

## **Contractor Information – ENWIN Metering Requirements for Commercial Services**

A floor plan showing the location of the units in relation to the electrical room shall be posted in the electrical room and a copy submitted to ENWIN. The drawing shall be revised within three months of any change to the floor plan.

Each of the service conductors must be marked to identify the individual phases and neutral both at the main switch and at the service entrance. In cases of multiple metering installations (both residential and commercial), it is necessary to clearly and permanently identify each unit and their corresponding meter socket, disconnect switch and panel. In the case of remote disconnects in a meter centre or similar enclosure, the main disconnect switch handle and compartment must be identified.

The identification may be painted (oil based), engraved directly in the equipment, or consist of a permanently attached nameplate. Only the unit number or assigned municipal address may show on the equipment.

All meters must be located in a secured electrical room or a weather proof cabinet.

Metering cabinets must have manufactured fixed backplate mounting studs. Self-tapping screws are not permitted. Cabinet height 1 metre (3 feet) between finished floor and bottom of the cabinet. The location allocated for the metering equipment shall be directly accessible to Enwin. It shall have not less than 1219mm (48") clear space in front of the cabinet.

For service that will have a load of 50 kW or larger a 120 volt duplex receptacle should be within a 6 ft. (2 meter) proximity of the meter cabinet to provide power to the cellular modem required for remote interrogation of the interval metering system. The meter must be located in an area where a cellular signal is available.

For 7 jaw meter socket services (up to 200 Amp services), the customer is to supply and install a 7 jaw meter socket on the load side of the main disconnect and a 120 volt duplex receptacle should be within a 6 ft. (2 meter) proximity of the meter of the meter socket to provide power to the cellular modem.

Minimum length of cable looped inside the meter cabinet for instrument transformers shall be 1m (39"). This cable must be continuous i.e. it must not be cut.

For all CT connections, crimp type connectors up to 500MCM for copper wire only will be supplied by ENWIN. There should be a maximum of two conductors per phase.

Where space is provided in a customers Switchgear for ENWIN provided CTs and PTs, a 508 mm x 762mm x 254mm (20"x30"x10") metering cabinet must be included in the switchgear or remotely located with 32mm (1 ¼") rigid steel conduit connecting the cabinet and instrument transformer compartment. The maximum length of this conduit should be 32 metres (106 Feet).

Where pulse metering is to be used the maximum length of the 32mm (1 ¼") Rigid Steel conduit between the pulse metering cabinet and the instrument transformer compartment is 23 m (75 feet).

In cases where Switchgear will be installed it will be the contractors responsibility to install CT's and PT's. These will be provided by ENWIN and can be picked up at the meter shop.

For outdoor meter cabinets, a 200 watt heater bar (supplied from a 120V circuit), vent, and a thermostat are required inside the meter cabinet to prevent condensation build up. The outdoor cabinet must have a locking hasp to allow for an ENWIN lock. The cabinet must be deep enough to allow room for the meter base (4-5") and meter (6") therefore a 12" deep cabinet should suffice. All wire inside the cabinet must be inside conduit to prevent damage.

### Meter Equipment Pick up and Delivery

Two weeks prior to inspection bring the back plate to the meter shop located at 4545 Rhodes Drive. ENWIN will wire the meter cabinet backplate in all cases. If CTs and PTs are to be installed onto the backplate ENWIN will wire these also. You can call the meter shop at 251-7300 ext. 229. Please label the backplate with the following information

- Address (must be written directly on the back plate in black marker)
- Top/Bottom
- Line and Load Entry and Exit points (please refer to drawings for acceptable locations and acceptable door opening)
- Size of main
- Conductor size
- Voltage