

Load Management Wiring

When a member signs up for the Dunn Energy Cooperative Load Management Program, there are several key items that need to be taken into consideration when preparing for the DEC final hook up.

Outside Requirements

The CT sub meter socket must be mounted outside; preferably next to the meter socket at eye level. It should also be easily accessible for wiring and maintenance.

The wiring must be pulled from the CT to the sub meter outside. There needs to be four wires plus a ground wire.

The gauge of wire depends on the distance the CT sub meter socket is located from the CT itself. **Stranded wire is preferred.**

The following wire gauge must be used for CT wiring:



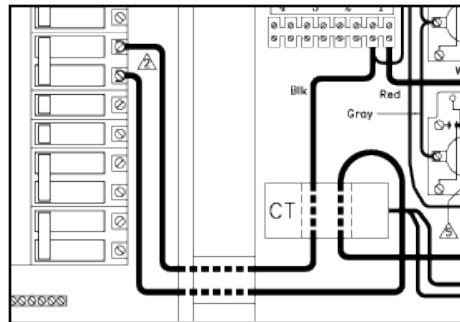
CT Sub Meter box with appropriate wiring.

- #14 wire - up to 10 feet
- #12 wire - 10 - 16 feet
- #10 wire - 16 - 23 feet

Inside Requirements

All off-peak loads, including electric heat, water heaters, clothes dryers, air conditioning units, saunas and hot tubs, must be run through the CT. **Please make sure to leave a dedicated 15-amp, 2-pole breaker open for powering the submeter.**

All leads from the 'A' phase from the breaker need to pass through the CT from the same direction. Subsequently, all leads from the 'B' phase from the breaker need to pass through the CT in the opposite direction. *See below.*

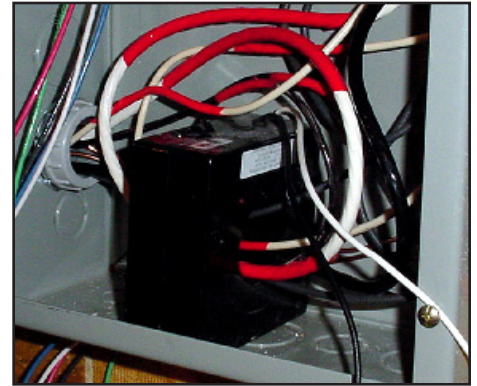


The sketch above depicts a properly wired CT.

If the off-peak load is a boiler or ground source heat pump a low voltage, 18/2 thermostat control wire must be run from the boiler area to the CT junction box area. Dunn Energy will make all necessary connections on the control wire.

What will DEC take care of?

- Dunn Energy will:
- Verify that all loads run correctly through the CT
 - Terminate wires at the meter socket and CT
 - Set meter
 - Install Load Management Receiver



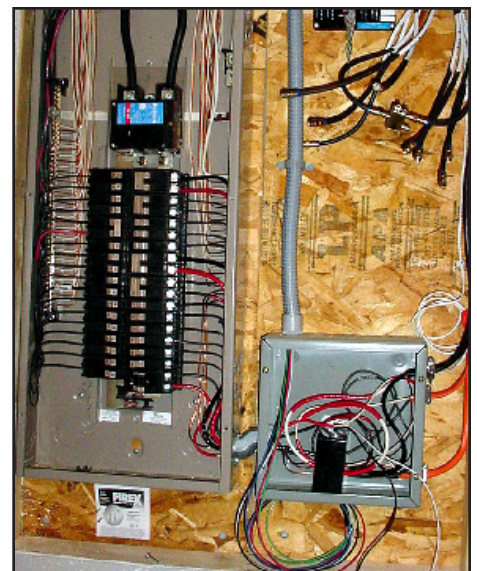
CT sitting in junction box with appropriate wiring

Typical Boiler Power Requirements

<u>Boiler amps</u>	<u>Amps</u>	<u>Breaker</u>
9 kW	37.5	1-60
13.5 kW	56.25	1-30 & 1-60
18 kW	75	2-60
22.5 kW	93.75	1-30 & 2-60
27 kW	112.5	3-60

Wire conductor size determined by name plate current rating.

For technical questions call the office at 715-232-6240.



A project appropriately wired, waiting for DEC to complete