

APPLICABILITY OF JEFFERSON DAVIS ELECTRIC COOPERATIVE'S RESIDENTIAL AND SMALL NON-COMMERCIAL SERVICE ENTRANCE REQUIREMENTS

It shall be the member's responsibility for compliance with the National Electric Code (N.E.C.) and any Governing Authority for all equipment beyond the point of connection. Division of ownership is at the weather/service head (where J.D.E.C. conductor is spliced to member owned conductor). The member is advised to use the service of a qualified electrician to assure compliance with all codes and regulations. Failure to comply with any of the following specifications will result in being rejected as an approved installation.

- The service entrance must be located on the outside wall of the structure, making the meter accessible at all times, enabling J.D.E.C. to make the necessary service connections without having the service wires crossing over any large portion of the roof. The inside walls of an open carport area are **not** considered an outside wall of the structure.
- Anytime a service entrance is changed due to inadequacy, the new service entrance must meet J.D.E.C.'s Guide on Residence-Overhead and Underground Service, whichever is applicable.
- Houses moved from one location another, where no changes are made in the wiring system, will be connected, providing the service entrance conductors are not smaller than #2 copper/#1/0 aluminum. EXCEPTION: Houses existing with #6 copper/#4 aluminum service entrance conductor will be connected, provided the house does not have more than two, two wire branch circuits. Houses moved into an area that is governed by Governing Authority must meet the requirements set by that Authority.
- Where a member requests that the service be disconnected in order to make repairs or revisions to the house, new specifications may or may not apply. It is the responsibility of the member to check with Parish entities regarding applicability.
- Where a meter pole is used, the service entrance shall be of sufficient size to serve the load as required by the National Electrical Code or Governing Authority.

- The following specifications specifically cover small water pumps, derricks for lights only, small chicken houses, barns, yard lights or other connections out of the realm of residential or commercial.

Required Minimum:

#2 copper/#1/0 aluminum in conduit to the meter base and to the main disconnect. The main disconnect must be sized in accordance with the National Electrical Code.

Exception:

For the Highway Department traffic control and signal lights consisting of no more than two, two wire branch circuits, the entrance may be reduced to #6 copper/#4 aluminum with no reduced neutral.

JEFFERSON DAVIS ELECTRIC COOPERATIVE, INC.

J.D.E.C.

GUIDE ON RESIDENCE

OVERHEAD SERVICE

It shall be the member's responsibility to be in compliance with the National Electrical Code (N.E.C.) and any Governing Authority for all equipment beyond the point of connection. The member is advised to use the service of a qualified electrician to assure compliance with all codes and regulations.

- Service cable from transformer to point of connection is furnished and installed by J.D.E.C.
- Service entrance conductors from the point of connection to the meter base, to the main disconnect, furnished and installed by member. Service entrance conductors and main disconnect are to be sized according to the load, as required by the National Electrical Code or Governing Authority. An extension of 18" (inches) of service entrance conductor required at the service head.
- Main disconnect furnished and installed by member and in accordance with the National Electrical Code. Where the main disconnect and/or other electrical equipment is mounted outside, it shall be of weatherproof and watertight design.
- Service mast is furnished and installed by the member. Service Mast conduit sized as required by load, must be securely mounted schedule 80 PVC or rigid conduit, with a 3 (three) strap minimum. Where all other conditions of these specifications are met, service entrance cable (Romex) is acceptable in place of a service mast.
- Roof jack installations are furnished and installed by member. Conduit must be securely mounted with 2" (inch) rigid conduit. On Roof Jack installations, the minimum 24" (inch) roof clearance and 14'6" (feet/inches) of ground clearance above the finished grade shall be provided. In doing so, it will be member's responsibility to provide adequate strength in, or support to the Roof Jack to safely withstand the strain imposed by the service cable.

- Meter base furnished by J.D.E.C. and installed by member on the outside of the building. Meter bases shall be mounted at 5'6"(feet/inches) above finished grade. K-10 (Service Masts) or conduit wire holder, K-10 L (Roof Jacks) furnished and installed by J.D.E.C.
- Meter base grounding, minimum, #6 soft drawn (s.d.) copper, in conduit from the meter base to the ground rod, furnished and installed by member. The meter base ground wire must be connected in the ground wire lug, where provided, and not in the service neutral lug. Ground wire from the meter base to the weather head, minimum, #6 soft drawn (s.d.) copper, is furnished and installed by the member:

In cases where Service Masts are required: a ground wire (outside of the PVC or Romex) must extend 18".

In cases where Roof Jacks are required and conductor is enclosed within 2" galvanized conduit: A ground wire is not required.

- Ground rod, 5/8" X 8' (inches/feet) galvanized or 1/2" X 8' (inches/feet) copper, furnished and installed by member. Ground rod is to be set 1" (inch) below finished grade. Ground Rod is to be set in accordance with the National Electrical Code.
- Variations of this design may be considered equal as long as National Electrical Code requirements are met. **(TO ASSURE ACCEPTABILITY WHERE VARIATIONS ARISE, CONTACT J.D.E.C. PRIOR TO INSTALLATION.)**
- INSPECTION: If a Governing Authority requires authorization, it will be acquired before J.D.E.C. will connect service.

JEFFERSON DAVIS ELECTRIC COOPERATIVE, INC.

J.D.E.C.

GUIDE ON RESIDENCE

UNDERGROUND SERVICE

It shall be the member's responsibility to be in compliance with the National Electrical Code (N.E.C.) and any Governing Authority for all equipment beyond the point of connection. The member is advised to use the service of a qualified electrician to assure compliance with all codes and regulations.

1. Service cable from transformer to meter base may be provided through J.D.E.C. at the current purchasing price.
2. Service cable riser conduit (purchased through and installed by J.D.E.C.) (See Page 10)
3. Meter base furnished by J.D.E.C. and installed by member on the outside of building. Meter base must be mounted 5'6" (feet/inches) above finished grade.
4. Members who choose to select the underground service option, will be required to sign a waiver stating that they are responsible for the installation and maintenance of the underground service (See Example/Page 13). Any defects, which occur on the underground secondary, will be handled by the member. If a temporary overhead service is required, while repairs are being performed to a defective underground service, the member will be required to absorb cost (both in and out). Underground kits may be purchased through J.D.E.C. **Arrangements must be made prior to purchasing and picking up the underground material kit.**
5. Main disconnect furnished and installed by member. Main disconnect (framed structures) must be located in accordance with the National Electrical Code (usually on the opposite wall surface of a mounted meter base) (Page 11 and 12). In cases where the underground conductor establishes a point of contact (other than on a structures exterior wall), a main disconnect is required (Page 12). Main disconnect and/or other electrical equipment mounted on the outside of the building must be of weatherproof design.

Entrance conductor from the meter base to the main disconnect furnished and installed by member. Entrance conductor must be sized according to the load, as required by the National Electrical Code or Governing Authority.

6. Meter base grounding, minimum #6 soft drawn (s.d.) copper, in conduit, from the meter base to the ground rod, furnished and installed by member. The meter base ground wire must be connected in the ground wire lug, where provided, and not in the service neutral lug.
7. Ground rod, 5/8" X 8' (inches/feet) galvanized or 1/2" X 8' (inches/feet) copper, furnished and installed by member. Ground rod is to be set 1"(inch) below finished grade. Ground Rod is to be set in accordance with the National Electrical Code.
8. Variations of this design may be considered equal as long as National Electrical Code requirements are met. To assure acceptability where variations arise, contact J.D.E.C. prior to installation.
9. INSPECTION: If a Governing Authority requires authorization, it will be acquired before J.D.E.C. will connect service.

Underground Secondary Specifications

The specifications listed below must be followed for an installation to be considered valid

1. Installation will be checked by Jeff Davis construction crew to verify depth and conduit type.
2. No more than two (2) 90 degree bends per run will be allowed.
3. 90 degree elbow (with encased conductor) to be installed in conjunction with three standoffs on takeoff pole. Extend conductor out of "L". J.D.E.C. will install remaining conduit joints, stand-off brackets and weatherhead to establish riser.
4. Conduit (with encased conductor) to be installed completely into the meter base.
5. Conduit (with encased conductor) to be installed by member.
6. Conduit (available for purchase through J.D.E.C.) is to be Schedule #80, gray type.
7. Main breaker must be installed next to meter or on inside wall behind meter base. In cases where the furnished underground conductor establishes a point of contact other than on a structure wall, a main disconnect is required. Conductors between meter base and main breaker must be in approved conduit and copper.
8. No cooperative owned pole may be used for an underground service unless pre-approved by the cooperative.
9. All specifications must be observed to be considered a valid installation. Failure to observe all of the above will be viewed as invalid, thus preventing a service to be energized.

JEFFERSON DAVIS ELECTRIC COOPERATIVE, INC.

J.D.E.C. METER POLE SPECIFICATIONS

PERMANENT AND TEMPORARY

MAXIMUM-200 AMP SERVICE

It shall be the member's responsibility to be in compliance with the National Electrical Code (N.E.C.) and any Governing Authority for all equipment beyond the point for connection. The member is advised to use the service of a qualified electrician to assure compliance with all codes and regulations.

Description:

Permanent-Mobile homes, camps, water wells, and any other connections not considered temporary

Temporary-Construction, special events, etc.

Meter poles are furnished and installed by member. Specifications shown on the drawing and described here shall be considered minimum requirements.

- Permanent: meter pole must be a treated 20' in length round pole and set 5' deep, with a minimum top diameter of 6" (inches). It shall be the member's responsibility to secure the pole in a vertical position. If the ground is not adequate to support the pole, a guy will have to be installed by the member.
- Temporary: meter pole/timber must be 18' (feet) in length and be set 4' (feet) deep. A temporary meter pole/timber must be treated, with a minimum size of 4"x6" (inches). A temporary meter pole/timber with a service length of 75' (feet) or greater must be braced as shown on the Temporary Meter Pole/Timber Drawing.
- Service entrance conduit furnished and installed by member. Service entrance conduit shall be Schedule 80 PVC or rigid conduit (NO EMT) and shall be sized in accordance with the National Electrical Code or Governing Authority. A minimum of 3 conduit straps are required, with one (1) strap being no more than 12" (inches) from the weather head.
- Service entrance conductors from the point of connection to meter base, to main disconnect, furnished and installed by member. Service entrance conductors shall be sized according to load, as required by the National Electrical Code or Governing Authority. The neutral of service entrance conductors can be two (2) sizes smaller than the other conductors and shall be identified with gray or white tape at the weather head and in the meter base. An extension of 18" (inches) of service conductor is required at the weatherhead. Load side of meter base must be in compliance with National Electrical Code.

- Main disconnect, either a single main or a main in a distribution panel, furnished and installed by member. Main disconnect shall be sized according to load, as required by the National Electrical Code or Governing Authority. Main disconnects and any other electrical equipment that is exposed to the elements must be of a weatherproof and watertight design.
- The meter base furnished by J.D.E.C. and installed by member. The meter base shall be mounted between 5' and 6" (feet) above finished grade, and face toward the open space.
- Meter base grounding, minimum, #6 soft drawn (s.d.) copper, in conduit from the meter base to the ground rod, furnished and installed by member. The meter base ground wire must be connected in the ground wire lug, where provided, and not in the service neutral lug. Ground wire from the meter base to the weather head, minimum, #6 soft drawn (s.d.) copper, is, furnished and installed by the member:

In cases where PVC or Romex is used: a ground wire (outside of the PVC or Romex) must extend 18" beyond the weatherhead. In cases where galvanized conduit is used a ground wire is not required.

- The pole grounding conductor shall be a minimum #6, bare, soft drawn copper wire and extend from 6" (inches) above the top of the meter pole to the ground rod. It is installed 90 degrees around the pole from the service entrance conduit. The pole-grounding conductor must be stapled, starting from the top of the pole at 2' (foot) intervals until point 6' (feet) above the ground is reached, then stapled every 6" (inches).
- Ground rods shall be 5/8" x 8' (inches/feet)-galvanized or 1/2"x8' (inches/feet)-copper.
Permanent meter pole ground rods shall be set 1" (inch) below finished grade
Temporary meter pole ground rods can be set 4" (inches) above finished grade
- ALL UNUSED OR OPEN HOLES IN THE METER BASE, MAIN DISCONNECT OR DISTRIBUTION PANEL SHALL BE PLUGGED WITH WATERTIGHT PLUGS.
- INSPECTION: If a Governing Authority requires authorization, it will be acquired before J.D.E.C. will connect service.

Unless properly installed and operated, emergency generators can be deadly

No emergency generator, whatever its size, should EVER be connected directly to household or farm wiring. Any emergency power system MUST be directly connected only to those appliances or equipment it serves **UNLESS THAT GENERATOR IS CONNECTED TO A PROPERLY INSTALLED AND OPERABLE DOUBLE-THROW SWITCH**.

Such a switch is NOT OPTIONAL.

When any generator, no matter how small, is connected directly to a home's wiring, say by being "plugged" directly into an electrical outlet the energy produced by that generator can "back-flow" through the household wiring, the service wire and even through the transformer serving that home or farm.

Transformers work both ways. It takes 14,000 volts from a power line and reduces it to the 120-volts used in your home. But 120 volts generated by an emergency generator, when it "back-flows" through that same transformer, is transformed into 14,000 volts that will travel for miles along what should be a "dead" power line.

Line crews working to restore service miles away on what should be a "dead" line risk death or injury from this current; and so do your neighbors who touch a downed power line. Children, pets and livestock can all be endangered when a generator is connected to household current without proper safeguards.

If the power comes back on while that generator is improperly connected, appliances and electrical equipment can be damaged by power surges.

All generators are sold with instructions that outline their safe and proper use and installation. No generator should ever be connected to household wiring without using a special Safety Transfer Switch. Take time to read and obey safety material that comes with standby generators. The following tips can help avoid a tragedy.

Proper standby generator hookup is vitally important.

Deficient or improperly installed generators can cause damage to the generator, the appliances connected to it, utility equipment and could cause injury or death to service personnel or the public.

Installation is not a do-it-yourself project. Rely on the expertise of a professional.

No matter who does the installation, make certain your generator has a double-throw (transfer) switch.

Follow all regulations established by your local utility company when using emergency generators.

Once installed, operate the generator according to manufacturers recommended installation procedures (proper ventilation, limited load and preventive maintenance are all essential to safe operation). The double throw switch is not optional equipment. This transfer switch permits a safe changeover from utility service to an on-site power supply. The National Electrical Code requires a double-throw switch on a standby generator installation. Otherwise, individual appliances should be plugged into the generator. Never connect a generator to household wiring that cannot be isolated from the utility system by a transfer switch.