



Complex Metering Guide Lines for Instrument Rated Metering and Check List for Electrical Contractors

Guidelines for Transformer rated metering installations

NOTE:

- These are general guidelines and are **not** intended to replace the Austin Energy Design Criteria Manual.
- Specific design requirements and final approval of any Transformer rated metering installation shall be directly coordinated with Complex metering.
*For further details, refer to section 1.9.0. through section 1.9.3.3. of the **Austin Energy Design Criteria Manual –Latest Edition.***

Electricians and Contractors within the Austin Energy (AE) service area:

The Complex Metering Operations section of Austin Energy *requires that all transformer-rated services be inspected **before** any meter is set. The **Austin Energy Design Criteria Manual** section 1.4.1 requires that the Customer must apply for electric service **before** any meter can be energized.*

- Instrument Rated or CT Rated inspections need to be called in and passed before you call for a City of Austin Inspection. (304 or 305)
- Ensure the address for the property or unit being worked on has been added to all required COA and AE systems. (Amanda, 911 addressing, AE Billing)
- As per the Austin Energy Criteria Manual Please allow 2 business days from the time of conference, with the Complex metering inspector to schedule your inspection, to have your service inspected.
- If the service passes inspection, allow 1 – 3 business days for your meter to be installed
- Once the meter is on the system, the customer will need to contact AE Customer Service at (512)494-9400 to set up an account and apply for service.
- If the service does not pass the initial inspection, you will be charged a Re-Inspection Fee, of \$75, that will be added to your permit fees. Any corrections that will need to be made will be discussed with you on site, by phone, or e-mail. You will also receive a metering correction notice stating the corrections that need to be made.

Please contact Complex Metering with any questions you may have. If you leave a voicemail message, be sure to provide the following:

- Your name
- Your phone number
- The address of the installation to be inspected
- The permit number of the installation to be inspected

Complex Metering numbers are as follows:

For Inspections and General Questions (Such as: equipment sizing, part numbers, etc...)

Primary Contacts- Ben Parks, Ryan Maybin
(512)505-7068

For Design questions regarding metering (Such as: Meter spots, Load questions, Online review, etc..)

Primary Contact – Ryan Maybin
(512)505-7157



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Tasks you must perform when building a Transformer rated installation(s) are listed below.

For installations with CT Enclosures:

- Mount the CT enclosure. Be sure you **do not** mount it on its side or up-side-down.
For further details, refer to Austin Energy Design Criteria Manual section 1.9.1.9. Table 1.9.1.9.A, and Appendix – Exhibits Figure 1-10.
- Mount the CTs either vertically or horizontally inside the can. Be sure **each** polarity mark faces the **line side** of the conductor.
For further details, refer to Austin Energy Design Criteria Manual section 1.9.1.9 B.
- Mount the meter can.
Refer to Austin Energy Design Criteria Manual section 1.9.2.C for heights and clearances.
All conduits entering or leaving the meter can or meter socket shall use knockouts provided.
For further details, refer to Austin Energy Design Criteria Manual sections 1.9.3.2, and Appendix – Exhibits Figure 1-6 or 1-11 B.
- Install all required plastic bushings for line (service), load, and metering.
- Pull the conductors through the current transformers (CTs).
- Apply color codes to the conductors in the CT can to indicate the service voltage and proper phasing.
For further details, refer to Austin Energy Design Criteria Manual section 1.3.7. Table 1.3.7.
- Run the #6 ground wire, either solid or stranded, from the earth grounded terminal, in the disconnect or gutter, through the CT enclosure and into the meter can. Ensure the ground is bonded to the CT enclosure and bonded to the grounding stud provided in the meter can.
For further details, refer to Austin Energy Design Criteria Manual section 1.9.1.9 I
- Seal Holes- With the lid on the CT enclosure, drill one-quarter inch (1/4”) holes through both the lid and the lip **between four inches (4”) and six inches (6) below the upper left-hand** corner of the CT can. Next, drill one-quarter inch (1/4”) holes through both the lid and the lip **between four inches (4”) and six inches (6) above the lower right-hand** corner of the CT can. When using a Hoffman type CT enclosure do not drill any seal holes. Use the lock plate hardware included. For further details; refer to Austin Energy Design Criteria Manual Appendix – Exhibits Figure 1-10.
- Label the meter can or socket to reflect the street number of the address and any additional information required to uniquely identify that address, such as a unit number, suite number, or building number. Use 2” stick on numbers and letters.
For further details, refer to the Austin Energy Design Criteria Manual section 1.9.1.7.

If you are upgrading a service, whether or not the existing meter(s) will be removed, provide us with any and all existing meter number(s). You only need to provide meter number(s) of meters involved in the upgrade. If you remove a meter, or meters, give the meter(s) to any Austin Energy personnel.

For further details, refer to the Austin Energy Design Criteria Manual section 1.9.1.5.



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Tasks you must perform when building a Transformer rated installation(s) are listed below.

For installations with CTs on the transformer bushings:

- Mount the meter can.

Refer to Austin Energy Design Criteria Manual section 1.9.2.C for heights and clearances.

All conduits entering or leaving the meter can or meter socket shall use knockouts provided.

For further details, refer to Austin Energy Design Criteria Manual sections 1.9.3.2, and Appendix – Exhibits Figure 1-6 or 1-11 B.

For details on how to construct the support structure (build the “rack”), refer to the Austin Energy Design Criteria Manual Appendix Figure 1-11a (page 9) or Figure 1-11c (page 11).

- Install the plastic bushing in the meter can.
- Run the #6 ground wire (stranded) from the secondary compartment of the padmount transformer to the meter can or socket. Bond the ground wire to the meter can or socket. Also run a pull string when running the # 6 ground wire in the 1 1/4 “ conduit.
For further details, refer to Austin Energy Design Criteria Manual section 1.9.1.9 H
- Apply color codes to the conductors in the secondary compartment of the padmount transformer to indicate the service voltage.
For further details, refer to Austin Energy Design Criteria Manual section 1.3.7. Table 1.3.7.
- Label the meter can or socket to reflect the street number of the address and any additional information required to uniquely identify that address, such as unit number, suite number, or building number. Use 2” stick on numbers and letters.
For further details, refer to the Austin Energy Design Criteria Manual section 1.9.1.7

If you are upgrading a service, whether or not the existing meter(s) will be removed, provide any and all existing meter number(s). You only need to provide meter number(s) of meters involved in the upgrade. If you remove a meter, or meters, give the meter(s) to any Austin Energy personnel.

For further details, refer to the Austin Energy Design Criteria Manual section 1.9.1.5.