

Policy and Guidelines for Electric Service

FRANKLIN MUNICIPAL POWER & LIGHT

1050 Pretlow Street
Franklin, VA 23851

757-562-8568
757-562-7883 Fax

January 2008



Franklin Power & Light

HELPFUL TELEPHONE NUMBERS

www.franklinva.com

To obtain location of underground electric lines:

Before digging, call: 800-552-7001 (48 hours notice required.)

To report damage to underground electric lines:

Telephone: 757-562-8568

After Hours: 757-562-8575

To report gas or electric trouble:

Telephone: 757-562-8568

After Hours: 757-562-8575

To report tree trimming around power lines:

Telephone: 757-562-8568

When planning new construction, service and meter installations:

Telephone: 757-562-8568

To order meter sockets and/or meter enclosures:

Telephone: 757-562-8568

Pick-up equipment at 1050 Pretlow Street

To apply for a meter and service:

Telephone: 757-562-8518

To request FP&L inspection or transformer slabs and ductline installations:

Telephone: 757-562-8568 (24 hours notice required.)

NOTICE

Virginia State Law forbids the operation of equipment or machines or any part of such equipment or machines within ten (10) feet of any high voltage lines. Satisfactory, mutual arrangements should be made between the owner or operator of the lines and the persons responsible for the work to be done. Contractors and owners of the work are responsible for making these type arrangements for the safety of their workers. Noncompliance with this law can result in both civil and criminal liability. To arrange for the lines to be de-energized, temporarily relocated, or covered, telephone FP&L at 757-562-8568 during normal business hours.

TO ARCHITECTS, CONSULTING ENGINEERS AND ELECTRICAL CONTRACTORS

Before beginning construction of service and metering installations:

CUSTOMER CHARGES AND AGREEMENTS:

Customer charges including estimates associated with main line extensions, new service installations, alterations in service, and the policy for supplying and taking of electric service are established in Franklin Power & Light (FP&L) "Guidelines for Electrical Service Lines". Copies of these documents are available from Utility Billing and the Engineering Department.

JOB PLANNING AND SURVEYS:

Planning of large jobs or jobs that will require a complex service installation must be coordinated with the Engineering Department Representatives. The Customer or his representatives should contact a Representative at 757-562-8568, during the design stages to ensure that all electrical installation requirements are met. FP&L may provide estimated cost for budgetary purposes, if requested, provided all necessary information is available. While FP&L attempts to provide estimates that are accurate to within a reasonable range of ultimate job costs; the FP&L cost estimates do not represent the final cost that may be charged to the customer. They are only estimates. FP&L discourages customers from performing their own estimation of FP&L charges, or from basing its estimates of costs on past experience or past jobs. The customer is responsible for ultimate FP&L job costs, regardless of whether such costs are greater than those originally estimated by FP&L.

A FP&L Engineering Department Representative will be available to assist the Customer or his Representative during the design and construction phases of his project.

The Engineering Department Representative will coordinate all planning processes between the Customer's representatives and the various Electric Sections, i.e. construction and metering.

The electrical contractor may order the meter enclosure, instrument transformer enclosure, etc. at a time convenient to him. See Article 1802.2 (applications) for issuing of metering equipment and enclosures. On all jobs, including new, remodeling, and adding load, the electrical contractor must call the Engineering Department Representative, at 757-562-8568, to order the metering enclosures or cabinets before wiring is started. The contractor is advised to plan his job in accordance with these standards and order his metering equipment as selected from Table 1800.1. The contractor must specify Equipment Code numbers from this table.

In general, estimated three-phase demand loads over 600 amperes on 208 volt, 240 volt, or 480 volt services will require instrument transformer installations. Estimated demand loads on single-phase services over 600 amperes will require instrument transformers. The electrical contractor for a commercial installation should always consider the possibility of the need for instrument transformers in his meter loop. All services with voltages greater than 480 volts will require the use of instrument transformers.

FP&L representatives will designate the electric meter location. Customer should consult with FP&L representatives regarding the location of the electric meter prior to awarding the contract for construction.

Engineering Department Representatives will be available to aid the customer when any detailed information is needed concerning metering or other FP&L equipment.

MISS UTILITY: (Underground Utility Locator Service)

The Damage Prevention Act requires most excavators to call 48 hours prior to digging.

The Dig Safely program was introduced nationwide in June 1999. Its purpose is to help protect underground utility lines from damage by excavators, and protect excavators from the effects of damage to underground lines.

The Dig Safely program stresses that safe excavation is a four-step process:

1. Call before you dig. The Miss Utility Center is an important part of the damage prevention process. The Miss Utility Center operates a toll-free number 24-hours per day for excavators to use. The Miss Utility Center is available by calling 800-552-7001. FP&L does not provide direct access to FP&L's utility locating service. Underground electric facility locating is coordinated through Miss Utility.
2. Wait the required amount of time. Virginia law requires at least two working days notice before beginning excavation. This means a homeowner who is putting in a fence on Saturday must call no later than Wednesday.
3. Respect the marks. If a potential problem exists, the utilities or their agents will mark the approximate location of buried facilities, using paint, flags, stakes, or a combination. During the project, it is the excavator's responsibility to make sure the utility marks remain visible. If they are obliterated, the excavator must call for a re-mark.
4. Dig Safely. Once the work begins, it is up to the excavator to use safe, accepted digging practices. Regardless of how careful the preparation has been, the excavation work must be performed in a prudent and careful manner.

The Dig Safely campaign is the result of cooperation between the National Transportation Safety Board, Office of Pipeline Safety, and representatives from the industries that own and operate underground facilities. These industries include communications (local, long distance, and CATV), electric power and gas utilities, pipelines, municipalities, and local, state, and federal regulatory agencies.

Table of Contents

ELECTRIC SERVICE CHECKLIST.....	6
GUIDELINES FOR ELECTRICAL SERVICE LINES.....	8
OVERHEAD PRIMARY LINE EXTENSIONS.....	9
UNDERGROUND SERVICE LINES.....	10
TEMPORARY SERVICE	13

ELECTRICAL SERVICE CHECKLIST

PERMIT

- _____ 1. **ELECTRICAL PERMIT:** City of Franklin residents must obtain a permit from the Building Inspections office. A fee is charged for this permit. County residents must check with their particular county Building Inspections office.

SERVICE REQUIREMENTS

- _____ 2. **CONSTRUCTION PLANS:** A copy of these plans must be given to the Franklin Power & Light (FP&L) Engineer.
- _____ 3. **TYPE AND SIZE OF SERVICE:** This information must be supplied to the FP&L Engineer.
- _____ 4. **DEEDS OF EASEMENT:** Any required information regarding these deeds for present and future electric line construction needs must be supplied to the FP&L Electrical Engineer.
- _____ 5. **SERVICE LOCATION:** Obtain service location for permanent meter base from FP&L.

TEMPORARY SERVICE

- _____ 6. **APPLY FOR TEMPORARY SERVICES:** Apply for temporary services at the Utility Billing Department (City Hall) and pay fees at the Treasurer's Office (City Hall).
- _____ 7. **TEMPORARY SERVICE LOCATION APPROVAL:** Approval for service location **MUST** be received from FP&L. (The Customer must have his or her own temporary meter base and service pole).
- _____ 8. **TEMPORARY SERVICE:** Request to the Building Inspections Office for inspection of the service. (A release will be forwarded to FP&L).
- _____ 9. **TEMPORARY SERVICE INSTALLATION:** Request to FP&L is made for temporary service installation.
- _____ 10. **TEMPORARY METER INSTALLATION:** Request to FP&L Meter Department for installation of a temporary meter.

PERMANENT SERVICE

- _____ 11. **PERMANENT METER BASE:** Obtain a permanent meter from the FP&L Meter Department and install as below.
- Top of Meter: shall not be any higher than five and one-half feet from the ground grade level unless in the 100-year flood zone.
 - Bottom of Meter: glass shall not be lower than four and one-half Feet from the ground level.
 - Underground Meter Base: Customer/Contractor is responsible for hooking up load-side of underground meter base.
 - Overhead Meter Base: Customer/Contractor is responsible for installing service entrance cable or pipe mast according to the “National Electric Safety Code”, and also must hook up both line and load-side of meter base. Service entrance tails at weather head must be at least 3 feet in length.
 - If located on a deck or porch, meter shall not be higher than 5’ 6” or lower than 4’ 6” from floor level.
- _____ 12. **ELECTRICAL INSPECTION:** Request is made to the Building Inspector for this inspection. The inspector will give a release notify FP&L.
- _____ 13. **CONNECTION FEES:** Payment of electrical connection fees charged by FP&L must be paid to the Treasurer’s Office (City Hall). **THIS MUST BE DONE PRIOR TO #15.**
- _____ 14. **PERMANENT ELECTRIC SERVICE:** Request FP&L to run permanent electric service.
- ALLOW 14 DAYS, after payment is received FOR CONNECTION.
- ALLOW UP TO 90 DAYS FOR SERVICE when equipment must be ordered.
- _____ 15. **INSTALLATION OF METER:** Request installation of meter at the Utility Billing Department (City Hall).

GUIDELINES FOR ELECTRICAL SERVICE LINES

OBJECTIVE

The primary objective of Franklin Power & Light (FP&L) (Distributor) is to provide electrical service for its customers on a timely and equitable basis. The following guidelines are to assist the customer and the Distributor in achieving this objective.

OVERHEAD SERVICE

Single-Phase Primary: The Distributor normally provides a permanent overhead single-phase service within 300 feet of the existing service, at no cost (where economically feasible).

Three-Phase: Three-phase is provided at no cost, when the Distributor determines that the load is large enough to justify it, typically 45kW. The Customer will be required to furnish, at their own expense (including attorney and recording fees), any easements the Distributor claims necessary.

UNDERGROUND SERVICE

Underground service is available to all classes of Customers (residential, commercial, industrial, owner, contract or developer). This service is available, provided the conditions are met for underground service, as specified in the Schedule of Rates and Charges.

For information regarding underground service, contact the Distributor. At that time, the requirements will be explained to the Customer. It may be necessary to visit the site, to determine what is desired and/or required to provide this service.

The Distributor will prepare a Cost Estimate for installing underground service. A representative of the Distributor will review the Estimate with the Customer and explain how the estimate was determined and what work, if any, the Customer would be allowed to do and the final estimate of cost. After reviewing the Cost Estimate, the Customer must pay the additional cost, as set in the Schedule of Rates and Charges for underground service.

Note: All new services in the City of Franklin are required to be underground per the subdivision ordinance.

OVERHEAD PRIMARY LINE EXTENSIONS

Should any customer require overhead electric service that extends greater than 300 feet from existing Franklin Power & Light (FP&L) electric lines, the following policy will apply:

1. FP&L will estimate the cost of extending the electric line.
2. The Customer is required to pay a deposit to cover the estimate.
 - a. The Customer is expected to cover any over-cost.
 - b. If the actual cost is less than the estimate, then that amount will be refunded to you.
3. The Customer will obtain and convey all easements to FP&L, which are needed to accommodate the electric line.
4. The electric line will be energized upon construction completion.
5. The Customer's bill for four years must equal or exceed the cost of constructing the electric line.
 - a. The four-year period starts at the time the electric line is completed and energized.
 - b. The deposit will be held until such time as the construction costs are recovered, not to exceed four years from the time that the line was energized.
 - c. The Customer's monthly electric bill will be credited from the deposit.
 1. This includes the temporary electric usage.
 2. After 12 months, the Customer may request that their four-year usage be projected. If the projection exceeds their deposit and is estimated to continue through the four-year time, the customer may be refunded the balance of his deposit.
 3. Upon refund of the deposit balance, the Customer will assume regular monthly billing.

If there is a balance at the end of the four-year period, it reverts to FP&L to cover construction costs.
 4. If within the four years the total Customer billing exceeds the Customer's deposit, the Customer will assume regular monthly billing immediately.

UNDERGROUND SERVICE LINES SCHEDULE OF RATES & CHARGES

PURPOSE

The purpose of this schedule is to maintain fairness with any customer contracting for electric service from Franklin Power & Light (FP&L). Franklin Power & Light will hereafter be referred to as the “Distributor”. This schedule is in addition to the regular schedule of rates and charges for electricity. It is the intent of this policy to cover the costs associated with the installation of the majority of underground facilities encountered on a routine basis with the Distributor reserving the right to examine situations, which are exceptions to those, outlined herein, on an individual basis.

DETERMINATION OF UNDERGROUND FACILITY CHARGE

Where the Customer requests the underground electric service, the Customer will secure the necessary rights-of-way and easements at no cost to the Distributor. The Customer will also provide poured concrete pad for transformers, if required. The Distributor charges for underground service is as follows:

1. Industrial & Commercial Development

(a) Primary Line Extensions/Upgrades-Conversions:

The Customer will pay the cost differential between overhead line extensions and underground line construction for primary line extensions. The cost differential (including contributions from other underground utilities, when applicable) and primary extensions from the Customer’s property line to the pad mount transformer costs are as listed below. (Costs will be reviewed annually to reflect changes in construction cost):

(1) Single-Phase Extensions (1/0): \$2.31/ft.

(2) Three-Phase Extensions (1/0): \$6.93/ft.

The Customer shall be responsible for the installation of new junction boxes, conduit, trenching and the like. The Customer will provide all poured concrete pads. The Distributor must approve all equipment per written agreement. The Distributor shall provide and install primary conductors.

(b) Secondary Services /Upgrades-Conversions:

Commercial Customers shall continue to install and own the conductors between their switchgear and the Distributor’s transformer or any conductors that terminate inside their building or structure. The Distributor will be responsible for the termination of the conductors in the transformer, and the Customer will make all terminations in their switchgear. Customer is responsible for mounting all metering equipment on outside wall.

For installations that have a meter base, distribution trough or CT cabinet the distributor shall install and own the conductors.

In all cases the customer shall install conduit and junction boxes in accordance with the Distributors specifications.

- (c) Relocation of Distributor Equipment/Facilities:
The Customer will bear all costs of the relocation of the Distributor's equipment/facilities resulting from incorrect information being supplied concerning the scope or details of the project.
- (d) The Distributor must give approval for underground service, costs and design in writing after submitting final drawings and load schedule. All work shall be in accordance with the Distributor specifications. The Customer will also bear any additional cost for unapproved service location. The Customer should allow 2 weeks for drawing approval from time received by Distributor.

2. RESIDENTIAL DEVELOPMENT (Single/Multi-Family)

- (a) Primary Line Extensions:
The Customer will pay the cost differential between overhead line extensions and underground line construction for the primary line extensions. The cost differential (including contributions from other underground utilities, when applicable) is as follows: (These costs will be reviewed annually to reflect changes in construction costs)

Single-Phase Extensions: \$6.33/ft.

Three-Phase Extensions: \$13.39/ft.

- (b) Secondary Service: (No Charge)

The Customer is responsible for installation of meter base and conduit to the point of service/property line as agreed upon by distributor per written agreement. All conduit joints must be glued. Ditch and conduit inspection by Distributor is required. Distributor will pull wire and connect to line side of meter base. Distributor will supply meter base.

- (c) Secondary Service Conversions/Upgrades: (No Charge)
The Customer is responsible for installation of meter base and conduit to the point of service/property line as agreed upon by distributor. Distributor will pull wire and connect to line side of meter base. Distributor will supply meter base. Prior approval by Distributor of the upgrade is required.

- (d) Relocation of Distributor Equipment/Facilities:
The Customer will bear all costs of relocation of Distributor's equipment/facilities resulting from incorrect or insufficient information being supplied to the Distributor concerning the scope or details of the project.

- (e) Approval for underground service, costs and design must be given in writing by the Distributor after submitting final drawings and load schedule. All work shall be in accordance with the Distributors specifications. The Customer will also bear any additional cost for unapproved service location. The Customer should allow two weeks for drawing approval from time received by Distributor.

BILLING AND PAYMENT

The Distributor shall not schedule or make underground installations of equipment and facilities until the Customer has signed an agreement and fulfilled the conditions as stated in the "Guidelines for Receiving Electrical Service".

1. All equipment and facilities installed and furnished by the Distributor shall remain the property of the Distributor unless otherwise provided.
2. Billing will be at the estimated cost, payable prior to any construction or ordering of materials, based upon the rates stated herein.
3. Payment is due upon receipt of invoice, prior to construction.

Rev Jan 2000
Rates as of January 2008

SECTION 1600 - TEMPORARY SERVICE

1601 General:

Service laterals or service drops will be installed for temporary construction service to an approved structure with a meter loop installed by Customer. A stand-alone temporary metering structure may also be installed. Before FP&L energizes the service, Customer must satisfy permitting requirements with the authority having jurisdiction, and the authority having jurisdiction must release these permits. The street address must be marked on the structure or building.

1602 Temporary Service Laterals in URD Areas:

Service laterals from padmount transformers, or from secondary enclosures may energize temporary meters in URD areas where available. The standard method will be from a padmount transformer. The general requirements for this type of installation are as follows:

1602.1 Location of Temporary Meter Structure:

The structure shall be located within two feet in line with the rear of the supplying transformer's pad. It shall be on the non-fenced side of the transformer facing away from the side property line. Transformer lid padlock is always located on the front of the transformer. (See Figure 1600.1.) If property is occupied and Customer objects to the temporary meter loop, it may be moved to adjoining undeveloped property utilizing FP&L'S easement, but as close to transformer as possible. The meter loop will face towards the street or alley.

NOTE: A ground rod shall not be driven at an angle toward the side of the transformer or toward the front side of transformer. Customer shall call for a locate before the ground rod and structure installation begin.

The temporary service installation from a secondary enclosure or transformer will require Miss Utility locate.

1602.2 Service Lateral:

FP&L will provide and install the service lateral between transformer and temporary meter loop when it is located within two feet of the transformer or secondary enclosure. If meter loop is to be installed on adjoining property or more than two-feet from transformer or secondary enclosure Customer shall provide and install service lateral conduit up to transformer. FP&L will install the service lateral conductor and terminate the service lateral conductor in the transformer compartment. Customer shall not dig under FP&L transformer. Temporary service laterals may be direct buried or installed in 1 ¼-inch schedule 40 or 80 PVC conduit under ground and shall be provided by customer. Temporary above ground service lateral installations must be approved by FP&L.

1602.3

All applicable parts of Section 600 for URD systems will apply to temporary service in URD areas.

1603 Temporary Service Drops in Overhead Areas:

A temporary service drop will be installed to an approved structure having a service outlet and meter loop. Temporary structure shall not be moved while energized. Street address shall be marked on the temporary structure, not on the meter socket cover. All temporary services shall be inspected and approved by the authority having jurisdiction.

1603.1 Location of Temporary Meter Structure:

The structure shall be located within the Customers premises at a minimum distance of 15 feet from an FP&L main line pole and shall be of adequate height for proper clearance, per NEC, of the utility's service drop wire above whatever drive, road, or land that it may cross. The placement will be subject to the approval of FP&L. The meter loop will face towards the street or alley. All applicable parts of Section 500 for overhead systems will apply to temporary service in overhead areas.

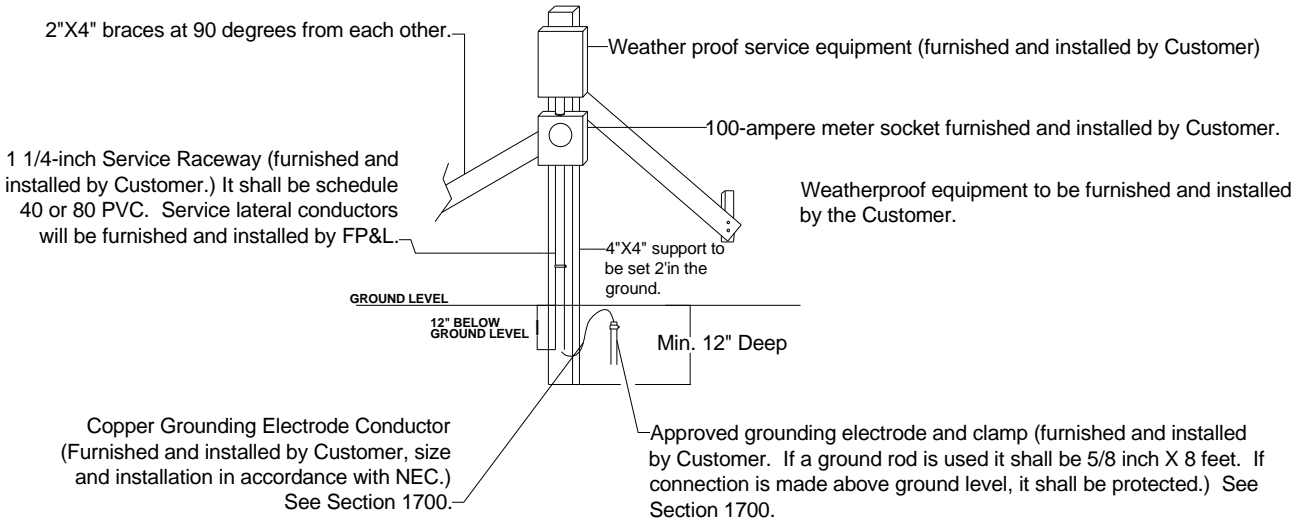
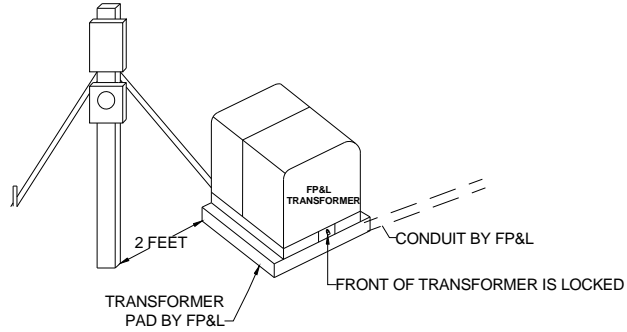
1603.2 Construction of Temporary Meter Structure:

The temporary structure will be of sound construction and installed so that it will not create a safety concern to personnel working on a ladder. See Figure 1600.2 for a typical temporary meter installation supplied from a service drop. A minimum of 4 x 4 inch wooden mast to be set a minimum of three feet in the ground, supported by three 2 x 4 inch braces and stakes. Top braces to be secured to mast 18 inches below weatherhead. The raceway may be Rigid Metal Conduit (RMC), Intermediate Metal Conduit (IMC), or Electrical Metal Tubing (EMT). The minimum 1 ¼-inch conduit should be used for the service raceway. See Figure 1600.2.

**Figure 1600.1
TEMPORARY METER INSTALLATION - URD SERVICE AREA**

The temporary meter structure and grounding electrode shall be placed on the side of the transformer away from the side property line and in-line with the rear of the transformer pad as shown. Meter reading note: Front of the meter should not be obstructed.

In all lot configurations, padmount transformers will normally be located approximately 3 feet from the side property line of the lot on which they are to be installed. FP&L will install a 2-inch conduit elbow near the transformer's secondary compartment. This conduit will extend to the edge of the pad for a passage of service laterals. See illustration of atypical installation at right. Note: If the property is occupied and Customer objects to the temporary metering, it may be moved to adjoining undeveloped property but it must remain as close to transformer as possible, and Customer shall provide excavation for service lateral conductors.



Customer shall construct the temporary service installation as shown above and maintain it in a safe condition throughout its period of use. It is suggested that the structure be left intact and moved from job to job as needed. It shall not be moved while it is energized.

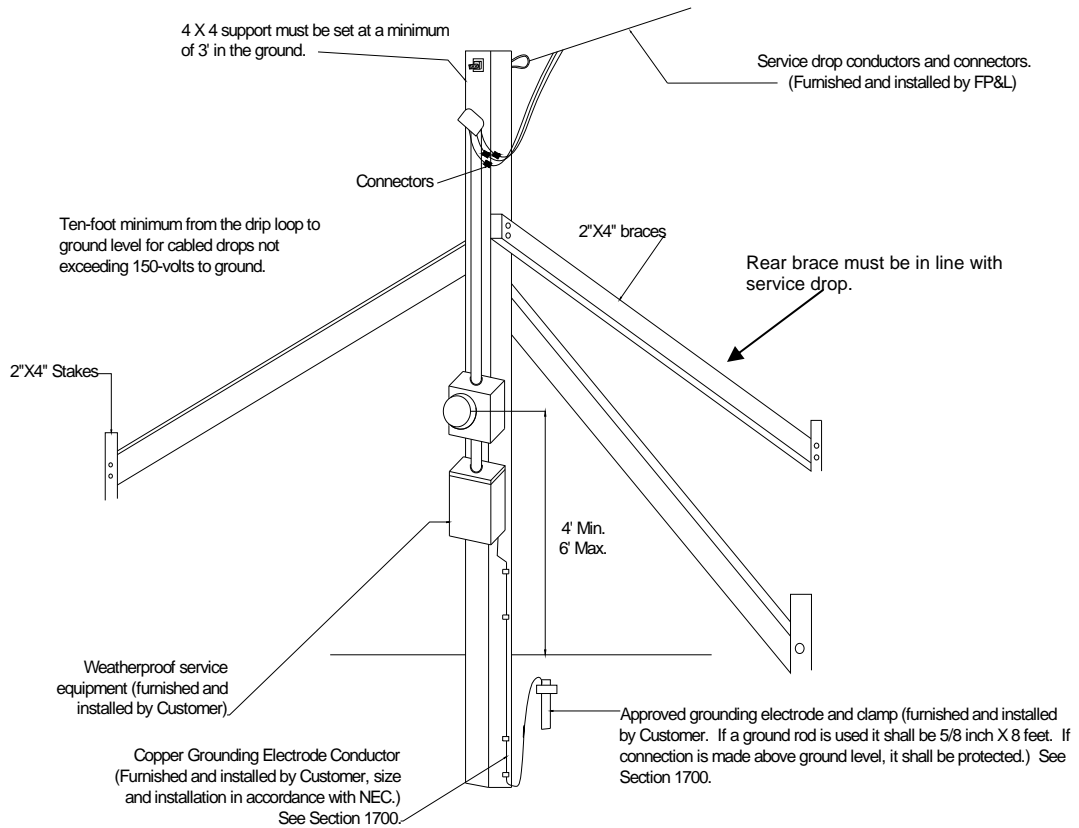
The temporary service installation must be identified with a proper service address before FP&L will energize it and install a meter.

Other Temporary service locations may include those supplied from secondary enclosures.

All temporary metering installations where digging 18 inches or more, will require that the Customer obtain utility locates from Miss Utility to prevent damage to the primary or secondary cables or possible personal injury.

**Figure 1600.2
TEMPORARY METER INSTALLATION - OVERHEAD SERVICE**

100-ampere meter socket furnished and installed by Customer.



Customer shall construct the temporary service installation as shown above and maintain it in a safe condition throughout its period of use. It is suggested that the structure be left intact and moved from job to job as needed. It shall not be moved while still energized.

The temporary service installation must be identified with a proper service address before FP&L will connect and install a meter.