

FREEBORN-MOWER COOPERATIVE SERVICES

Albert Lea, Minnesota

METER SOCKET AND METER LOOP INSTALLATIONS

POLICY 4.005

I. General requirements

- A. All new and modified service locations and metering equipment shall be approved by the Coop before work commences. A request for electrical inspection shall be made to the Department of Labor and Industry before any new or modified electrical service will be connected.
- B. All pole or field built structure mounted services shall have a disconnecting means and over current protection located at the pole or field built structure.
- C. All sockets shall be mounted at eye level or approximately 5 ½ feet (but not more than 6 feet) above finished ground level. All new and reconnected meters shall be located outside in free air without obstruction.
- D. Meter sockets for services \leq 200amp (Overhead or Underground) shall be 200 amp, 4 terminal and of the lever bypass type.

Exception 1: Modular ganged meter gear with integral circuit breaker shall be allowed to have only horn bypass in the sockets.

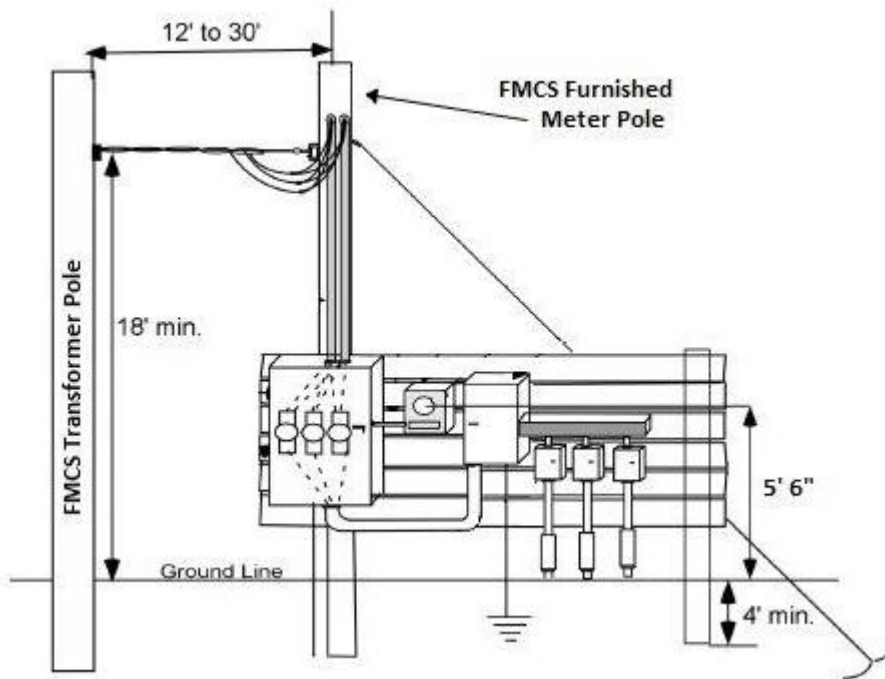
Exception 2: Free standing meter pedestals with a disconnect switch within sight of the meter location shall be allowed to have only horn bypass in the socket.

- E. All self contained 200 and 320 amp meter sockets shall be provided by the member and approved by the Coop.
- F. All instrument metering sockets (6 & 13 terminal), CTs and PTs where applicable shall be sized by and purchased from the Coop by the member or contractor. The Coop shall install and wire all instrument metering sockets, CTs and PTs in the space or enclosure provided by the member or contractor.
- G. Current transformers will not be allowed in a padmount transformer or transformer enclosure.
- H. All conduit runs that will contain Coop owned conductors shall include expansion joints.
- I. The Coop shall furnish and install the meter pole at no cost to the member.
- J. The coop will provide the underground service conductor on all services \leq 200 amp and 320 amp single phase. The member shall provide all trenching/backfilling as specified by the Coop.
- K. The Cooperative will not allow disconnects or meter sockets to be installed on underground transformers or transformer enclosures.

II. Requirements for single phase services > 200 amps, 120/240 volts

A. 320 amp single phase 120/240 self contained services are allowed. The maximum size or combination of main breakers connected shall not exceed 300 amps. (i.e 2-150 amps or 1-100 and 1-200 amp panels connected in total.) All other installations > 200 amp shall use two (2) current transformers to be located in a current transformer enclosure at grade level. Space shall be provided for the socket to be mounted at approximately 5 ½ feet (not more than 6 feet) from finished ground level.

The preferred installation for this type of service is shown below:



III. Requirements for single phase services <=200 amps, 240/480 volts

A. All 480 volt single phase self contained services require cold sequence switch-meter-fuse. A suitably rated utility disconnect shall be located ahead of the 200 amp 480 volt meter socket. It shall be operable and lockable by the Coop.

IV. Requirements for three phase services >= 200 amp, 120/208, 277/480

- A. A member planning to increase the size of an existing 120/240 volt delta service main disconnect will be required to upgrade the service to either 120/208 or 277/480 volt 3 phase service. Existing 120/240 volt delta 3 phase services will be allowed to be maintained but not increased in size. This includes the Coop upgrading transformers sized to better serve added load on an existing service main (i.e. no increase in main disconnect size – just added load)
- B. 200 amp 3 phase lever bypass meter sockets are required for all self contained 3 phase services.
- C. Installations will follow the same basic requirements as section I and II.

- D. The meter socket shall be purchased from or approved by the Coop.
- E. The current transformer cabinet shall be furnished by the member and approved by the Coop.
- F. The member or contractor shall supply all conduit and conductor from the transformer to the CT cabinet. The Coop will connect the service conductors inside the transformer.
- G. Space shall be provided for the socket to be mounted about 5 ½ feet, (but not more than 6 feet) above finished ground level.

V. Meter Loop Installation, <=200 amp, single or 3 phase.

- A. The Cooperative shall be notified before the work of changing a meter loop is started. This will allow the Cooperative time to check if a yard pole change is needed and also to place the job into our work schedule.
- B. All materials, equipment and wire shall be rated according to the size of the loop.
- C. Meter loops are to be properly grounded by connecting the consumer's neutral directly to our system neutral with compression fittings. The pole ground is for lightning protection and is not meant to be a current carrying conductor.
- D. The Cooperative will make the connections to our service wires or transformer. Ample wire leads from the switch box or conduit should be left for this purpose. The electrician can connect the neutral wire to our system neutral.
- E. Switch, loop and related equipment shall be so located on the pole so as to leave climbing space for Cooperative linemen.
- F. Meter loops shall be installed on the meter pole furnished and installed by the Coop.
- G. The Cooperative will not allow pole top switches to be installed on transformer poles.

VI. Other

- A. Current transformers and potential transformers for primary metering shall be purchased from the Coop. The cost of CTs and PTs plus installation shall be billed to the member.
- B. Freeborn-Mower Cooperative Services will not set or leave any used poles in the ground for consumer use, i.e. old meter or transformer poles.

AMENDED: 7-26-16

SIGNED: Roger Weness
Board Chairman