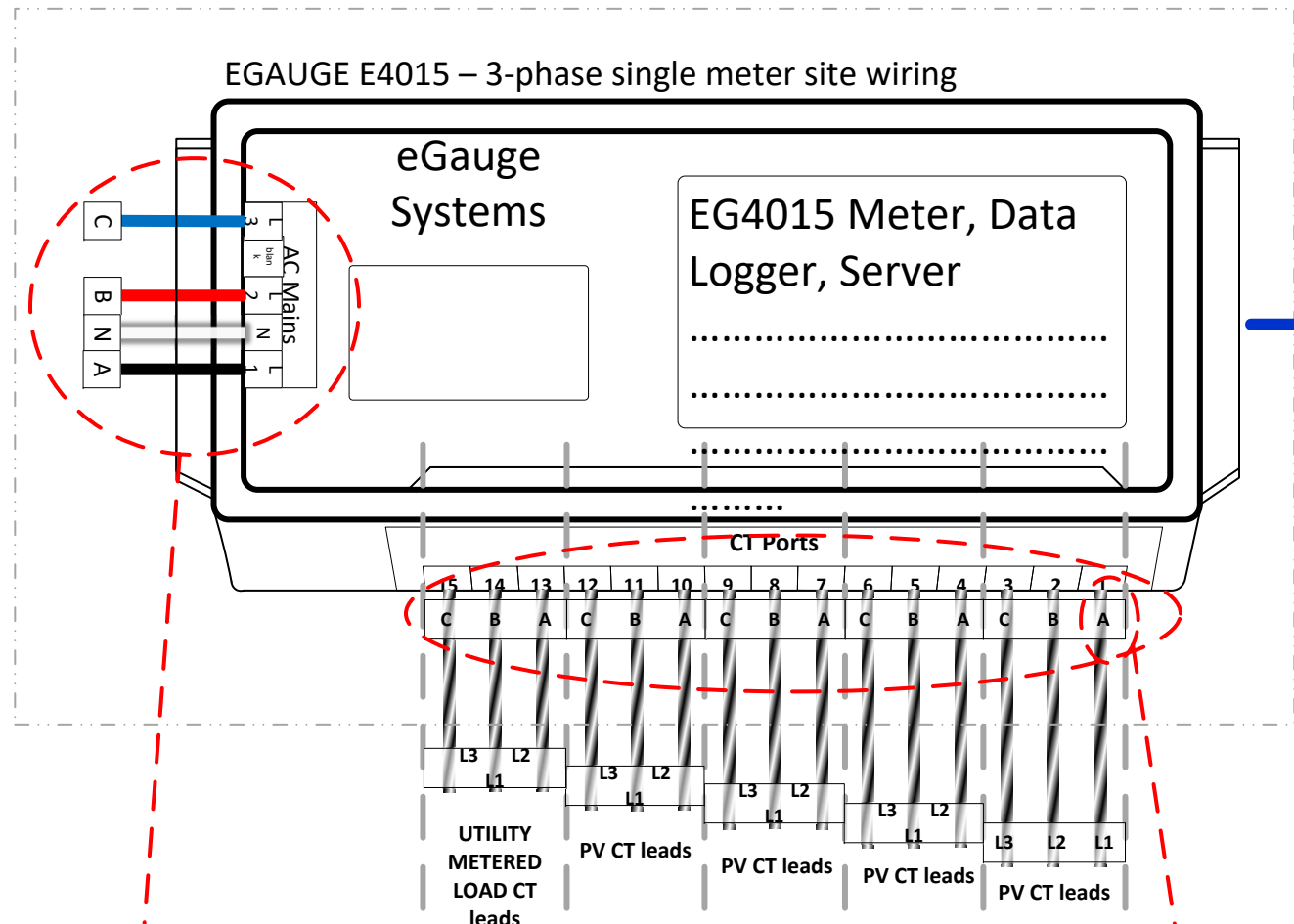
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EGAUGE
ETHERNET
PORT TO SITE
INTERNET

NOTE: CT'S MUST BE INSTALLED ON THE PHASES AS NOTED IN THE DIAGRAM

EACH INDIVIDUAL CT LEAD **MUST** BE A TWISTED STRANDED PAIR OF SHIELDED WIRES



CORRECT WIRING
FOR 2-PIN CT PLUG

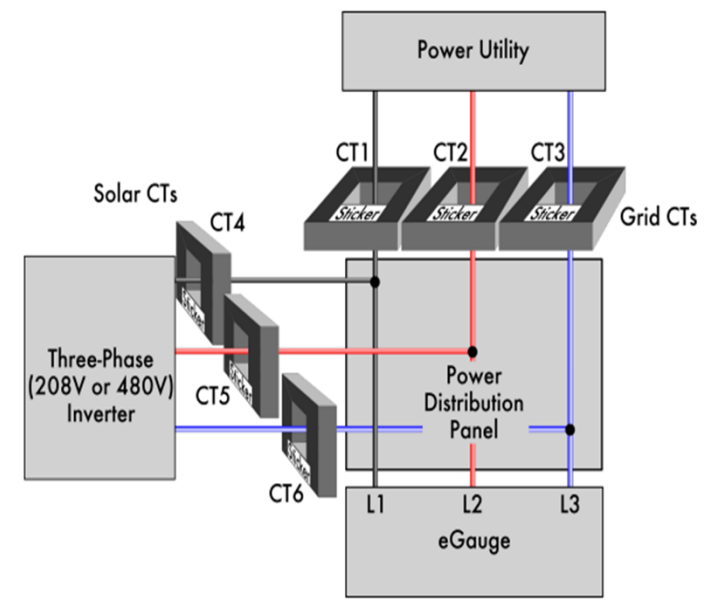
NOTES: VOLTAGE REFERENCE CONDUCTORS MAY BE BROWN/ ORANGE/YELLOW OR OTHER COLOR SCHEMES BASED ON CONNECTION VOLTAGE.

VOLTAGE TAPS **MUST** BE TAKEN AT THE SAME REFERENCE VOLTAGE (LOAD) THE CTS ARE MEASURING. IDEALLY THIS WOULD BE WITHIN THE SAME PANELBOARD THAT THE CTS ARE LOCATED.

A EGAUGE METER CONNECTIONS

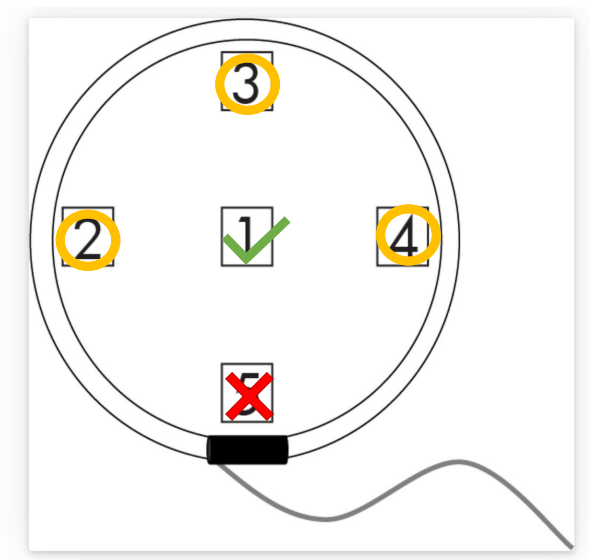
SOLID & SPLIT CORE CT INSTALLATION

SPLIT AND SOLID CORE CT'S SHOULD BE INSTALLED WITH THE STICKER SIDE FACING THE LOAD BEING MEASURED. CERTAIN CT'S MAY HAVE AN ARROW, IN WHICH CASE ENSURE THE ARROW IS POINTING TOWARDS THE LOAD BEING MEASURED



ROPE CT INSTALLATION

ROPE CT'S SHOULD BE INSTALLED PROPERLY TO REDUCE THE MAXIMUM ERROR BASED ON POSITIONING. IDEALLY THE CONDUCTOR BEING MONITORED WILL BE PERPENDICULAR TO THE ROPE CT LOOP, AND PASS THOUGH THE CENTER OF THE ROPE CT AS SHOWN BELOW. TIE-WRAPS OR OTHER NON-CONDUCTIVE FASTENERS CAN BE USED TO CENTER THE ROPE CT AROUND THE CONDUCTOR



Position Number	Position Description	Error
1	Centered	< 0.4%
2, 3, 4	Near outer edge	< 2.0%
5	Near connector	< 4.0%

B CT INSTALLATION INFORMATION



321 E. OSCEOLA ST.
STUART, FL 34994
(866) 303.7786

DESCRIPTION:
METER & CT INSTALLATION
DETAILS

SYSTEM TYPE:
GENERIC

REV.	DESCRIPTION	DATE	BY	LL	KM
1	DETAILS PUBLISHED	09.07.23			
2	ENCLOSURE DETAILS UPDATED	09.26.24			



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TITLE:
MONITORING ONLY
SINGLE LINE

DRAWING NUMBER:
MON_3

SCALE:
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SHEET:
3 OF 5

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DESCRIPTION:
METER CONNECTIONS

SYSTEM TYPE:
GENERIC

REV.	DESCRIPTION	DATE	BY	KM	LL
1	DETAILS PUBLISHED	09.19.23			
2	ENCLOSURE DETAILS UPDATED	09.26.24			



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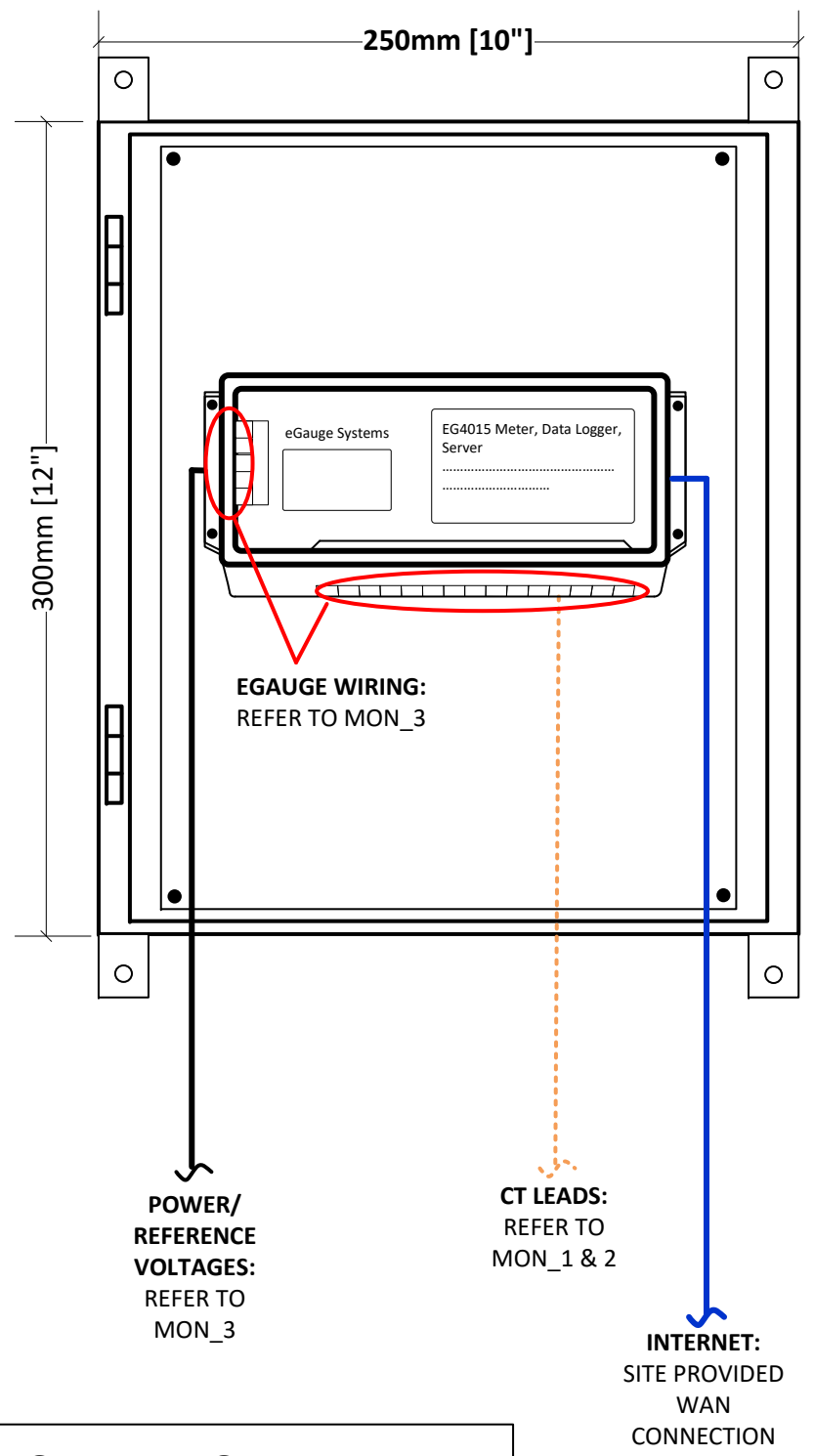
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SINGLE LINE

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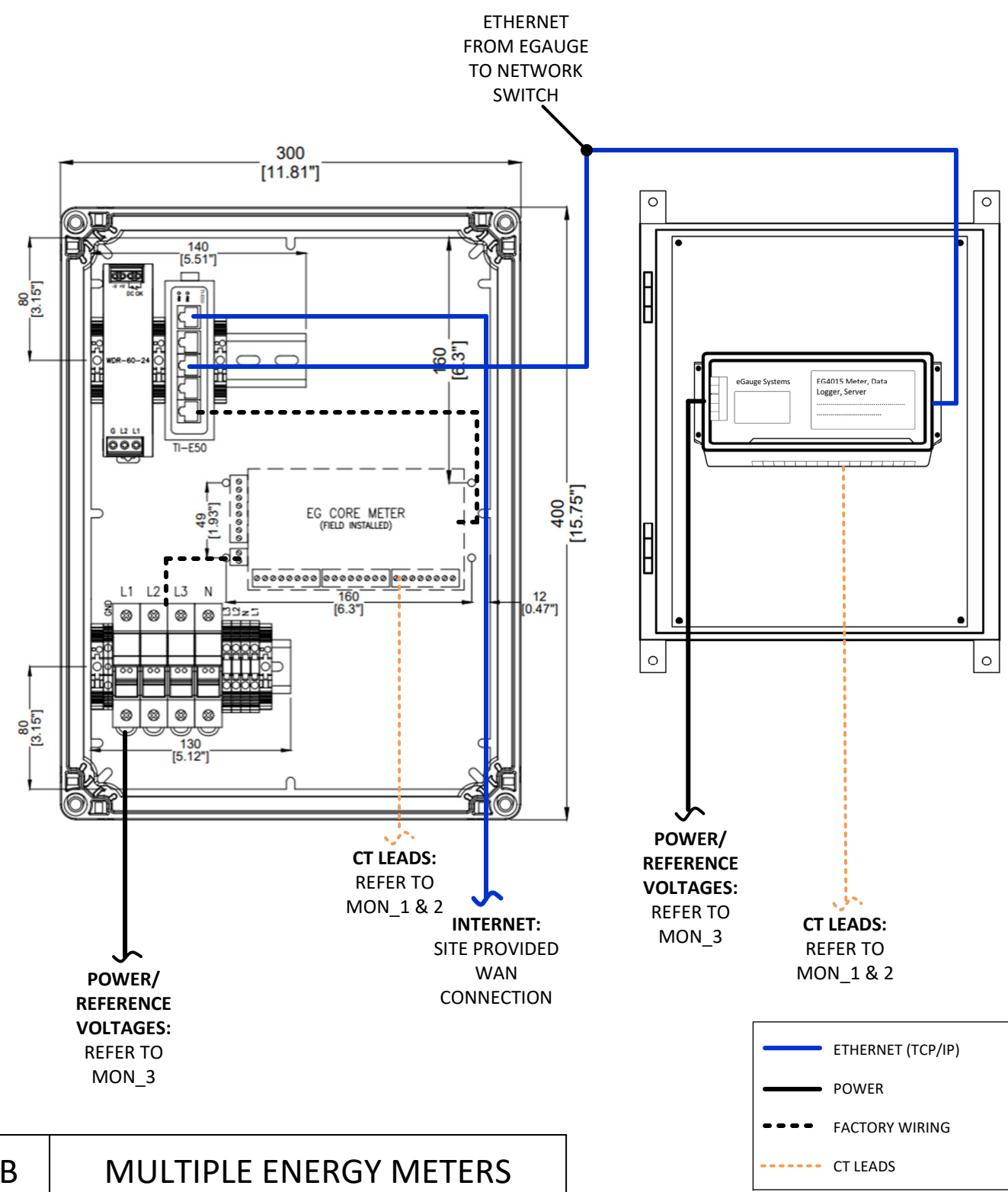
SCALE:
NS

SHEET:
4 OF 5

ALL PENETRATIONS TO METER ENCLOSURE SHALL BE MADE ON THE BOTTOM UNLESS MOUNTED INDOORS



A SINGLE ENERGY METER



B MULTIPLE ENERGY METERS

Legend:

- ETHERNET (TCP/IP)
- POWER
- - - FACTORY WIRING
- - - CT LEADS

NOTES:

1. CT LEADS SHALL NOT BE EXTENDED BEYOND 100'. ETHERNET TCP COMMUNICATION SHALL NOT BE EXTENDED BEYOND 330'.
2. CT LEADS MUST BE RAN SEPARATE FROM POWER CONDUCTORS. IF EXTENDED BEYOND FACTORY LEADS, USE TWISTED STRANDED PAIRS AND **ENSURE PROPER SPLICING VALIDATED WITH A FIELD TEST.**
3. INTERNET CONNECTION AND CT TRACES SHOULD BE TESTED ONSITE BY INSTALLER. PLEASE REFER TO ACUMEN INSTALLATION MANUAL FOR TESTING METHODS.

4. ETB METERING ENCLOSURE CONDUIT ENTRANCES MUST USE PROPERLY RATED HUBS/CONNECTORS SEALED WITH FIRE RATED COMPOUND TO PREVENT MOISTURE INTRUSION. PENETRATIONS MUST BE MADE ON THE BOTTOM OF THE ENCLOSURE.

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STUART, FL 34994
(866) 303.7786

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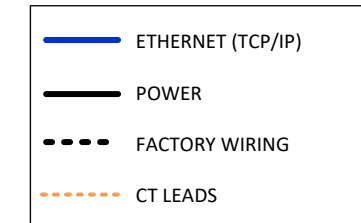
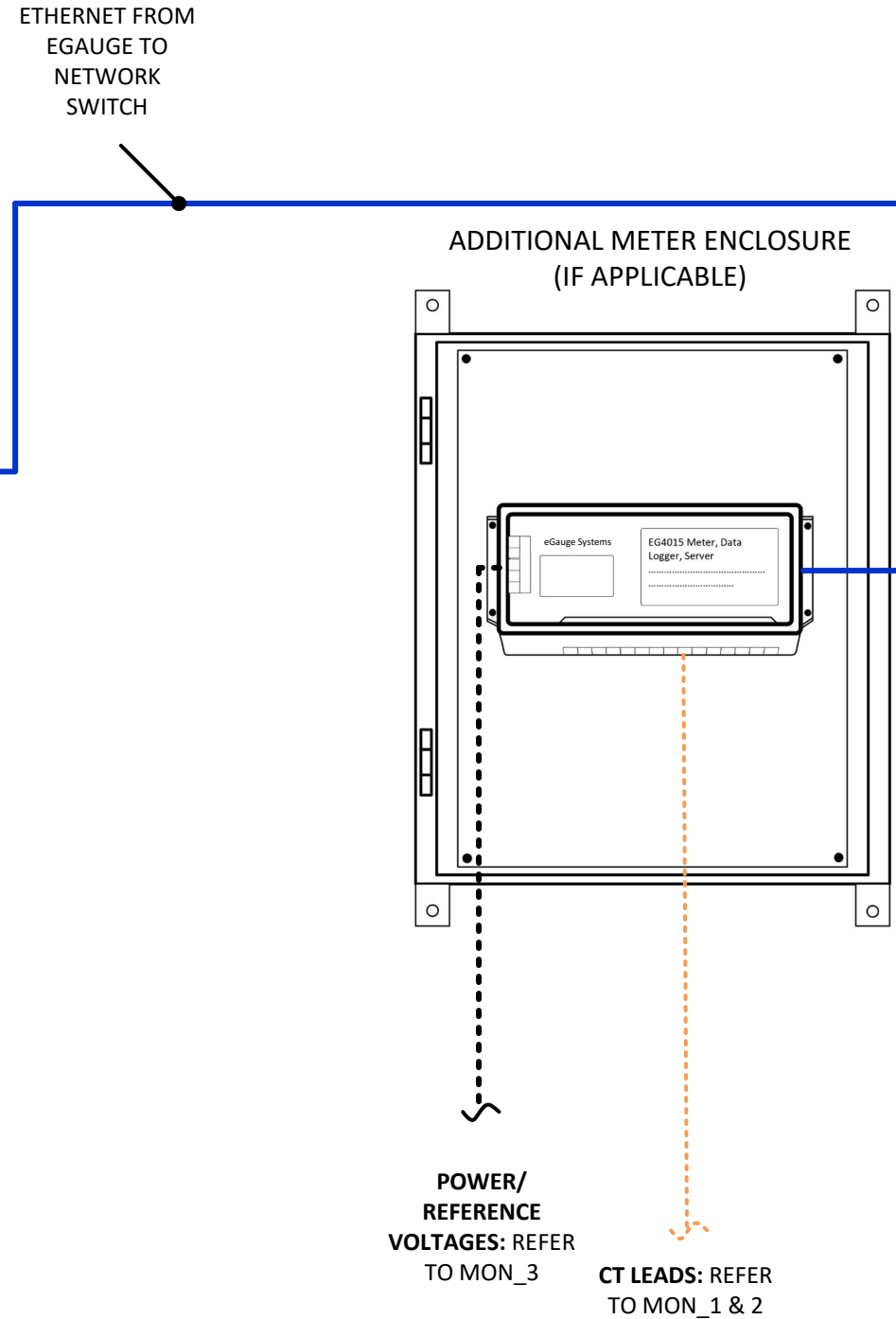
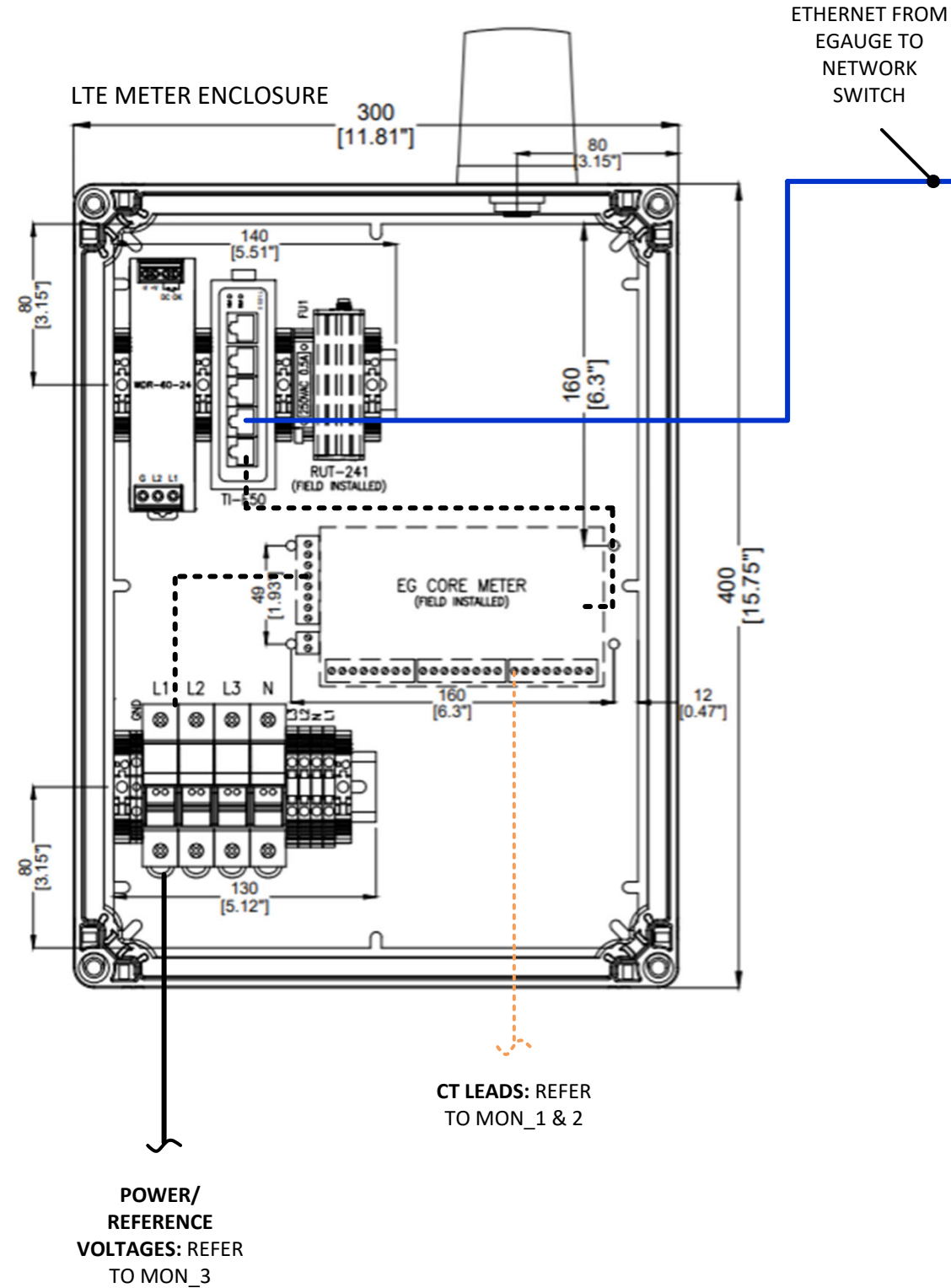
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MON_5

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A LTE METER CABINET (MULTIPLE METERS IF APPLICABLE)

- NOTES:**
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 2. CT LEADS MUST BE RAN SEPARATE FROM POWER CONDUCTORS. IF EXTENDED BEYOND FACTORY LEADS, USE TWISTED STRANDED PAIRS AND **ENSURE PROPER SPLICING VALIDATED WITH A FIELD TEST.**
 3. INTERNET CONNETION AND CT TRACES SHOULD BE TESTED ONSITE BY INSTALLER. PLEASE REFER TO ETB MONITORING: STANDARD HARDWARE KIT – SETUP GUIDE FOR TESTING METHODS.

4. ETB MONITORING ENCLOSURE CONDUIT ENTRANCES MUST USE PROPERLY RATED HUBS/CONNECTORS SEALED WITH FIRE RATED COMPOUND TO PREVENT MOISTURE INTRUSION. PENERATIONS MUST BE MADE ON THE BOTTOM OF THE ENCLOSURE.

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