

## **Installation of Watt-hour Meters on the Following Services:**

- 120/240V, 3 Wire, Single Phase Services Greater Than 320 Amperes
- 120/208V, 3 Wire Network Service Greater Than 320 Amps
- 120/208V and 120/240V, 4 Wire, Three Phase Service Greater Than 320 Amps
- 277/480V, 4 Wire, Three Phase Service Greater Than 320 Amps
- All 480V, 3 Wire, 3 Phase Delta Service

**Instrument transformers are required for these installations and will be installed by qualified company personnel.** The Company will designate the location of the metering equipment. Where necessary, the Company will furnish to the customer, for installation by the contractor, its standard instrument transformer enclosure. These cabinets house only the transformers and meter connections to and from the transformers. In no case shall the customer's branch circuits or feeders be supplied from the instrument transformer enclosure.

The Company will also furnish a meter socket, to be installed by the contractor. The customer shall provide sufficient space in a location approved by the Company for this meter socket as well as the instrument transformer enclosure, if one is necessary.

When the space above the instrument transformer enclosure is intended as the location for the meter or meters, the entire space shall be reserved for this purpose.

If it is necessary to locate the meter remote from the instrument transformers, the necessary conduit between the instrument transformers and the meter location will be installed by the customer and may not exceed 50 feet in length. Where the installation utilizes a pad mounted transformer, the maximum lateral distance shall not exceed fifteen (15) feet. **Diagrams on page 81** depict the maximum distances in each instance. 1 1/4" conduit with a maximum of two 90° bends or equivalent is allowed in each run of conduit. All conduit ends shall be reamed to protect the meter control cable. If the conduit is Rigid galvanized or EMT, the conduit ends shall be equipped with a bonding bushing.

**It is not acceptable for the Company to place instrument transformers in customer owned switchgear** unless extraordinary circumstances prevail and it is convenient for both the Company and the customer. If instrument transformers must be located in customer owned switchgear, each installation must be coordinated with the Company's Metering Services Department.

Where instrument transformers are to be located in the customer's switchgear, the instrument transformers will be provided by the Company and they shall be installed by the switchgear manufacturer at the customer's expense. Such instrument transformers shall be installed **ahead of all load** and in a separate compartment with a hinged, sealable door and shall be located such that metering personnel will have clear and unobstructed access to the instrument transformers. Shipping instructions along with a one-line diagram showing the location of the instrument transformers within the switchgear shall be sent to the Metering Services Department.

On multi-unit buildings where a wiring trough is utilized in serving customers and one or more customers are metered with instrument transformers, the company requires a load side disconnecting

means be installed that is readily accessible to the Company. The disconnecting means shall accept a Company lock. The purpose of the disconnecting means is to enable the Company to disconnect and reconnect service to these customers without interruption of service to other customers served from the same trough.

The wiring from the instrument transformer secondary to the meter will be installed by the Company.

When parallel service entrance conductors pass through current transformers, care should be taken to ensure each transformer has only one phase passing through it.