

METERING INSTALLATIONS FOR SERVICES LESS THAN 600 VOLTS

A. General:

To minimize problems, the customer, architect, or contractor should ascertain from the Company the point of delivery on the customer's building and the location of the metering equipment prior to installation. If the customer has not ascertained the location of the point of delivery, the Company may require the customer to relocate his service entrance equipment at his expense, or the Company may require payment for the additional cost of service, if any.

If, in order to comply with the requirements of governmental agencies, it becomes necessary for the Company to make any changes in the location of its equipment or to change the class of service given, the customer will, at his expense, make such changes in his wiring, service entrance, and utilization equipment as are made necessary by these changes.

Service entrance cable or conduit containing the service entrance conductors or service lateral conductors carrying unmetred energy shall not be concealed behind a wall. The only exception is for that section of a service mast which must be installed through the building roof, and that conduit shall not have any joints.

Conduit & Raceways:

To protect the service entrance conductors and prevent moisture from entering the service equipment, all conduit threads and fittings used in the service entrance raceway in outdoor locations are to be made raintight.

Where conduit is used, fittings with removable covers in the service conduit run are to be avoided if possible. If they are necessary, they cannot be concealed.

Conductors:

Wires carrying metered energy are not to be located in the same raceways, troughs, boxes, or conduits with wires carrying unmetred energy. Wires carrying metered energy from two or more different meters shall not be enclosed in a common conduit, raceway, trough, or box.

The grounded conductor in a set of service entrance conductors shall always be identified either by a continuous white or natural gray outer finish along its entire length or at the time of installation by a distinctive white marking at its termination.

When the service is 120/240 volt four wire, three phase, delta, the 208 volt phase to neutral conductor (high leg, power leg or stinger) shall be durably and permanently marked by an outer finish that is orange or red in color or by other effective means. For proper metering of four wire, three phase, delta service, the power leg must be in the right hand or "C" phase position in the meter socket.

All service entrance conductors shall be of sufficient size to conform with the rated capacity of service entrance equipment and should be of sufficient size to provide for reasonable future load increases.

The service entrance conductors may consist either of continuous lengths of multi-conductor cable approved for the purpose or individual conductors in conduit. Where service entrance cable is used, good workmanship requires it to be supported at intervals not over 24 inches.

Lightning arrestors or surge protection equipment installed by the customer must be connected on the load side of the service entrance equipment. Under no circumstance can customer owned surge protection equipment be attached to or connected in the meter socket or connected anywhere along the service entrance cable, service entrance conductors, or service drop.

Only one set of service entrance conductors will be allowed on the load side of the meter socket unless the load side socket connector is specifically designed for multiple conductors.

Service is to be properly grounded.

The Company shall furnish, install, test, and maintain adequate metering equipment to accurately measure the customer's use of electric energy.

Metering equipment furnished by the Company to be installed by the customer (meter sockets, meter cabinets, etc.) will be supplied as complete units in good operating condition. **This equipment is the property of the Company and shall be used only for metering Mississippi Power Company customers.** With the exception of this provided metering equipment, the customer will furnish and install all service entrance equipment, service circuit breakers or switches, branch circuit breakers or fuses and related equipment, together with the necessary wiring at his expense

The Company will provide and retain ownership of a suitable metering equipment (meter socket, etc.) for each installation except those noted above. The customer will install the meter socket and provide maintenance for the meter socket at his expense. If the meter socket should ever need replacing, the Company will supply a replacement socket to be installed by the customer.

The customer shall provide suitable mounting space on the customer's building wall, pole or other suitable structure for the Company's metering at secondary voltages. The Company will install and connect adequate metering facilities to measure the energy used in accordance with its applicable rates.

Connections to all meters, instrument transformers, and other equipment affecting the accuracy of these devices shall be made by a qualified employee.

Only service entrance and grounding conductors may be run through the meter socket or meter connection box. Company owned meter sockets or metering cabinets shall not be used as junctions boxes for the connection of branch circuits, feeder conductors or the connection of subsets of service conductors supplying separate service locations for the same or different premises. If a meter is to be relocated and the circuit is to remain in place, then the meter socket is to be removed. Ownership of a Company owned meter socket cannot be transferred to the customer. In such cases it is the customer's

responsibility to modify his equipment so that it complies with Company specifications and local electrical codes.

Where aluminum conductors are terminated in meter sockets or other company owned equipment, inhibitor of the non-grit type shall be used in each conductor connector and around the circumference of each conductor including the grounded conductor (neutral).

B. Installation of Watt-hour Meters For the Following Services:

120V Single Phase Service Through 100 Amps

120/208V Network Service Through 200 Amps

120/240V Single Phase Service Through 320 Amps

120/208V Three Phase Service Through 320 Amps

120/240V Three Phase Service Through 320 Amps

277/480V Three Phase Service Through 200 Amps

Locations:

The Company's preference is to furnish all meter sockets used for revenue metering except those noted, i.e., single phase residential. Only one conductor shall be permitted in each connector of Company owned meter sockets.

The Company will determine in each case the type of meter installation to be made. The meters used for these type installations do not require instrument transformers. **Decisions as to whether or not to use instrument transformers will be made based on the Company's calculations of diversified demand, rather than the service entrance capacity.**

On all new installations or existing installations that are to be rearranged in any way which may affect the service entrance conductors or service circuit breaker or switch, the meters will be installed outdoors except in those few cases where outdoor locations are not practical. In such cases, the meters may, with the Company's permission, be installed indoors in suitable locations as previously outlined.

For grouped installations, different sockets may be required than for single meter installations. It will be necessary to consult the Company before such installations are made so that the Company can furnish the proper meter sockets to fit into the desired layout.

Meter Enclosures:

Where service is 120 volts 2 wire 100 amps and under or 120/240 volts 3 wire, 200 amps and under single phase service;

The company will furnish an approved four terminal meter socket which will be installed as shown in the installation drawings. For commercial single phase application the Company will furnish its standard five terminal socket with bypass provisions to allow meters to be more readily removed for testing and repair without interruption to the customer.

Where service is 120/240 volt 320 amps single phase service;

The Company will furnish its standard class 320 side-wired socket for use.

For 120/208 volt, 3 wire installations of network type (two phase wires and a neutral) 200 amps and under:

A standard, five-terminal socket will be furnished by the Company. Such installations are similar to the 3 wire single phase installations described earlier, but the wiring is in accordance with diagrams for network service.

Where service is 120/240 volts 3 phase, 4 wire delta service 200 amps and under:

The Company will furnish its standard seven terminal meter socket which will be installed and connected as shown on the installation drawings and connection diagram for this type of service. It is necessary that all wires in the meter socket be identified in the manner shown on the connection diagram. Note that the position of the power leg on delta installations must be on the far right-hand side of the meter socket.

Where service is 120/208 volt or 277/480 volt wye, 3 phase 4 wire wye service 200 amps and under:

The Company will furnish its standard seven terminal meter socket which will be installed and connected as shown on the installation drawing and connection diagram for this type of service. It is necessary that all wires in the meter socket be identified in the manner shown on the connection diagram.

For 120/208 volt, 4 wire, three phase and 120/240 volt, 4 wire, three phase services **less than 320 amps, but greater than 200 amps:**

A class 320 ampere socket will be furnished by the Company. As with the seven terminal sockets, the power leg on the 120/240V, 4W, 3PH service must be properly marked and located on the far right hand terminals of the socket.