

### MEMBER'S WIRING

The Cooperative should be consulted before any wiring or equipment is purchased or installed. Information should be secured from the Cooperative regarding the character of the service to be supplied and the Cooperative's requirements in connection with the installation.

All new electrical installations shall be inspected and approved by the Inspection Agency in accordance with the requirements of the National Electrical Code.

All meter poles shall be owned by the member and shall be equipped with a disconnect switch so that the member's wiring from the pole can be de-energized.

Metered and unmetered wiring shall not be installed in the same conduit or raceway.

Where a member provides auxiliary or breakdown service with his own generator, a double throw switch must be provided to prevent parallel operation. In situations where a member has been authorized by the Cooperative to operate a generator in parallel with the distribution system, the member shall provide and install necessary protective relays to insure safety and reliability to the Cooperative's and customer's system.

The Cooperative will furnish the meter only and the member will furnish and install all other service and related meter equipment.

The Cooperative does not assume any responsibility for a member's wiring or equipment, or for any loss or damage that may result from any

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defects that may exist in the member's wiring or equipment, or the use or abuse of it.

If the Cooperative is called to a member's premises because of an interruption to electric service, and it is determined that the cause of the trouble is the member's own wiring, there will be a minimum charge of \$20.00 during regular Cooperative working hours or \$60.00 if outside of regular Cooperative working hours.

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## WIRING INSPECTION

Electrical installations connected to the Cooperative's system shall comply with the latest edition of the National Electrical Code (NEC), the National Electrical Safety Code (NESC), and the Terms and Conditions of the Cooperative.

New electrical installations shall be inspected and approved by the Inspection Agency in accordance with the requirements of the National Electrical Code.

The Cooperative will not connect a new service until receipt of notice of approval (cut-in card) issued by the duly recognized Inspection Agency. Additionally, the Cooperative will not connect a new service if it is aware of a violation of the NEC, NESC, or Terms and Conditions of the Cooperative regardless of whether an electrical inspection (cut-in card) has been received.

Any changes in, or additions to, the original wiring and equipment of the member shall be subject to the same inspection.

The Cooperative may refuse to render service where it has knowledge of or reason to believe that the member's wiring or equipment does not comply with recognized requirements. The Cooperative shall be under no obligation to inspect the wiring and equipment of any member.

The Cooperative has a working agreement with the Inspection Agency where, in case of dire emergency, a temporary connection may be used for fifteen (15) days. The member must sign a release of liability before service is connected which relieves the Cooperative of all responsibility for the presence of electricity on the premises.

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## GROUNDING OF EQUIPMENT

All member wiring shall be grounded in accordance with the National Electrical Code, the National Electrical Safety Code and the Cooperative's Terms and Conditions.

An underground metallic water piping system shall be used as the grounding electrode whenever available. Care must be exercised to make sure there is no plastic or insulating pipe used between the ground connection and the well. It is highly desirable that grounds from electric service, telephone service, television antennae, lightning rods and other equipment, all be connected together to form a good grounding system.

The grounded conductor (typically the neutral and equipment ground) of an electric system may have an electric potential (voltage) between it and other grounded objects including the earth itself. The encountered voltage is typically small (less than ten volts) but can be much higher under transient conditions such as electric cable faults, motor starts and lightning strikes. Members shall take this into consideration when receiving electric service particularly for certain activities or purposes. Such activities or purposes include, but are not limited to: fencing, stanchions, watering/feed troughs and other equipment associated with animal and livestock husbandry, swimming pools, ponds, boat docks, outdoor showers, hot tubs and Jacuzzis. Generally these voltages are more of a nuisance but can pose safety and productivity issues and cause personal injury and property damage under certain circumstances and conditions. Specialized grounding techniques shall be followed.

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President/CEO

## 503

## GROUNDING OF EQUIPMENT

Localized electrical bonding, equipotential grids, and controlled voltage gradients (pursuant to the NEC) or other specialized measures may be required to minimize risk or lower these voltages to safe and acceptable levels. Knowledgeable professionals should be consulted to have mitigating systems installed. Neutral isolating devices mask the underlying lack of effective electrical bonding and are not considered a prudent solution. Neutral isolators will not be installed by the Cooperative as a corrective measure and are not approved by the Cooperative as a corrective measure.

A grounded conductor is required on all three phase services even though it is not required for operation of three phase motors. An equipment grounding conductor shall be bonded to the grounded conductor at the service panel to ground all motors and equipment and provide a path for fault currents.

All metal buildings, house trailers, or structures housing or supporting electric equipment to which electric service is supplied must be permanently bonded to the service entrance ground.

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## ELECTRIC MOTORS

The Cooperative should always be consulted on motor installations. The maximum permissible individual motor size depends upon the member's location on the distribution system and the capacity of the circuit.

It is the characteristic of most electric motors including units integral to heat pumps and A/C equipment to draw a heavy momentary current when starting, resulting in many cases of variation in the voltage supplied to other members who receive service from the same circuits or transformers. It is therefore necessary that the Cooperative limit the amount of starting current which may be drawn by a motor. The Cooperative may require reduced voltage starting of motors in such cases.

All motors should be provided with devices that will protect the motor against overload or short circuit. All three phase motors shall have overload devices on each of the three phase wires to insure proper protection for the motor. Motors that cannot be safely subjected to full voltage at starting should be provided with a voltage reducing device upon starting.

The direction of phase rotation and the continuity of all three phase currents are guarded with great care, but the Cooperative cannot guarantee against accidental or temporary change or failure; therefore, motors or other apparatus requiring unchanged phase rotation and continuity of three phase supply shall be equipped by the member with suitable protection against such reversal or phase failure.

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## 602

## ELECTRIC WELDERS AND MISCELLANEOUS DEVICES

Members desiring to operate electric welders or other devices with high inrush or fluctuating currents must supply the Cooperative with information regarding the electrical characteristics of the equipment. Service will not be allowed to equipment which adversely affects the Cooperative's equipment or the service to other members.

The Cooperative must be consulted before the purchase or installation of the equipment.

## 603

## ELECTRIC GENERATORS

Normally, where auxiliary or breakdown service is installed by the member to provide emergency power, parallel operation of the member's generating equipment with the Cooperative's system will not be allowed. A double throw switch must be used to prevent possible injury to the Cooperative workmen by making it impossible for power to be fed back into the main line from the emergency generator.

Under restricted circumstances, parallel operation of a generator with the distribution system may be permitted. Please refer to section 114.

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701

## SUPPLEMENTARY SERVICE

Where the Cooperative's electric service is used to supplement another source of power not exceeding 10,000 KVA, either by direct electric or mechanical interconnection, or by joint use with electric or mechanical equipment operated from such other source of power for supply of air, ammonia, water or other products into a common piping system, the member's entire electric requirements from the Cooperative will be supplied under any of the Cooperative's nonresidential schedules otherwise applicable subject to the following provision:

CONTRACT DEMAND

The Contract Demand is the total capacity in kW to be furnished by the Cooperative and shall be specified in writing by the member.

The Contract Demand may be increased upon request of the member or when shown by measurement to be greater than specified. It may not be decreased nor contract terminated until the expiration of 12 months after either (1) the beginning of service under this clause or (2) installation of additional capacity by the Cooperative to provide for increase in such Demand; it is subject to decrease, but to not less than the maximum measured demand (usable for billing purposes) of the preceding 11 months and, in any event, to not less than two-thirds of the Contract Demand of the preceding 11 months. Decreases below the prescribed limits will be allowed only upon request of the member where load is permanently removed from the Cooperative's service or additional capacity is installed by the member to supplement his other source of power, and then only to the extent of the change.

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701 SUPPLEMENTARY SERVICE – continued

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MONTHLY CHARGES

The Demand Charge, where applicable, is increased by \$2.76 per kW of excess of Contract Demand over the Billing Demand, but the excess used in determining this charge is not to be greater than the Contract Demand.

The overall net Minimum Charge for each billing month is the Demand Charge provision of the appropriate rate schedule plus any applicable excess Demand Charge applied to kW of Contract Demand.

GENERAL

Where Supplementary Service is supplied within one (1) year of the expiration of a prior Supplementary Service Contract, the Contract Demand shall be not less than that in effect at the expiration of such prior contract, except where load has been permanently removed or the member has installed additional capacity.

Where a member supplied under a nonsupplementary service contract changes to Supplementary Service at other than contract expiration date, the Contract Demand for the remainder of the contract term shall be not less than the demand (as used in billing or estimated) in effect just prior to such change. A reduction in the Contract Demand, by reason of the use of another source of power may be made at such contract anniversary date, but subsequent reductions are permitted only in accordance with the provisions prescribed above.

The member shall reimburse the Cooperative for all loss attributable to his overloading other improper use of the Cooperative's facilities.

Operation of member's electric generators in parallel with the Cooperative's service is permitted only where operating conditions satisfactory to the Cooperative have been obtained.

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701 SUPPLEMENTARY SERVICE – continued

This Supplementary Service does not apply where:

- (a) the other source of power provided by the member is used, by agreement between the Cooperative and the member only during an outage of the Cooperative's service or for occasional limited test periods, including permission for installation by the Cooperative of such seals as are necessary in its opinion to insure operation under the agreed-upon conditions.
- (b) the other source of power provided by the member can reduce the use of the Cooperative's electric service by less than 5% of the Contract Demand or 10 kW, whichever is greater.
- (c) service provided to cogenerators and small power producers is used only during periods specified by the Cooperative and solely for maintenance purposes provided that all other conditions specified by the Cooperative have been met.

Supplementary Service for loads in excess of 10,000 kW shall be separately negotiated.

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PAGES 38 AND 39 RESERVED

FOR FUTURE USE

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