



RULES AND REGULATIONS

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I. INTRODUCTION

The "General Rules and Regulations" section contains the rules, practices, classifications, exceptions and conditions observed by the Company in supplying service to its customers. Included, by reference, are the technical specifications and requirements of the Company's currently effective *Standard Electrical Service Requirements (SESR)* and *Vault Design Criteria* on file with the Florida Public Service Commission and available on request. The SESR explains the general character of electric service supplied, the meters and other devices furnished by the Company, and the wiring and apparatus provided and installed by the customer.

These requirements supplement those of the National Fire Protection Association, National Safety Codes, and those of state, county and municipal authorities.

Situations not specifically covered herein, or questions regarding the application of these requirements may be resolved by contacting the Company as early as possible.

Except for installation and maintenance of its own property, Tampa Electric Company does not install or repair customer owned wiring on customer's premises. Therefore, the Company cannot assume any responsibility for, or liability arising because of, the condition of wires or apparatus not owned by the Company.

Cooperation in these matters will be greatly appreciated and will help the Company to render prompt, satisfactory service when it is needed.

II. GENERAL INFORMATION

2.1 DEFINITIONS

See section 4, technical terms and abbreviations.

2.2 GENERAL RULES REGARDING SUPPLY AND USE OF ELECTRICAL ENERGY

Notwithstanding any contrary provisions contained in any other agreement between the customer and Tampa Electric Company, the following sections 2.2.1 through 2.2.5 shall apply.

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2.2.1 CUSTOMERS RESPONSIBILITIES

All property of the Company installed in or upon the customer's premises used and useful in supplying service is placed there under the customer's protection. All reasonable care shall be exercised to prevent loss or damage to such property, ordinary wear and tear excepted.

The customer will be held responsible for breaking the seal, tampering or interfering with the Company's meter or meters or other equipment of the Company installed on the customer's premises. No one, except employees of the Company, will be allowed to make any repairs or adjustments to any meter or other piece of apparatus belonging to the Company.

Resale of electrical energy by the Customer is not permitted.

2.2.1.1 ACCESS TO PREMISES

The company and its representatives shall have access to the premises of the Customer at all reasonable times for the purpose of installing, maintaining, and inspecting or removing the company's property, reading meters, trimming trees, and other purposes incident to the performance or termination of the company's agreement with the Customer. The company and its representatives shall not be liable to the Customer for trespass.

2.2.1.2 CONJUNCTIVE BILLING

Conjunctive billing means totalizing metering, additive billing, plural meter billing, conjunctive metering, and all like or similar billing practices which seek to combine, for billing purposes, the separate consumptions and registered demands of two or more points of delivery serving a single Customer.

A single point of delivery of electric service to the user of such service is defined as the single geographical point where a single class of electric service, as defined in a published rate tariff, is delivered from the facilities of the utility to the facilities of the Customer. Conjunctive billing shall not be permitted. Bills for two or more points of delivery to the same Customer shall be calculated separately for each such point of delivery.

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Totalized metering may be authorized by the company on such installations of electric service where single circuit metering equipment is impractical because of the Customer's load and the standard electrical equipment utilized by the company. Totalized metering will be considered only if all of the following criteria are met.

- (a) All of the services to be totalized must be at the same voltage level.
- (b) The facility's total demand load must exceed the company's loading criteria for the largest standard transformer purchased by the company to serve that voltage level.
- (c) The facility must be comprised of one building containing a single integrated business* operated by one Customer.

Totalized metering, when authorized by the Company, will normally be provided to a single geographical point. However, service may be provided at multiple geographical points if the Customer pays the company all costs associated with the additional facilities necessary to achieve these multiple service locations.

A customer operating a single integrated business under one name in two or more buildings and/or energy consuming locations may request a single point of delivery and such request shall be complied with by the Company providing that -

- (1) such buildings or locations are situated on a single unit of property; or
- (2) such buildings or locations are situated on two or more units of property which are immediately adjoining, adjacent or contiguous; or
- (3) such buildings or locations are situated on two or more units of property which would be immediately adjoining, adjacent or contiguous except for intervening streets, alleys or highways;

and in all cases arising in sub-paragraphs (1), (2), or (3), it shall be the customer's responsibility to provide the electrical facilities necessary for distributing the energy beyond the single delivery point.

* The word "business" as used in this section shall be construed as including residences and educational, religious, governmental, commercial and industrial operations.

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2.2.2 CONTINUITY OF SERVICE

The Company will use reasonable diligence at all times to provide continuous service at the agreed nominal voltage, and shall not be liable to the Customer for any damages arising from causes beyond its control or from the negligence of the Company, its employees, servants or agents, including, but not limited to, damages for complete or partial failure or interruption of service, for initiation of or re-connection of service, for shutdown for repairs or adjustments, for fluctuations in voltage, for delay in providing or in restoring service, or for failure to warn of interruption of service.

Whenever the Company deems that an emergency warrants interruption or limitation in the service supplied, or there is a delay in providing or restoring said service because of an emergency, such interruption, limitation or delay shall not constitute a breach of contract and shall not render the Company liable for damages suffered thereby or excuse the Customer from fulfillment of its obligations.

2.2.3 FORCE MAJEURE

The Company shall not be liable to the Customer, or to others for whose benefit this contract may be made, for any injury to persons, including the Customer, or for any damage to property, including property of the Customer, when such injury or damage is a caused directly or indirectly by:

- (1) a hurricane, storm, heat wave, lightning, freeze, severe weather event, or other act of God;
- (2) fire, explosion, war, riot, labor strike, or lockout, embargo, interference by federal, state or municipal governments, injunction or other legal process;
- (3) breakage or failure of any property, facility, machinery, equipment or lines of the Company, the Customer, or others.

2.2.4 INDEMNITY TO COMPANY

The Customer shall indemnify, hold harmless and defend the Company from and against any and all liability, proceedings, suits, costs or expenses, for loss or damage to property or for injury to persons, in any manner directly or indirectly connected with, or arising out of, the use of electricity on the Customer's side of the point of delivery or out of the Customer's negligent acts or omissions.

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2.2.5 LIMITATION ON CONSEQUENTIAL DAMAGES

The Customer shall not be entitled to recover from the Company for loss of use of any property or equipment, loss of profits or income, loss of production, rental expenses for replacement of property or equipment, diminution in value of property, expenses to restore operations, loss of goods or products, or any other consequential, indirect, unforeseen, incidental or special damages.

2.3 COMPANY EQUIPMENT ON PRIVATE PROPERTY

An easement will be required where necessary for the Company to locate its facilities on property not designated as a public right-of-way to serve the customer on whose property the facilities are to be located. Service drops, service laterals and area light services are the exception to the proceeding rule. If a service drop is expected to serve future customers, an easement should be obtained. Easements will also be required where it is necessary for the Company's facilities to cross over property not designated as public right-of-way to serve customers other than the property owner. Normal distribution easements will be 15 feet wide, but easements will vary in dimensions depending upon the type of facility necessary. All matters pertaining to easements will be handled directly with the appropriate representative in the Company office serving the area in question.

In the event that the Company's facilities are located on a customer's property to serve the customer, and if it becomes desirable to relocate these facilities due to expansion of the customer's building or other facilities, or for other reasons initiated by the customer, the Company will, where feasible, relocate its facilities. The Company may require that all costs associated with the requested relocation or removal be charged to the customer making the request.

2.4 ELECTRIC SYSTEM RELOCATIONS

In subdivided property in general, the Company endeavors to locate its facilities such that they are in the immediate vicinity of a lot line. This may not be possible due to subdivision replatting or inability of the Company to so locate its facilities. In rural areas facilities are located so as to provide the most efficient electrical distribution system.

If a customer desires that a guy wire, pole or other facility be relocated, the Engineering Department at the nearest Company office should be contacted. Consideration will be given to each case; and if practicable, the Company will relocate such facility to the vicinity of the nearest lot line or to the desired location. The Company may require that all costs associated with the requested relocation or removal be charged to the customer making the request.

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2.5 CHANGES IN SUPPLY VOLTAGE

Should it become necessary or expedient for the Company to initiate a change in the supply voltage to a customer, the Company will provide the necessary equipment and make the necessary changes at its expense and will, where necessary, supply transformers and/or auto-transformers sufficient to adequately serve the existing load of the customer at the voltage served before the change. Documentation such as ownership of equipment used to make such changes shall be required at the time of the change. A reasonable amount of spare capacity to supply minor additions of load by the Customer after the voltage change has been made will be provided. Any large increase of load by the Customer after the voltage change has been made must either be provided from the new system or the Customer must supply the necessary increase in transformer and/or auto-transformer capacity.

Any load addition by the customer which would require the company to change its supply voltage or supply equipment shall not obligate the company to bear any of the necessary expense of converting the Customer's wiring system or equipment. Such an addition relieves the company of any responsibility to serve any of the Customer's load at the previous existing voltage or service characteristics that were furnished before the change.

2.6 AVAILABILITY AND LOCATION OF SERVICE

The company recognizes its obligation to furnish electric service to Customers throughout its entire service area, but necessarily must reserve the right to require a contribution in aid of construction (CIAC) when the additional distribution investment is not considered prudent. A CIAC will normally be required when the cost of the facilities required to serve a Customer are in excess of those normally provided by the company. CIAC fees are intended to protect the general body of ratepayers from subsidizing special service requests.

In the case of an overhead distribution system extension, a CIAC will normally be required when the cost of extending overhead distribution facilities exceeds the investment allowance last approved by the Florida Public Service Commission.

The investment allowance is based upon the Customer's estimated annual electric energy consumption and the company's average cost of energy in providing service to existing Customers of similar classification, and is credited to the overall cost of the line extension and reduces the required CIAC by that amount.

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The credit allowance effective July 2, 1985 is the sum of four times the expected annual non-fuel energy charge revenues and four times the expected annual demand charge revenues to be generated from sales over the new line.

In the case of an underground distribution system extension, a CIAC will normally be required equal to the difference in cost between the requested underground system and the overhead system which would normally be provided to serve the Customer load. Specific applications of this rule are found elsewhere in these rules and regulations.

If the company considers the prospects of securing additional revenue from additional distribution investment to be favorable, (i.e. in public road right-of-way, other Customers and/or additional load) such payment, or portion thereof, may be waived.

Line extensions will normally be made from the nearest existing facilities of adequate capacity.

For cases involving non-permanent type structures, the Customer must contribute in aid of construction an amount equal to the estimated costs for the entire extension.

When a CIAC is required, the Customer shall deposit with the Company the specified amount prior to the company commencing construction. The company will install, own, and maintain the electrical distribution facilities up to the company designated point of delivery. Any payment by the Applicant under the provisions of this policy will not convey to the Applicant any rights of ownerships.

A customer may request a one-time review of the CIAC charge within twelve months of the in-service date of the new or upgraded facilities. Using the same methodology employed in the calculation of the CIAC estimate, the Company will true-up the CIAC charge using actual values for labor hours, vehicle hours, materials cost, and customer base revenue. The actual labor and vehicle hours will be multiplied by the average rates in place at the time of the installation for the labor and vehicle classifications that were originally estimated for the job. The revenue portion of the CIAC true-up will be calculated by annualizing the actual base demand and energy revenues received by the Company to date, annualizing that amount and then multiplying by four to derive four years expected base revenues. Based on the CIAC true-up calculation, the customer will either receive a refund from the Company for the CIAC amount overcharged or be billed by the Company for CIAC owed in excess of the initial CIAC payment.

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In cases where more end-use customers than the initial applicant are expected to be served by new facilities within three-years of the in-service date of the facilities, the expected number of customers to be served (including the initial applicant) shall be determined and documented based on information available at the time of the calculation of the CIAC. If there are expected to be additional customers served, the CIAC amount shall be prorated based on this expected number of customers; however, the company may require payment equal to the full amount of the CIAC from the initial applicant. If, the company has required the initial customer to pay the full amount of the CIAC, the company shall refund to the initial applicant the prorated share amount collected from each customer subsequently served by the facilities until the CIAC has been evenly allocated among each of the expected customers or three years have elapsed from the in-service date of the facilities, whichever is sooner.

Electrical service may be refused or discontinued under certain conditions as shown in Part 2.14 of this section.

Information may be obtained from the company as to availability and kind of service for any desired location. In order to insure that the service connection will be made promptly, cooperation between the Customer, his electrical contractor, and the company is necessary.

An application for permanent service or for alternations in existing service must be made by the Customer himself as noted in Paragraph 2.8 below.

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In addition to the service application, a request for service layout location at the desired address shall be made by the customer's electrical contractor at the company office serving the area in question before construction is started.

2.7 RATES AND THEIR APPLICATIONS

The rates for all types of electric service rendered by the company are on file with The Florida Public Service Commission. Copies of these rates are available and information regarding their application may be obtained in the nearest company office.

2.8 APPLICATION FOR SERVICE

In order to obtain service at the desired time, application by the customer should be made as early as possible to the Company. Time is required to procure and assemble the necessary materials and for installing the service or altering the existing service. Deposits are sometimes required with the application.

Applications for service or change in service may normally be made by telephone, in writing, or on-line at www.tampaelectric.com. Under certain conditions, however, the application or contract shall be in writing as determined by the Company.

Unless otherwise specifically provided in the applicable rate, or in a contract between the customer and the Company, all applications for service shall be deemed for the period of one year and continuously thereafter until notice of termination is given by either party.

Application for new service or alteration in existing service must be accompanied by an adequate description of the location of the property where service is desired, such as street and house number, rural address, or legal description of the property.

In order to insure that adequate Company electrical equipment is installed to provide satisfactory service to the customer, load data must be submitted with the application. This load data should include the electrical requirements of each device to be installed and the total anticipated demand.

2.9 ALTERATIONS OR ADDITIONS TO EXISTING WIRING

The Company must be notified by the customer before adding any major load. An application for required alteration in service must be made by the customer in the same manner as application for new service.

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Relocation of service attachments must be approved and a layout of the new location furnished by the Company before the customer commences work. When alterations have been satisfactorily completed by the customer and the necessary inspection approvals obtained, the Company will make the connections to provide the new service.

The metering equipment used before the wiring alterations must not be removed from the premises without specific approval of the Company.

2.10 CITY AND COUNTY PERMITS

If an installation, addition, or alteration is made in an area requiring City or County electrical wiring permits, no service will be connected or altered until approval of the installation by the City or County Electrical Inspector is received by the Company.

2.11 INSPECTIONS AND APPROVALS

It shall be the customer's responsibility to notify the Company and where applicable, the City or County Electrical Inspection Department when his wiring installation, addition, or alteration is completed and ready for electric service.

Local inspection by the AHJ is all inclusive from the point of attachment throughout the customer's entire wiring system.

Company inspection is made from the point of attachment to the roadside terminals of the main switch, including service entrance grounding systems. The purpose of this inspection is to insure safe working conditions for Company personnel and to protect Company equipment from mechanical or electrical hazards. Such inspection in no way relieves the customer of the responsibility for providing a safe electrical system.

The Company cannot render new service or alter existing service characteristics until all of the required inspections have been made and approval of them has been received by the Company from the proper authorities.

Service will not be connected to any new or existing installation which is known to be unsafe.

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2.12 DEPOSITS

At the Company's option, a deposit amount of up to two (2) month's average billing, or a suitable guarantee as security for payment for electric service, may be required at any time. As a suitable guarantee the applicant for service may furnish either (1) a satisfactory guarantor to secure payment of bills for the service requested, (2) an irrevocable letter of credit from a bank, or (3) a surety bond. For residential customers, a satisfactory guarantor shall, at the minimum, be a customer with a satisfactory payment record. For non-residential customers, a satisfactory guarantor need not be a customer of the utility. Each utility shall develop minimum financial criteria that a proposed guarantor must meet to qualify as a satisfactory guarantor. A copy of the criteria shall be made available to each new non-residential customer upon request by the customer.

After a residential customer has established a satisfactory payment record and has had continuous service for a period of twenty-three (23) months, the customer's deposit shall be refunded provided the customer has not in the preceding twelve (12) months, (a) made more than one late payment of a bill (after the expiration of twenty (20) days from the date of mailing or delivery by the Company), (b) paid with a check refused by a bank, (c) been disconnected for nonpayment, or at any time, (d) tampered with the electric meter, or (e) used service in a fraudulent or unauthorized manner.

A minimum of six percent (6%) interest per annum on deposits shall be credited to the current bill annually and when deposits are refunded. Interest of seven percent (7%) shall be paid on deposits of non-residential customers after the deposits have been held for twenty-three (23) months and the company elects not to refund the deposits. The deposit interest shall be simple interest in all cases. No customer depositor shall be entitled to receive interest on his deposit until and unless the customer relationship and the deposit have been in existence for a continuous period of six (6) months, then he shall be entitled to receive interest from the day of the commencement of the customer relationship and the placement of deposit.

Upon termination of service, and provided all bills have been paid in full, the deposit and accrued interest may be credited against the final account and the balance if any, shall be returned promptly to the customer within fifteen (15) days after service is discontinued.

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2.13 PAYMENT OF BILLS

Bills for service will be rendered monthly by the Company to the customer. Payment is due when the bill is rendered, and becomes delinquent twenty (20) days after mailing or delivery to the customer. Five (5) days written notice separate from any billing will be given before discontinuing service. Payment may be made at offices or authorized collecting agencies of the Company. Care will be used to have bills properly presented to the customer, but non-receipt of the bill does not constitute release from liability for payment.

2.13.1 MEASUREMENT AND EVIDENCE OF CONSUMPTION

Power and energy shall be measured for each Point of Delivery by one meter for each type of Service rendered; and the Company's readings and records thereof shall be accepted and received, at all times and places as prima facie evidence of the quantity of electricity used by the customer at the Point of Delivery.

2.14 REFUSAL OR DISCONTINUANCE OF SERVICE

The Company may, until adequate facilities can be provided, refuse to serve an applicant if, in the best judgment of the Company, it does not have adequate facilities to render the service applied for.

The Company may refuse to serve any person whose service requirements or equipment is of a character that is likely to affect unfavorably service to other customers.

The Company may refuse to render any service other than that character of service which is normally furnished, unless such service is readily available.

The Company shall not be required to furnish service under conditions requiring operation in parallel with generation equipment connected to the customer's system if, in the opinion of the Company such operation is hazardous or may interfere with its own operations or service to other customers or with service furnished by others. The Company may specify requirements as to connection and operation as a condition of rendering service under such circumstances.

As applicable, the Company may refuse or discontinue service under the following conditions provided that, unless otherwise stated, the customer shall be given notice and allowed a reasonable time to comply with any rule or remedy any deficiency.

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- (1) For non-compliance with and/or violation of any State or municipal law or regulation governing electric service.
- (2) For failure or refusal of the customer to correct any deficiencies or defects in his wiring and/or equipment which are reported to him by the Company.
- (3) For the use of energy for any other property or purpose than that described in the application.
- (4) For failure or refusal to provide adequate space for the meter and service equipment of the Company.
- (5) For the failure or refusal to provide the Company with a deposit to insure payment of bills in accordance with the Company's regulation, provided that written notice, separate and apart from any bill for service, be given the customer.
- (6) For neglect or refusal to provide reasonable access to the Company for the purpose of reading meters or inspection and maintenance of equipment owned by the Company.
- (7) For non-payment of bills or non-compliance with the Company's rules and regulations, and only after there has been a diligent attempt to have the customer comply, including at least five (5) days written notice to the customer, such notice being separate and apart from any bill service.
- (8) For failure to settle, in full, all prior indebtedness incurred by any Customer or Customers of record for the same class of service at any one or more locations of such Customer or Customers of record.
- (9) Without notice in the event of a condition known to the Company to be hazardous.
- (10) Without notice in the event of tampering with meters or other facilities furnished and owned by the company.
- (11) Without notice in the event of unauthorized or fraudulent use of service. Whenever service is discontinued for fraudulent use of service, the company may, before restoring service, require the Customer to make at his own expense all changes in facilities or equipment necessary to eliminate illegal use and to pay an amount reasonably estimated as the loss in revenue resulting from such fraudulent use.

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The following shall not constitute sufficient cause for refusal or discontinuance of service to an applicant or Customer:

- (1) Delinquency in payment for service by a previous occupant of the premises unless the current applicant or Customer occupied the premises at the time the delinquency occurred and the previous customer continues to occupy the premises and such previous Customer shall benefit from such service.
- (2) Failure to pay for merchandise purchased from the company.
- (3) Failure to pay for a service rendered by the company which is non-regulated.
- (4) Failure to pay for a different type of utility service, such as gas or water.
- (5) Failure to pay for a different class of service.
- (6) Failure to pay for bill of another Customer as guarantor thereof.
- (7) Failure to pay a dishonored check service charge imposed by the company.

In case of refusal to establish service, or whenever service is intentionally discontinued by the Company for other than routine maintenance, the Company shall notify the applicant or customer in writing of the reason for such refusal or discontinuance.

If service has been discontinued for proper cause, it may be reconnected after those circumstances which required that it be discontinued are corrected. A service charge will be made in accordance with Sheet 3.030 of this Tariff except that when unusual expenses are incurred, or in cases of flagrant or continuing violations of approved Rules and Regulations, the Company, after advising the customer, may charge such additional costs as are incurred.

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2.14.1 MEDICALLY ESSENTIAL SERVICE

For purposes of this section, a Medically Essential Service Customer is a residential customer whose electric service is medically essential, as affirmed through the certificate of a doctor of medicine licensed to practice in the State of Florida. Service is "medically essential" if the customer has a medical dependence on electric-powered equipment that must be operated continuously or as circumstances require as specified by a physician to avoid the loss of life or immediate hospitalization of the customer or another permanent resident at the residential service address. If continuously operating, such equipment shall include but is not limited to the following: oxygen concentrator or a ventilator/respirator. The physician's certificate shall explain briefly and clearly, in non-medical terms, why continuance of service is medically essential. A customer who is certified as a Medically Essential Service Customer must renew such certification periodically through the procedures outlined above. The Company may require such renewed certification no more frequently than once every 12 months.

The Company shall provide Medically Essential Service Customers with a limited extension of time, not to exceed thirty (30) days, beyond the date service would normally be subject to disconnection for non-payment of bills (following the requisite notice pursuant to Rule 25-6.105(5) of the Florida Administrative Code). The Company shall provide the Medically Essential Service Customer with written notice specifying the date of disconnection based on the limited extension. The Medically Essential Service Customer shall be responsible for making mutually satisfactory arrangements to ensure payment within this additional extension of time for services provided by the Company and for which payment is past due, or to make other arrangements for meeting the medically essential needs.

No later than 12 noon one day prior to the scheduled disconnection of service of a Medically Essential Service Customer, the Company shall attempt to contact such customer by telephone in order to provide notice of the scheduled disconnect date. If the Medically Essential Customer does not have a telephone number listed on the account, or if the utility cannot reach such customer or other adult resident of the premises by telephone by the specified time, a field representative will be sent to the residence to attempt to contact the Medically Essential Service Customer, no later than 4 PM of the day prior to scheduled disconnection. If contact is not made, however, the Company may leave written notification at the residence advising the Medically Essential Service Customer of the scheduled disconnect date; thereafter, the Company may disconnect service on the specified date. The Company will grant special consideration to a Medically Essential Service Customer in the application of Rule 25-6.097(3) of the Florida Administrative Code.

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In the event that a customer is certified as a Medically Essential Service Customer, the customer shall remain solely responsible for any backup equipment and/or power supply and a planned course of action in the event of power outages. The Company does not assume, and expressly disclaims, any obligation or duty: to monitor the health or condition of the person requiring medically essential service; to insure continuous service; to call, contact, or otherwise advise of service interruptions; or, except as expressly provided by this section, to take any other action (or refrain from any action) that differs from the normal operations of the Company.

2.15 CUSTOMER EQUIPMENT ON COMPANY POLES

Tampa Electric prohibits any attachments to its poles or other equipment unless specifically authorized by agreement. Such attachments include, but are not limited to fences, banners, signs, clotheslines, basketball backboards, antennas, placards, political posters, or any advertising matter. Tampa Electric will remove unauthorized attachments without notice. Meter sockets and customer electric service risers are not to be attached to Tampa Electric poles. Customers are not allowed to make connections to, or disconnections from Tampa Electric equipment. All connection/disconnection work must be performed by Tampa Electric's personnel.

2.16 TYPE AND CHARACTER OF SERVICE

Alternating current (a. c.) at a nominal frequency of 60 hertz (c. p. s.) is considered standard. The voltage and number of phases depend upon the character of the Customer's load, its size and location.

The standard service available to most TEC Customers is 120/240 volt three-wire single-phase service. TEC also has available the following four-wire three -phase voltages: 120/240, 240/480, 120/208, and 277/480. Customers may obtain three-phase service at no cost if their forecasted load is sufficient to support the installation of three phase equipment.

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For Customers whose forecasted load does not qualify for a requested voltage, the Customer may obtain the requested voltage by paying an appropriate CIAC. This CIAC will be equal to the cost difference between the requested service and the service which would normally be provided for this load. Customers may also receive the requested three-phase service voltage at no charge if a suitable transformer bank is existing in the field and Tampa Electric can supply the requested voltage more economically from that source than providing the standard single phase service.

In some commercial centers and/or residential centers where service is provided from a three phase transformation, the nominal standard voltage is 120/208 volt or 277/480 volt 4-wire three phase wye depending on the Customer's electrical demand.

In the designated network area of downtown Tampa, the nominal standard voltage is 120/208 volt 3-wire single phase, 120/208 volt 4-wire three phase wye or 265/460 volt 4-wire three phase wye depending on the Customer's electrical demand.

Should the Customer desire service at a voltage that is neither standard nor readily available for his location or electrical demand, the company may, at its option, provide such service after being compensated by the Customer for any additional cost incurred.

Under certain conditions, as set forth in Section 5, part 3.3.5 of this tariff, the Customer may receive service at the company's primary distribution voltage.

For service rendered to Customers whose principal consumption shall be for lighting and/or residential purposes, the voltage at the point of delivery shall not exceed 5% above or below the standard voltage adopted. For service rendered principally for industrial or power purposes, excluding residential purposes, the voltage at the point of delivery shall not exceed 7 1/2% above or below the standard voltage adopted. These limitations may be modified for cases in which the Customer specifically agrees to accept service not meeting the specified limits.

Sudden changes in voltage that exceed 5% of the standard voltage and occur more frequently than two times per hour, or changes of 2 1/2% that occur more frequently than once per minute shall be limited to magnitudes and frequency of occurrence compatible with the Customer's requirements. These limitations may be modified for cases in which the Customer specifically agrees to accept service not meeting the specified limits.

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Continued from Sheet No. 5.175

Where the company's facilities are reasonably adequate and of sufficient capacity to carry the actual loads normally imposed, the company may require that the equipment on the Customer's premises shall be such that the starting and operating characteristics will not cause an instantaneous voltage drop of more than 4% of the standard voltage, measured at the point of delivery, or cause objectionable flicker to other Customer's service.

2.17 EMERGENCY RELAY POWER SUPPLY

The Company will receive applications for emergency relay power supply service from existing and/or new customers and reserves the right to approve or disapprove each application based upon need, location, feasibility, availability and size of load.

After receiving approval, the Company may require that all costs of any duplication of additional facilities required by the customer in excess of the facilities normally furnished by the Company for a single source, single transformation, electric service installation, be charged to the customer making the request.

Customers requesting relay service through a single point of delivery to a multi-serviced facility, must ensure that all new occupants of the multi-serviced facility beyond the single point of delivery are aware of the obligation to pay charges associated with relay service. All existing occupants (i.e. occupants with leases predating the request for relay service to a multi-serviced facility) may choose not to pay the relay service charge at the time service is provided but must pay the charge upon renewal of the existing lease. Any unrecovered revenues related to the relay service charge will be billed to the customer requesting relay service for the multi-serviced facility.

Exceptions may be made by the Company when public safety is involved.

III. CUSTOMER SERVICES AND WIRING

3.1 GENERAL REQUIREMENTS FOR CUSTOMER WIRING

As previously stated, compliance of customer owned facilities with the requirements of the National Electrical Code will provide the customer with a safe installation, but not necessarily an efficient or convenient installation.

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Continued from Sheet No. 5.180

For this reason, the requirements for service listed herein may be in excess of those required by the National Electrical Code. Frequently, a larger service entrance, a higher point of attachment, more branch circuits, or types of service equipment that exceed code minimums are desirable. As a general convenience, every electrical contractor should provide a stencil or tag with his name and address on the service switch of a customer's wiring system.

A neutral point of connection at the ownership line is provided by the Company for all three-phase four-wire and single-phase three-wire services. The neutral shall be extended from the ownership line to the customer's grounding system by the customer.

3.1.1 LOCATION OF SERVICE ENTRANCE WIRING

As previously noted in Subsection 2.6, Company approval of the point of attachment must be obtained before commencing work on service entrance wiring. The point of delivery shall be determined by the Company and will normally be on the building nearest the point at which the secondary electric supply is available to the property. If for the convenience of the Applicant, the Company is requested to agree on a different point of delivery, any additional costs shall be borne by the Applicant.

3.1.2 RELOCATION OR REMOVAL OF EXISTING FACILITIES

If the Company is required to relocate or remove existing electric facilities in the implementation of these Rules, the Company may require that all costs associated with such relocation or removal be charged to the customer.

3.1.3 POINTS OF ATTACHMENT AND SERVICE DROP CLEARANCES

The point of attachment will be located such that the lowest point on the service drop will be in accordance with the National Electric Safety Code (NESC).

Continued to Sheet No. 5.190

Continued from Sheet No. 5.181

The Customer will furnish and install fasteners for points of attachment on frame wooden locations through-the-roof and wall-mounted locations. Exception: the Company will furnish and install pipe brackets for points of attachment on 2 inch and 2½ inch conduit for through-the-roof installations. It is the Customer's responsibility to furnish, install and maintain any other type of point of attachment.

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Continued from Sheet No. 5.190

In the event the construction of the building does not provide proper service clearances for a wall type attachment, a rigid galvanized steel conduit extension as shown in Drawing No. 7.5 of the Standard Electrical Service Requirements or other approved type must be provided by the customer to elevate the point of attachment. This conduit extension, or other point of attachment, must be strong enough to support a sustained load of 500 lbs. minimum at the designated height of the point of contact of the service drop, unless otherwise specified in the drawings shown herein. In no case is this extension to be used as a support for any other attachment, such as a radio or TV antenna, telephone drop, lights, etc.

Service drop conductors of 300 volts or less which do not pass over other than a maximum of 4 feet of the overhang portion of the roof for the purpose of terminating at a (through the roof) service raceway or approved support may be maintained at a minimum of 18 inches from a portion of the roof over which they pass.

Service drop conductors shall have a clearance of not less than 8 feet from the highest point of roofs over which they pass except where the voltage between conductors does not exceed 300 volts and the roof has a slope of not less than 4 inches in 12 inches, the clearance may be not less than 3 feet.

Service drop conductors shall have a clearance of not less than 25 feet from wells for the protection of workers and rigging equipment.

3.1.4 GROUNDING

Grounding of service entrance equipment, conduits, meter enclosures and switches must be in accordance with the rules of the National Electrical Code and applicable local ordinances, except that only copper wire will be approved by the Company for grounding purposes.

Each service entrance shall be grounded to an approved made electrode which shall further be bonded electrically to the metallic cold water piping system and building steel where available.

The service entrance grounding conductor shall be sized according to the prevailing electrical code. This conductor must be securely fastened to the surface of the structure with clamps or staples at intervals not greater than 24 inches.

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Continued from Sheet No. 5.200

3.1.5 RIGHTS-OF-WAY AND EASEMENTS

The Applicant shall furnish satisfactory rights-of-way and easements at no cost to the company and in ample time for the company to provide the service required by the Applicant. Before the Company will start construction, these rights-of-way and easements must be cleared by the Applicant of obstructions that conflict with construction and must be staked to show property lines and final grade and graded to within six inches of final grade. Such clearing and grading must be maintained by the Applicant during construction by the company. Should paving, grass, landscaping, sprinkler systems or other utilities be installed prior to the construction of the underground distribution facilities, the Applicant shall pay the added costs of trenching, backfilling and restoring the paving, grass, landscaping and sprinkler systems or other utilities to their original condition. The Company will utilize to the fullest extent practicable, the public streets, roads, highways and platted easements for its facilities.

3.2 RESIDENTIAL AND SMALL USE SERVICES AND WIRING

3.2.1 General

Service entrance conductors installed by the customer between the point of attachment and the meter when exposed to the outside environment shall be enclosed in a rigid metallic conduit.

Service entrance conduit to and including the meter will be run only on exterior parts of the building. Conduit fittings, such as LB, LL, LR, and junction boxes shall not be used. Exposed service entrance conduit must be securely fastened to the building wall.

All customer installed service entrance wiring conduits exposed to the outside will be rigid metallic conduit. The service entrance is from the point of attachment to the main switch.

For each four wire delta service entrance the conductor designated to have the highest voltage measured to ground (high leg) shall be identified by orange color outside of the weatherhead, within the meter enclosure and within the main switch enclosure, and will be connected to the right-hand terminals of the meter socket and to the center terminal of the main switch.

For two metered services, each not greater than 200 amperes, a duplex meter socket can be used. For larger service or for more than two meters, a service raceway must be provided.

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Continued from Sheet No. 5.210

Only one conductor may be connected to each lug in a meter socket, except that lightning arrester and TEC lighting leads may be connected as shown in the appropriate meter socket installation drawing.

Metered and unmetered conductors shall not run in the same raceway.

3.2.2 SERVICE FROM OVERHEAD LINES-RESIDENTIAL

The standard service available to residential customers is 120/240 volt three-wire single phase. The customer should consult the National Electrical Code and local ordinances to determine minimum size service entrance conductors, keeping in mind that a larger capacity may be desirable in order to allow for future load additions. In any case, the minimum size service entrance conductor shall be #4 copper or #2 aluminum.

The construction requirements for residential service entrance wiring are shown in Drawing Nos. 7.4 and 7.5 of Tampa Electric's Standard Electrical Service Requirements.

3.2.3 SERVICE FROM OVERHEAD LINES SMALL NON-RESIDENTIAL

For non-residential customers, the standard service voltages available are 120/240 volt 3-wire single phase and 120/240 volt 4-wire three phase delta. Other voltages are standard in the Downtown Tampa Network Area, certain commercial centers and where service is provided from three phase padmount transformers. It is the customer's responsibility to determine what service voltages are available prior to purchasing electrical equipment. Such information is available by contacting the nearest Company office.

3.2.4 UNDERGROUND SERVICE

In certain geographical areas designated by the Company, electrical service is only available from an underground distribution system. Outside such designated areas, and with approval by the Company, underground electrical service may be obtained by compensating the Company for such service as provided in Subsections 3.4 and 3.5.

If it is determined that the installation of electrical facilities through an existing underground development is for the Company's benefit, the facilities shall be installed underground at the Company's expense. However, if these facilities are the result of a specific customer request, the customer shall contribute, as a Contribution In Aid of Construction, an appropriate amount determined by the applicable policy in these Rules and Regulations.

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3.3 LARGE CUSTOMER SERVICES

3.3.1 GENERAL

For large electrical loads, sound engineering principles will sometimes require that service transformers not be located on the customer's property. Where the customer requests a service voltage which is not standard in the immediate area, and the Company approves such request, the service transformers must be voltage labeled. If it is determined that the transformation is to be on the customer's property, the customer must provide a safe and continuously accessible location for such facilities, and a properly executed and recorded easement agreement may be required as provided for in Section 2.3 of these rules and regulations.

The Company will provide, upon request, the available fault current at the customer's service location, and such information must be considered when selecting service entrance equipment.

3.3.1.1 Services from Customer Owned Wiring

In large commercial or residential buildings where customer owned wiring is utilized for main services, all junction boxes, troughs, gutter or duct ahead of the individual metering must be sealable by the Company. All services to the structure will be check metered at or near the point of entry to determine the total consumption of the structure.

Metering of large services requires careful planning and special equipment as provided for in Section 4 of these rules and regulations.

At the point of ownership, whether in a handhole or in the padmount transformer, each set of Customer owned service conductors shall be marked to indicate their meter location and address.

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3.3.2 TRANSFORMER STRUCTURE-POLE

Where load requirements permit, the Company will normally mount service transformers on poles. In such cases, the Company will furnish, install and maintain the transformers and associated equipment and overhead service conductors to a specified point of attachment on the customer's structure.

3.3.3 PAD-MOUNT TRANSFORMER INSTALLATIONS

Pad-mount transformers served from underground lines may be installed when the Company and the customer mutually agree on the desirability of their use.

Customer services from 3 pad-mount transformer installations shall be balanced three phase and no individual service entrance equipment shall exceed four thousand amperes at a supply voltage of 600 volts or less.

The customer will reimburse the Company the estimated cost difference in furnishing this type underground installation as compared with that of furnishing conventional overhead service, as provided for in Subsections 3.3.3.1, 3.5.4, and 3.5.5.

Continued to Sheet No. 5.240



**NINTH REVISED SHEET NO. 5.240
CANCELS EIGHTH REVISED SHEET NO. 5.240**

Continued from Sheet No. 5.230

The design of such a system must be as shown in Drawing No. 7.27 of the Standard Electrical Service Requirements Manual and must be approved by the Company prior to construction.

The service voltage available from pad-mount transformer installations depends upon the customer's electrical demand.

The customer shall furnish, install and maintain all secondary wiring and conduit to the transformer secondary terminals. Rigid metallic conduit shall be used above ground for service entrances on exposed exterior walls. The Company will provide and install secondary connectors necessary to connect the customer's secondary conductors to the transformer provided that such conductors are of certain standard sizes as specified in Drawing No. 7.27 of the Standard Electrical Service Requirements Manual. The Company will, in any case, make all physical connections to the transformer.

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Continued from Sheet No. 5.240

3.3.3.1 UNDERGROUND COMMERCIAL DISTRIBUTION SYSTEMS

In certain geographical areas designated by the Company, electrical service is only available from an underground distribution system. When this is the case, underground distribution service utilizing padmounted transformers and padmounted manual switching equipment will be offered as the standard method of service. Primary Service may be available as provided for in Sections 3.3.5 - 3.3.5.2.

Outside such designated areas, large load customers in certain high load density locations, i.e... downtown area, Commercial/Industrial Developments, a shopping center complex... etc., may be served from an underground distribution system after compensating the Company in accordance with Section 3.5.5 of these Rules and Regulations. Underground distribution service utilizing padmounted transformers and padmounted switching equipment will be offered, upon payment of the appropriate CIAC, as the standard method of service from an underground distribution system.

The customer shall compensate the Company with a contribution in aid of construction for any duplicate or additional facilities requested by the customer in excess of the facilities normally furnished in providing for an electric service installation.

3.3.4 TRANSFORMER STRUCTURE - VAULTS

3.3.4.1 GENERAL

- 1) Transformer vaults shall be located on the customer's property. The required vault space as determined by the Company shall be provided by the customer inside the building structure or adjacent to the structure. Ingress and egress for the Company to operate and maintain the vault shall be provided by the customer to the satisfaction and requirements of the Company by means of a properly executed and recorded easement. The vault area will be secured by a Company lock, and only authorized Company personnel shall enter.
- 2) Transformer vault structures shall be constructed and maintained by the customer at his expense. The construction of the vault shall be to no less than the Company's minimum vault requirements for flammable liquid filled transformers. The Company shall have the right to inspect for compliance with no less than minimum vault requirements at all times during construction.

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- 3) The customer may, at the option of Company, be required to provide a collector bus in the vault area. The collector and service bus shall be of weatherproof construction and/or include fused sections where deemed applicable by the Company.
- 4) Normally, customer metering will not be located in the vault area. In most cases Company metering instrument transformers furnished by the Company shall be installed by the customer. Details of metering instrument transformer installations shall be approved by the Company prior to switchgear construction.
- 5) Prior to bid and construction, the customer shall obtain from the Company a written statement to the effect that engineering design drawings of the vault structure, collector bus, conduit systems, service bus, service equipment, vault ventilation system and vault lighting prepared by the customer's architect and or engineer have been reviewed by the Company and meet at least the minimum Company requirements for such structures and equipment. Prior to fabrication, related shop drawings must also be submitted and a written statement obtained from the Company to the effect such structures and equipment meet at least the minimum Company requirements.
- 6) The customer shall install and maintain the necessary conduit system from the vault area to a point specified by the Company. This point will normally be two feet outside the property line into public right-of-way. The conduit system shall be designed and constructed to no less than the Company's minimum requirements.
- 7) The customer shall compensate the Company as a contribution in aid of construction for all primary cable required in excess of 150 feet from the property line to the vault.
- 8) An easement and a contractual agreement defining the responsibilities of the customer and the Company shall be required and executed for all transformer vaults and conduit systems on private property prior to service connection. The easements shall include the contract as an exhibit to provide for all surviving conditions as contained in the contract.

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Continued from Sheet No. 5.260

- 9) The overall design for electric service shall be determined by the Company for the most desirable and economical system. The overall project should be considered in the planning stage for initial as well as ultimate load, number of buildings and services required from the best planning information available to both the Company and the customer.
- 10) Transformer vault structures and conduit systems constructed by the customer shall remain the customer's property; however, the transformer vault and conduit system shall be under the operational jurisdiction of the Company. The customer shall be responsible for maintenance of the vault structure and conduit system to the Company's satisfaction. The Company shall have the right to connect the transformer vault electrically into its underground distribution system.
- 11) The Company shall furnish, connect and maintain all transformers. The Company shall also furnish, install and maintain all primary cable, the vault grounding system (exclusive of ground rods or grounding connection point), and sump pumps (where required).
- The customer shall provide and install ground rods or a grounding connection point in the vault in accordance with no less than Company minimum requirements.
- The customer shall furnish, install and maintain the secondary wiring system to the transformer secondary terminals. The Company will provide and install secondary connectors necessary to connect the customer's secondary conductors to the transformer provided that such conductors are of certain standard sizes as specified in these Rules and Regulations. The Company will, in all cases, make all physical connections to the transformer.
- 12) In the event the transformer vault is located in such a manner that it is necessary for walls, grating, ventilation louver systems or any structural improvements to be moved, removed, modified or relocated during the installation, maintenance, removal and/or replacement of transformers and/or any other related equipment, then the customer shall be responsible at his expense to move, remove, modify, relocate and/or replace the walls, grating, ventilation louver systems, or any structural improvements.

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The customer shall be responsible at his expense for the placing, replacement and/or removal of the transformers and/or related equipment in the transformer vault to or from a location on private property or on adjacent public property where the Company can provide or exchange the transformers and/or related equipment without liability for damage to customer's property or the public. The Company reserves the right at its option to handle its equipment. If the Company exercises this option it will accept all responsibility pertaining to this installation.

The customer shall be liable for safe handling and any damage caused to the Company's transformers and/or any other related equipment when installing or removing same until accepted by the Company at the above agreed upon site.

- 13) The customer shall supply, install and maintain a minimum of 100 amp., 120/208 or 120/240 volt 3-wire single phase service per National Electrical Code and local code requirements to the transformer vault for vault lighting, small tools and sump pumps. The source disconnect for this vault service shall be permanently designated and identified "TECO OPERATED VAULT - DO NOT OPEN".

The customer shall provide and install the vault lighting system in accordance with no less than Company minimum requirements.

- 14) If vault design requires forced ventilation, the ventilation system shall be designed to no less than the Company's minimum requirements. Electrical service to the ventilation equipment shall normally be combined with and included in the transformer vault lighting service panel (see par. 13). This combined service shall be of adequate capacity according to National Electrical Code and local code requirements and shall be installed, supplied and maintained by the customer.
- 15) The Company will perform routine operational maintenance of the vault lighting system upon acceptance.

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3.3.4.2 DESIGNATED UNDERGROUND NETWORK AREAS

Tampa Electric Company will not expand any designated network area beyond its present boundaries. Within these boundaries, service for any new or additional load shall be provided in the most economical manner. Where service is economically available from non-network facilities, the standard method of service shall be utilized. Primary service may be available as provided for in sections 3.3.5 - 3.3.5.2.

Those customers requesting network service, at the Company's option of availability, when service is more economically available from non-network facilities will normally be required to pay the additional cost for this type of service as a contribution in aid of construction.

The customer shall compensate the Company with a contribution in aid of construction for any duplicate or additional facilities requested by the customer in excess of the facilities normally furnished in providing for an electric service installation.

Customer services from this system shall be balanced three phase whenever the service entrance equipment exceeds sixty amperes and no individual service entrance equipment shall exceed three thousand amperes. Provisions for metering must be agreed upon between the Company and the customer prior to any construction. Primary metering is not available with network service.

When in the Company's judgement, the location and electrical load make it economically feasible to serve a customer from the existing secondary network system located in adjacent public right-of-way, the Company will furnish a point of attachment for the customer's service entrance conductors within a company owned vault or service handhole. This point of attachment may be a junction of stud mole, or simply mechanical connectors to accommodate the customer's secondary conductors. The Company will make the physical connection of the customer's conductors to the point of attachment. The customer will furnish and install the main service entrance conductors between the point of attachment and his equipment. Service entrance conductors shall be copper. Sufficient length must be left in the transformer vault or service handhole to permit connection to the Company's equipment. This conductor length will vary normally between 3 and 15 feet as specified by the Company. The customer will furnish cable limiters and insulating sleeves on both ends of his main service entrance conductors. These limiters should not be ordered or installed without first consulting the Company to insure proper sizing.

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Cable limiters may be omitted in certain cases with the approval of the Company. The customer's conduit must enter the vault or handhole at a point specified by the Company and wall openings shall be repaired to the Company's satisfaction. Metallic conduit shall terminate in the vault or handhole with an insulated grounding bushing and non-metallic conduit shall terminate with an end-bell fitting.

The designated boundaries of the network area are defined as follows:

1. Tampa International Airport
2. Downtown Tampa

The Interstate on the north; Morgan Street to Cass Street, Cass Street to Jefferson Street, Jefferson Street to Zack Street, Zack Street to Governor Street, and Governor Street to Whiting Street on east; Whiting Street on the south; and the Hillsborough River on the west.

When at the Company's option, the customer requests network service based on location and load, and the customer makes an appropriate contribution in aid of construction, the following shall apply:

Where, in the Company's judgement, the customer's location or load requires the expansion of the underground network system, the following shall apply:

- 1) Network transformer vaults shall be located on the customer's property. The required vault space as determined by the Company shall be provided by the customer inside the building structure or adjacent to the structure. Ingress and egress for the Company to operate and maintain the vault shall be provided by the customer to the satisfaction and requirements of the Company by means of a properly executed and recorded easement. The vault area will be secured by a Company lock, and only authorized Company personnel shall enter.
- 2) Transformer vault structures shall be constructed and maintained by the customer at his expense. The construction of the vault shall be to no less than the Company's minimum vault requirements for flammable liquid filled network transformers. The Company shall have the right to inspect for compliance with no less than minimum vault requirements at all times during construction.

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Continued from Sheet No. 5.300

- 3) All network transformer installations shall be one of the following types:
 - (a) padmounted
 - (b) below grade submersible
 - (c) inside building
 - 1) dry type air cooled (limited availability)
 - 2) conventional liquid/air cooled
- 4) The customer may, at the option of the Company, be required to provide a collector bus in the vault area of adequate design to provide necessary service taps to complete the network secondary tie in the vault area. The collector and service bus shall be of weatherproof construction and/or include fused sections where deemed applicable by the Company.
- 5) Normally, customer metering shall not be located in the vault area. In most cases, Company metering instrument transformers furnished by the Company shall be installed by the customer. Details of metering instrument transformer installations shall be approved by the Company prior to switchgear construction.
- 6) Prior to bid and construction, the customer shall obtain from the Company a written statement to the effect that engineering design drawings of the vault structure, collector bus, conduit systems, service bus, service equipment, vault ventilation system, and vault lighting have been reviewed by the Company and meet at least the minimum Company requirements for such structures and equipment. Prior to fabrication, related shop drawings must also be submitted and a written statement obtained from the Company to the effect such structures and equipment meet at least the minimum Company requirements.
- 7) The customer shall install and maintain the necessary conduit system from the vault area to a point specified by the Company. This point will normally be two feet outside the property line into public right-of-way. The conduit system shall be designed and constructed to no less than the Company's minimum requirements and shall include provisions for all primary, network secondary, street lighting and supervisory cables deemed necessary by the Company for the continuous operation of the network system.
- 8) The customer shall compensate the Company as a contribution in aid of construction for all primary cable required in excess of 150 feet from the property line to the vault.

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Continued from Sheet No. 5.310

- 9) An easement and contractual agreement defining the responsibilities of the customer and the Company shall be required and executed for all transformer vaults and conduit systems on private property prior to service connection. The easement shall include the contract as an exhibit to provide for all surviving conditions as contained in the contract.
- 10) The overall design for electric service shall be determined by the Company for the most desirable and economical system. The overall project should be considered in the planning stage for initial as well as ultimate load, number of buildings, and services required from the best planning information available to both the Company and the customer.
- 11) Transformer vault structures and conduit systems constructed by the customer shall remain the customer's property; however, the transformer vault and conduit system shall be under the operational jurisdiction of the Company. The Company shall have the right to connect the transformer vault electrically into its underground network system. The customer shall be responsible for maintenance of the vault structure and conduit system to the Company's satisfaction.
- 12) The Company shall furnish, connect and maintain all network transformers and network protectors. The Company shall also furnish, install and maintain all primary cable, network protector secondary leads, network secondary cable, street lighting cable, supervisory cable, the vault grounding system (exclusive of ground rods or grounding connection point), and sump pumps (where required).

The customer shall provide and install ground rods or a grounding connection point in the vault in accordance with no less than Company minimum requirements.
- 13) In the event the transformer vault is located in such a manner that it is necessary for walls, grating, ventilation louver systems or any structural improvements to be moved, removed, modified, or relocated during the installation, maintenance, removal and/or replacement of transformers and/or any other related equipment, then the customer shall be responsible at his expense to move, remove, modify, relocate and/or replace the walls, grating, ventilation louver systems or any structural improvements.

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Continued from Sheet No. 5.320

The customer shall be responsible at his expense for the placing, replacement and/or removal of the transformers and/or related equipment in the transformer vault to or from a location on private property or on adjacent public property where the Company can provide or exchange the transformers and/or related equipment without liability for damage to customer's property or the public. The Company reserves the right at its option to handle its equipment.

The customer shall be liable for safe handling and any damage caused to the Company's transformers and/or other related equipment when installing or removing same until accepted by the Company at the above agreed upon site.

- 14) The customer shall supply, install and maintain a minimum of 100 amp., 120/208 volt, 3-wire, single phase service per National Electrical Code and local code requirements to the transformer vault for all 265/460 volt transformer vaults. The source disconnect for this vault service shall be permanently designated and identified "TECO OPERATED VAULT" - DO NOT OPEN".

For 120/208 volt transformer vaults, a minimum 100 amp., 120/208 volt, 3-wire, single phase service per National Electrical Code and local code requirements shall be supplied and installed by the customer in the vault area from the collector bus.

These above referenced services are for vault lighting, small tools and sump pumps. The customer shall provide and install the vault lighting system in accordance with no less than Company minimum requirements.

- 15) If vault design requires forced ventilation, the ventilation system shall be designed to no less than the Company's minimum requirements. Electrical service to the ventilation equipment shall normally be combined with and included in the transformer vault lighting service panel (see Par. 14). This combined service shall be of adequate capacity according to National Electrical Code and local requirements and shall be installed, supplied and maintained by the customer.

- 16) The Company will perform routine operational maintenance of the vault lighting system upon acceptance as part of its operational jurisdiction.

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3.3.5 PRIMARY SERVICE

As used here, the term "primary service" refers to the voltage at which the Company distributes electrical energy from its Distribution Substation for customer utilization.

If a customer desires to receive electrical service at the primary voltage available in the area, special approval of the company must be obtained. Close cooperation between the customer and the Company is necessary in such cases to insure proper selection of the customer's equipment to match the Company's primary voltage to insure proper coordination of all phases of design and construction, and to assure proper understanding of applicable rates and requirements of the service being rendered.

Primary cables will not normally be permitted under buildings or structures.

An ownership line will be established by the Company, and the customer shall install, own and maintain all electrical facilities beyond such line. The customer shall consult with the Company prior to designing his electrical system in order to assure proper interaction between customer and Company owned equipment.

Metering will normally be done at the primary voltage level. Upon agreement between the Company and customer, the customer may install company provided metering equipment as an integral part of the customer's facilities. Such installations must be done in accordance with Subsection 4.3 of these rules and regulations.

3.3.5.1 OVERHEAD PRIMARY SERVICE

If a customer desires to receive electrical service at the primary voltage available, the ownership line will be on the customer's pole at the line side of his fused disconnect switch. The customer will then carry his primary distribution from that pole either underground or overhead. Refer to Drawing No. 7.25 in the Standard Electrical Service Requirements Manual.

The customer shall compensate the Company with a contribution in aid of construction for any duplicate or additional facilities required by the customer in excess of the facilities normally provided for overhead service.

3.3.5.2 UNDERGROUND PRIMARY SERVICE

If a customer desires to receive electrical service at the primary voltage available in a designated underground commercial distribution area, metering will normally be done at the primary voltage level with the ownership line described as follows:

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Continued from Sheet No. 5.340

(1) If a customer provides primary metal clad switchgear approved for service equipment incorporating the Company's primary instrument metering transformers the ownership line shall be defined as the termination of the Company's primary cable in the customer's primary service equipment.

Refer to Subsection 4.3 for Primary Metering Practices and Requirements. Refer to Drawing No. 7.25 of the Standard Electrical Service Requirements Manual for further details on the ownership line.

(2) If a customer does not provide primary service equipment then Company padmounted primary metering equipment shall be installed. The ownership line shall be defined as the termination of the Company's primary cable in the customer's padmounted switching equipment containing an incoming fused disconnect switch for isolation and fused or load break separable insulated connectors for outgoing load primary cables.

The customer shall compensate the Company with a contribution in aid of construction for any duplication of additional facilities requested by the customer in excess of the facilities normally furnished in providing for an underground primary service.

3.4 THE INSTALLATION OF UNDERGROUND RESIDENTIAL DISTRIBUTION (URD) FACILITIES TO SERVE RESIDENTIAL CUSTOMERS

3.4.1 GENERAL INFORMATION

3.4.1.1 Application

Underground electric distribution facilities are offered in lieu of overhead facilities in accordance with these rules and regulations for:

- (a) Residential Subdivisions and Developments
- (b) Multiple-Occupancy Residential Buildings
- (c) Individual Residential Customers
- (d) Residential Customers not included in (a), (b) or (c) above

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Continued from Sheet No. 5.350

When the Applicant requests underground electric facilities not specifically covered by these Rules and Regulations and when overhead facilities would otherwise be provided or maintained, the request may be granted provided the Applicant shall pay the Company the estimated cost differential between the underground facilities and the equivalent overhead facilities.

3.4.1.2 Early Notifications and Coordination

In order for the Company to provide service when required, it is necessary that the Applicant notify the Company during the early stages of planning major projects. Close coordination is necessary throughout the planning and construction stages by the Company, the architect, the builder, the subcontractors and the consulting engineers to avoid delays and additional expense. Particular attention must be given to the scheduling of the construction of paved areas and the various subgrade installations of the several utilities.

3.4.1.3 Changes in Plans

The Applicant shall pay for any additional costs incurred by the Company as a result of changes made by the Applicant in the subdivision or development layout or grade as originally agreed upon between the Applicant and Company.

3.4.1.4 Conversion of Existing Overhead System to Underground

In the case of conversions, the Customer will deposit with the Company a non-refundable amount as listed in Section 3.7.2 of this Tariff. Such estimate will be valid for 180 calendar days from the date of delivery to the Customer unless an extension is mutually agreed upon by the Customer and the Company. The final CIAC paid by the Customer shall not exceed the original binding cost estimate by more than 10% provided there are no changes in the project scope as addressed in 3.4.1.3. The deposit will be applied to the payment of the CIAC within the 180 day time limit. The Customer may request, without deposit, a non-binding "ballpark" estimate. Any further processing of the application will require a deposit and binding estimate as above.

The CIAC payment shall include the estimated cost differential between the underground facilities and the equivalent overhead facilities; removal costs of the existing overhead facilities; and the estimated remaining net book value minus the estimated net salvage value of the existing facilities to be removed. The Customer agrees to abide by the other provisions of these Rules and Regulations.

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3.4.1.5 Type of System Provided

These Rules apply to single-phase underground residential distribution facilities of standard Company design with above grade appurtenances. Unless otherwise stated, service provided will be 120/240 volt single-phase. If other types of facilities are requested by the Applicant or required by governmental authority, the Applicant will pay the additional cost, if any.

In the case of conversions, every effort will be made to provide an underground distribution system which is fully equivalent to the system being removed.

3.4.1.6 Ownership

The Company will install, own, and maintain the electric distribution facilities up to the designated point of delivery, except as otherwise noted. Any payment by the Applicant under the provisions of these Rules will not convey to the Applicant any rights of ownership.

3.4.1.7 Rights-of-Way, Easements and Permits

The Applicant shall furnish satisfactory rights-of-way and easements, staked to show property lines and final grade, as well as use-permits, at no cost to the Company prior to the commencement of construction or conversion. The Applicant will provide for the removal and restoration of all obstructions, and bear the additional costs of alternate construction techniques caused by any obstructions not able to be removed. Obstructions include, but are not limited to, sidewalks, driveways, pavement, landscaping, sprinklers and other utilities. Such clearing, grading and staking must be maintained by the Applicant during construction by the Company.

3.4.1.8 Connection to Supply System

The Company will connect the single-phase underground distribution facilities within a subdivision to the surrounding distribution system with an adequate underground feed not to exceed 200 feet outside the subdivision boundary. Should the Applicant request an underground feed in excess of 200 feet, he will pay the estimated additional cost of such excess.

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3.4.1.9 Performance Security

Where, because of the manner in which a subdivision is developed, the Company is required to construct an underground electric distribution system through a section or sections of the subdivision where service will not be connected for at least two (2) years, the Company may require a reasonable performance deposit from the Applicant before construction is commenced, in order to guarantee performance.

3.4.1.10 Special Conditions

When in any specific situation the application of these Rules appears impractical or unjust to either party, the matter may be referred to the Commission for special ruling prior to the start of construction.

**3.4.2 UNDERGROUND DISTRIBUTION FACILITIES FOR RESIDENTIAL
SUBDIVISIONS AND DEVELOPMENTS**

3.4.2.1 Availability

When requested by the Applicant, the company will provide underground electric distribution facilities in accordance with its standard practices in:

- (a) Recognized residential subdivisions of five or more building lots.
- (b) Tracts of land upon which five or more separate dwelling units are to be located.
- (c) Tracts of land upon which new multiple-occupancy buildings are to be constructed.

For buildings containing five or more dwelling units see Section 3.4.4 of these Rules.

3.4.2.2 Contribution by Applicant

- (a) The company may require the Applicant to pay all amounts owing to the company in accordance with the provisions hereof, at the time of execution of the contract governing the services to be performed by the company.
- (b) When a subdivision contains an average of 1.0 or more dwelling units per acre, the Applicant shall pay the company the average cost differential for a single-phase residential underground distribution system based on the number of service laterals required or the number of the dwelling units as listed in Section 3.7.1.1.

Continued to Sheet No. 5.390



Continued from Sheet No. 5.380

- (c) The Applicant is required to pay all additional costs required for a service lateral length in excess of the minimum which would have been needed to reach the Company's designated point of delivery.
- (d) The standard charges are based upon arrangement of distribution facilities that will permit serving the local single-phase underground distribution system within the subdivision from overhead feeder mains. If feeder mains, or other three-phase facilities within the subdivision are deemed necessary by the Company to provide and/or maintain adequate service and are required by the Applicant or governmental agency to be installed underground, the request shall be governed by Section 3.4.1.1 of these Rules and Regulations.
- (e) The Applicant may provide all trenching and backfilling and installation of conduit if mutually agreed to in advance by both parties. To compensate the Applicant for this work the Company will allow credit to the Applicant against the underground difference cost. Such credit shall not exceed the total cost difference. Costs of additional inspection and engineering services required will be borne by the Applicant. Prior to allowing Applicant to provide trenching, backfilling or installation of conduit, the Company may, among other things, require Applicant to provide evidence that any contractor to be used by Applicant in providing the foregoing (i) is licensed by all applicable governmental authorities and (ii) carries and will maintain insurance sufficient to protect the Company. The Company will provide specifications for any trenching, backfilling or conduit installation to be done by Applicant and shall have the right to inspect such work provided by Applicant. If Applicant's work is not in accordance with such specifications or does not pass the Company's inspection process, the Applicant will not be allowed the credit referred to above and will be required to compensate the Company for any additional costs incurred as a result thereof. The Company's inspection process shall allow Applicant, upon failing the Company's initial inspection, to resubmit its work for a second inspection within 30 days of the initial inspection.

Nothing in this tariff shall prevent the applicant from constructing and installing all or a portion of the underground distribution facilities provided:

- (a) such work meets the public utility's construction standards;
- (b) the public utility will own and maintain the completed distribution facilities;
- (c) such agreement is not expected to cause the general body of ratepayers to incur greater costs; and
- (d) the applicant meets all additional criteria as outlined in the paragraph above.

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Close coordination between the applicant and the utility is imperative when the applicant installs any portion of the underground electrical system. This coordination process is even more critical when the applicant installs facilities other than the conduit system. If the applicant requests to provide for the installation of electrical facilities other than trenching, backfilling, and installation of conduit, the appropriate CIAC will be calculated on an individual project basis.

3.4.2.3 Point of Delivery

The point of delivery shall be determined by the Company and will normally be on the building nearest the point at which the underground secondary electric supply is available to the property. If for the convenience of the Applicant, the Company is requested to agree on a different point of delivery, any additional costs shall be borne by the Applicant.

**3.4.3 UNDERGROUND SERVICE LATERALS FROM
OVERHEAD ELECTRIC DISTRIBUTION SYSTEMS**

3.4.3.1 Applicability

- (a) When requested by the Applicant, the Company will install underground service laterals from overhead systems to newly constructed residential buildings containing less than five separate dwelling units, with provisions as described in 3.4.3.3 (a).
- (b) When requested by a residential Applicant, the Company will install an underground service lateral from an existing overhead line to replace an existing overhead service to an existing residential building containing less than five separate dwelling units with provisions as described in 3.4.3.3 (b).

3.4.3.2 Rearrangement of Service Entrance

The Applicant shall be responsible for and shall pay the cost of any necessary rearranging of his existing electric service entrance facilities to accommodate the underground service lateral in accordance with the Company's specifications.

3.4.3.3 Contribution by Applicant

- (a) For new laterals, the Applicant shall pay the Company the applicable charge as listed in Section 3.7.1.2.

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- (b) For converted laterals, the Applicant shall pay the Company the applicable charge as listed in Section 3.7.1.3.
- (c) Credit, not to exceed the estimated cost differential, will be allowed whereby mutual agreement the Applicant provides trenching, conduit and back-filling, in accordance with Company specifications and for the use of the Company's facilities. Such credit is to be determined by the estimated cost of trenching, conduit and back-filling less any additional inspection, engineering and coordination expenses. Any requests by the applicant to install all or a portion of the underground electrical facilities will be governed by the rules and regulations outlined in 3.4.2.2.(e)

3.4.4 UNDERGROUND DISTRIBUTION FACILITIES TO MULTIPLE - OCCUPANCY RESIDENTIAL BUILDINGS

3.4.4.1 Availability

Underground electric distribution facilities may be installed within the tract of land upon which multiple-occupancy residential buildings containing five or more separate individually metered dwelling units will be constructed. (Metering equipment shall be approved by the Company)

3.4.4.2 Contribution by Applicant

- (a) There will be no contribution from the Applicant for single-phase distribution facilities so long as the Company is free to construct its facilities in the manner it believes to be the most economical and reasonably full use is made of the tract of land upon which the multiple-occupancy buildings will be constructed. If the Company is asked to construct its facilities in any other manner, the applicant must pay in advance for the engineering evaluation of the alternative. If an alternative is agreed upon, the applicant must pay for the estimated cost differential of the construction.
- (b) If feeder mains or other three-phase facilities are deemed necessary by the Company to provide and/or maintain adequate service and are required by the Applicant or a governmental agency to be installed underground, the request shall be governed by Section 3.4.1.1 of these Rules and Regulations.

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- (c) Section 3.4.1.4 of these Rules and Regulations shall apply if, in the opinion of the Company, the installation is not typical.

3.4.4.3 Responsibility of Applicant

The Applicant shall, at no cost to the Company:

- (a) Furnish details and specifications of the proposed building or complex of buildings. The Company will use these in the design of the electric distribution facilities required to render service.
- (b) Provide easements, including the right of ingress and egress for the installation, operation and maintenance of the Company's facilities, and use-permits.
- (c) Provide staking to indicate final grade and provide for the removal and restoration of all obstructions, and bear the additional costs of alternate construction techniques caused by any obstructions not able to be removed. Obstructions include, but are not limited to, sidewalks, driveways, pavement, landscaping, sprinklers and other utilities. Such clearing, grading and staking must be maintained by the Applicant during construction by the Company.
- (d) Where the Company determines that transformers are to be located inside the building the Applicant shall provide:
 - (1) The vault or vaults necessary for the transformers and associated equipment.
 - (2) The necessary raceways or conduits for the Company's supply cables from the vault or vaults to a suitable point five feet outside the building in accordance with the Company's plans and specifications.
 - (3) Conduits underneath all buildings when required for the Company's supply cables. Such conduits shall extend five feet beyond the edge of the building for joining to the Company's facilities.
 - (4) The service entrance conductors and raceways from the Applicant's service equipment to the designated point of delivery within the vault.
- (e) Where the Company determines that transformers are to be located outside the building, the Applicant shall provide:

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- (1) Space for the transformer enclosure or padmounted equipment, if required.
- (2) The service entrance conductors and raceway from the Applicant's service equipment to the point of delivery designated by the Company, at or near the building.
- (3) Conduits underneath all buildings when required for the Company's cables. Such conduits shall extend five feet beyond the edge of the building for joining to the Company's facilities.

3.4.4.4 Responsibility of the Company

The Company will:

- (a) Provide the Applicant with the Company's plans to supply the proposed building or complex of buildings, and specifications for the facilities to be provided by the Applicant.
- (b) Furnish and install the primary and/or secondary conductors from existing or proposed facilities adjoining the property to the point of delivery.
- (c) Furnish and install the necessary transformers and associated equipment.
- (d) Be solely responsible for the installation, operation and maintenance of all of its facilities.

3.4.4.5 Service Voltage

Unless otherwise stated, service provided will be 120/240 volt single-phase.

3.4.4.6 Point of Delivery

The point of delivery shall be determined by the Company and will normally be at a point adjacent to the building nearest the most accessible source of primary or secondary supply. If, for the convenience of the Applicant, the Company is requested to agree on a different point of delivery, all additional costs (if any) shall be borne by the Applicant. In the case where point of delivery is a padmount transformer, the ownership line shall be between the transformer secondary bushings and the service entrance conductor terminals. Where the point of delivery is a second handhole, the ownership line shall be between the secondary connectors and the service entrance conductors. Where the point of delivery is an interface cabinet, the ownership line shall be between the secondary bus and the service entrance conductor terminals.

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3.4.4.7 Maximum Service Entrance Conductors

There are limitations on the size and number of service entrance conductors which can be accommodated by the Company at the point of delivery in keeping with sound engineering practices, safety and economics. The Applicant shall confer with the Company to determine these limitations prior to completion of the final design.

3.5 UNDERGROUND COMMERCIAL PRIMARY AND SECONDARY DISTRIBUTION SYSTEMS

Underground primary distribution service or secondary distribution service may be provided from an overhead or underground distribution system to a predetermined point of delivery for new commercial loads subject to the provisions outlined below.

3.5.1 Qualifying Requirements

In order to qualify, a new commercial load must meet the following conditions:

- (1) All electric energy requirements shall be furnished by Tampa Electric Company.
- (2) The various buildings (or units) will be individually metered by Company approved metering equipment.
- (3) The total estimated average monthly demand of the new load shall be determined by Tampa Electric Company.

3.5.2 Procedure for Commercial Developments

The Applicant, developer or owner should not commence wiring or final wiring design until final approval has been given by the Company. The Applicant, developer or owner will also agree to such easements and rights-of-way as may be necessary for the installation and operation of the underground distribution system and will give the Company the right to maintain and alter the system as necessary where any portion of the system is located on private property.

The Applicant will also provide staking to indicate final grade and provide for the removal and restoration of all obstructions, and bear the additional costs of alternate construction techniques caused by any obstructions not able to be removed. Obstructions include, but are not limited to, sidewalks, driveways, pavement, landscaping, sprinklers and other utilities. Such clearing, grading and staking must be maintained by the Applicant during the construction by the Company.

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3.5.3 Point of Delivery - Ownership Line - Secondary Service

The point of delivery shall be determined by mutual agreement between the Applicant and the Company and will normally be at a point adjacent to the building nearest the most accessible source of secondary supply. If, for the convenience of the Applicant, the Company is requested to agree on a different point of delivery, all additional costs (if any) shall be borne by the Applicant. The Company will normally install, own, and maintain the electric service up to the point of ownership and make all connections at ownership line. The following cases are exemplified:

- (1) Where the point of delivery is at a single self-contained meter, the ownership line shall be the load side terminals of the metering equipment. The Company will supply, install and maintain service from the Company overhead service pole to the building. The customer shall install a 200 ampere, self-contained meter socket on the outside of the building at a location specified by the Company and shall supply and install a rigid metal conduit system from the bottom of the meter socket to Company specifications.
- (2) Where the point of delivery is at an identified customer owned meter pole, the ownership line shall be at the connection of the Company's overhead service drop and the customers service conductors. The customer will supply, install and maintain his own pole which shall be a minimum of 30 feet class 6, pressure treated. The Company shall specify the location on the customer's property, clear of all easements. Metering will be located on this pole installed by the customer to the Company's specifications.

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- (3) Where the point of delivery is at a current transformer location on the outside of the building, the ownership line shall be at the load side connections of the current transformers. The Company will supply, install and maintain service from the Company overhead service pole to the building. The customer shall furnish and install the specified metering enclosure and meter socket for the current transformers on the outside of the building at a location specified by the Company and shall supply and install a rigid metal conduit system from the bottom of this enclosure to Company specifications. The Company will supply the current transformers to be installed by the customer.
- (4) Where the point of delivery is at a customer owned handhole, the ownership line shall be where the Company's underground service conductors and the customer's service conductors connect in that handhole. The Company will supply, install and maintain service in conduit from the Company overhead service pole to the customer owned handhole. The customer shall furnish, install and maintain a company approved handhole of fiberglass or concrete construction to a minimum inside dimension of 30" x 30" x 24" deep with removable bolted cover of non-slip resistant material located in an area accessible to the Company and not subject to vehicular traffic.
 - (a) Current transformers may be located inside the building in approved enclosures. The current transformers will be furnished by the Company and installed by the customer along with related metering equipment.
 - (2) Group metering (all in one) located on the exterior or in metering rooms will be furnished and installed by the customer. All group metering equipment must be approved by the Company.
- (5) Where the point of delivery is in grouped (gangable) meter centers, the ownership line shall be where the underground service conductors attach to the center. The Company will supply, install and maintain service in conduit from the overhead service pole to the building. The customer shall furnish and install the approved group metering center on the outside of the building at a location specified by the Company and shall supply and install rigid metal conduit system from the bottom of this enclosure to Company Specifications.

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- (6) Where the point of delivery is a padmount transformer, the ownership line shall be between the transformer secondary bushings and the service entrance conductor terminals.

3.5.4 Point of Delivery - Ownership Line - Primary Service

The point of delivery shall be determined by mutual agreement between the applicant and the Company and will normally be at a point on the property nearest to the most accessible source of primary supply. If for the convenience of applicant, the Company is requested to agree on a different point of delivery, all additional costs (if any) shall be borne by the applicant.

3.5.5 Contribution by Applicant

- (1) For new loads, the customer contribution will be the Company's estimated cost differential between equivalent overhead service and the underground service.
- (2) For installations requiring specialized equipment or enclosures (switchgear, translosures, etc.) the customer will pay the estimated cost over and above that of a normal overhead service.

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3.5.6 Limitations

The Company will make all connections at the point of ownership. Maximum wire size is 750MCM copper or 750MCM aluminum per connection with limitations as set forth in Subsection 6.41.

3.6 OTHER TYPES OF ELECTRIC SERVICE

3.6.1 Lighting Service

Lighting service is offered by the Company to civic groups, subdivision developers, governmental authorities, and individual customers for the sole purpose of lighting roadways or other outdoor areas. Such service consists of the installation, operation, and maintenance of lighting equipment. Applicants for lighting service shall satisfy the requirements of Section 3.1.5.

Based on written lighting system design specifications provided by the customer and/or the lighting equipment selected by the customer, the Company shall prepare and provide the customer with a copy of the final design sketch at least five (5) business days prior to the commencement of installation of the Equipment at the Installation Site. If the Company is unable to provide some or all of the Equipment selected by the customer or the Company is unable to install the Equipment in reasonable proximity to the locations identified in the customer's original design specifications, the Company shall note any material deviations from the customer's original design specifications or equipment selections in the final design sketch. The customer is solely responsible for specifying the general location of the Equipment and the direction and orientation of the illumination provided thereby. If the final design sketch has been provided to the customer, as required immediately above, and the customer has not advised the Company of specific changes to be made to the final design sketch prior to the commencement of work at the Installation Site, then the customer will be deemed to have consented to the configuration and installation of Equipment pursuant to the final design sketch. The final design sketch will conform, to the extent practicable, to the customer's preferences or preferred design. However, THE COMPANY MAKES NO WARRANTY, EITHER EXPRESSED OR IMPLIED, INCLUDING AN IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE of either the Equipment or the lighting design plan pursuant to which the Equipment is installed.

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The luminaires will be mounted on Company-owned poles only. Poles supporting these luminaires may be located in either road right-of-way or on private property, but the location must be such that they are, and will continue to be feasible and accessible to the Company for both construction and maintenance.

Upon request by the customer, the Company will move its existing lighting facilities to a mutually agreeable location. The customer will bear all costs of such relocation.

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It shall be the customer's responsibility to notify the company in the event of failure of one of these units. Maintenance will be performed by the Company during normal daytime working hours only, and will normally be done after receiving notice as provided for under Section 768.1382 Florida Statutes, that the light is inoperable or malfunctioning.

Standard lighting service is continuous dusk-to-dawn automatically controlled by Company-owned light sensitive devices (i.e., photoelectric cell). Timed lighting service utilizing a programmable timer device is also available; however, timed service shall not exceed 2,100 hours each year and customer access to the timer settings shall not be permitted.

The number of poles required for a given installation to provide proper line construction shall be determined by the Company. The details of the installation must be agreed upon by the customer and the Company prior to the installation of any lighting facilities. A non-refundable deposit will be collected for customer-requested lighting designs on commercial property involving ten or more lights. The deposit amount will be applied as a credit to the customer's monthly bill for the lighting service after the lighting service commences.

3.6.2.1 Customer-Owned Highway Lighting

The Company will furnish energy at primary or secondary voltage, at the discretion of the Company, for customer-owned highway lighting. Metering will be at the secondary voltage level. The Company's metering equipment will be located on customer-owned equipment that is accessible to the Company's meter personnel.

3.6.3 Temporary Service

Temporary service will be supplied under the applicable rate. The customer must furnish and install all entrance wiring. Receptacle outlets must be of the polarized grounding type.

Single phase service for construction purposes only will be installed according to Drawing Nos. 7.1 or 7.2 of the Standard Electrical Service Requirements Manual. Such service is limited to a maximum of 70 amperes at 240 volts.

Larger metered temporary single phase service will be installed according to Drawing No. 7.3 of the Standard Electrical Service Requirements Manual.

Three phase installations for construction purposes, requiring current transformers, will be metered in accordance with Drawing No. 7.15 (Standard Electrical Service Requirements Manual). When current transformers are not required, the metering installation will be similar to that shown in Drawing No. 7.3 (Standard Electrical Service Requirements Manual). In either case, the customer should contact the Company for further information.

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Other temporary service requirements, whether single or three phase, such as tent revivals, fairs or carnivals, will be given individual consideration.

The Company may require the customer to pay the cost of installing and removing its facilities required for providing temporary service. Advance payments sufficient to cover the entire costs of providing temporary service to the customer will be required.

3.6.4 Individual Manufactured Home Service

The Company will provide individually metered service to an individual manufactured home subject to the provisions outlined below.

3.6.4.1 Not Located in Recognized Manufactured Home Park

If it is permanently situated in a location other than in a recognized manufactured home park, and the service entrance equipment and mounting facilities conform to specifications shown on Drawing No. 7.8 of the Standard Electrical Service Requirements Manual and to the requirements of the National Electrical Code and local electrical ordinances. Polarized grounding type receptacles are mandatory.

3.6.4.2 Located in Recognized Manufactured Home Park

If it is located in a manufactured home park which conforms with provision of "Company Installed Individually Metered Service", (See Subsection 3.6.5.2), and the service entrance and mounting facilities conform to specifications shown on Drawing Nos. 7.3 and 7.8 of the Standard Electrical Service Requirements Manual and to the requirements of the National Electrical Code and local electrical ordinances. Polarized grounding type receptacles are mandatory.

3.6.5 Manufactured Home Parks Service

Manufactured home parks will be supplied under one of the following:

- (1) Single Meter Commercial Service.
- (2) Company Installed Individually Metered Service.
- (3) Combination of Single Metered Commercial and Company Installed Individually Metered Service.

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3.6.5.1 Single Meter commercial Service

Mobile Home Parks will be supplied single-meter commercial service only where park owner or operator supplies (furnishes) electrical service as a part of his rental and/or general service charge to tenants. Resale of electric energy through park owned meters will not be permitted (See Paragraph 2.2.1)

3.6.5.2 Individual Company Metered Service

Mobile Home Parks will be supplied through Company installed individual meters for individual tenants and other types of service required in park under the provisions required on Paragraph 3.4.3 and 3.4.4 and the subparagraphs appertaining thereto.

3.6.6 Miscellaneous Types Of Electric Service

Certain other types of electric service are available from the Company. Information on such services not specifically covered in this Tariff may be obtained at the nearest Company office. Such special cases will be given individual consideration.

3.7 SCHEDULE OF STANDARD CHARGES AND NON-REFUNDABLE DEPOSITS FOR COST ESTIMATES FOR UNDERGROUND ELECTRIC DISTRIBUTION SYSTEMS

3.7.1 Standard Charges

The Standard Charges listed here are Contributions In Aid of Construction (CIAC) which are referenced by other sections of these rules and regulations.

3.7.1.1 Residential Subdivision

Low Density Subdivisions per service lateral or dwelling unit...	\$573.00
High Density Subdivisions per service lateral or dwelling unit...	\$347.00

3.7.1.2 New Single-phase UG Service Laterals from Overhead Distribution Systems

Fixed Charge for 2/0 service lateral	\$43.34
Fixed Charge for 4/0 service lateral	\$129.87
Per trench foot charge for 2/0 service lateral	\$0.95
Per trench foot charge for 4/0 service lateral	\$1.39
Credit for service pole if otherwise required for overhead service	\$351.26

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3.7.1.3 Single-phase UG Service Laterals Converted from Existing Overhead Service Drops

Removal charge for overhead service with no service pole	\$170.09
Removal charge for overhead service with a service pole	\$387.85
Fixed Charge for 2/0 service lateral	\$43.34
Fixed Charge for 4/0 service lateral	\$129.87
Per trench foot charge for 2/0 service lateral	\$0.95
Per trench foot charge for 4/0 service lateral	\$1.39
Credit for service pole if otherwise required for overhead service	\$351.26

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3.7.2 Non-refundable Deposits for Estimates of CIAC for Conversion of Existing Overhead Distribution Facilities to Underground Facilities

Qualified applicants can request, upon payment of a non-refundable deposit as listed below, the conversion of overhead distribution facilities to underground in accordance with these Rules and Regulations for conversion areas of not less than one (1) city block in length along both sides of the main distribution system, or in the absence of city blocks, not less than five (5) contiguous building lots along both sides of the main distribution system, or in the absence of both, not the less than 600 pole-feet of the main distribution system, including all Customers served along both sides of the main distribution system, and so as to result in a decrease in the number of non-lighting poles in the system.

Requests for conversions, except for individual residential service covered under Section 3.4.3.3, will be accompanied by a non-refundable amount as follows:

Density Class	Deposit Amount
Urban Commercial or Residential.....	\$8,575 per mile*
Rural Commercial or Residential.....	\$5,016 per mile*
High or Low Density Subdivision.....	\$41 per lot

* As measured along the existing overhead primary and secondary distribution system.



IV METERING

4.1 GENERAL

The customer must provide a self-contained meter socket or meter enclosure on his premises. The type shall be determined from the Company's approved list and the location shall be determined by the Company. These devices are not in any way to be altered or mutilated by the customer or his contractor, as suitable knockouts are provided in each socket or enclosure for convenience. Instrument transformers are furnished by the Company where their use is required. (See Paragraph 4.3). Care must be exercised in handling all metering equipment.

4.1.1 Security

All meter cabinets, troughs and raceways containing unmetered conductors shall be of a type and so arranged to permit effective sealing by the Company. Such seals shall not be broken or tampered with except in cases of emergency or with permission of the Company. Where metering equipment may be subject to vandalism or tampering, additional protective measures may be required by the Company. All meter sockets and enclosures which become deteriorated shall be replaced by the customer.

4.2 LOCATION AND GENERAL MOUNTING REQUIREMENTS FOR METERING

Meters for individual residences shall be outdoors on the front or adjacent side walls of the building.

All other metering shall be outdoors except where specific exceptions are approved by the company.

Only accessible places free from vibration will be approved for meter location. Meters and main switches will not be placed in the following locations: transformer vaults, attics, coal or other bins, bathrooms, bedrooms, display windows, laundries and other places subject to dampness or possible flooding, or in the garages where meters may be subject to vehicle damage. Meters shall not be located within 3 feet of doors; within 5 feet of fuel tanks; within 3 feet of gas meters; over sinks or lavatories; within 2 feet of water, steam, sewer vent pipes; where subject to heat from furnaces, stoves, heaters; beneath pipes or containers from which moisture may drop on meters or service switches; within 5 feet of wall mounted rotating machines; or in generator rooms. Meter rooms are not to be used as storage rooms for any purpose.

A clear space of 36" shall be maintained at all times in front of all meters and metering equipment for reading and testing.



TAMPA ELECTRIC

**TENTH REVISED SHEET NO. 5.530
CANCELS NINTH REVISED SHEET NO. 5.530**

A meter socket shall be so located that the center of the meter will be not less than 4'6" nor more than 5'0" above finished grade except that meter socket elevations for underground services and for certain grouped meters shall be located as shown in the appropriate drawings of the *Standard Electrical Service Requirements*.

Meter sockets or enclosures shall have at least three inches clearance in all directions from any adjacent switch or device unless specific approval from the company is obtained before installation. This space is necessary to allow for installation of the meter and for testing purposes.

The meter socket or enclosure must be fastened securely to the supporting structure, square and plumb in all directions. Wooden pegs shall not be used for mounting sockets or enclosures.

It is preferable on buildings having more than one occupant, that the various meters be grouped in one location feeding from a common point of attachment.

In cases of new construction of multiple units where it is not practical to locate the meters out-of-doors, it is recommended that architects incorporate in the plans a meter room within the building designed for the location of all meters and the main switches. Meter rooms must be lighted, lockable and are not to be used as storage rooms for any purpose. The owner shall supply to the company a key to each meter room.

If, however, a building is to have more than one floor, and each floor is to have several tenants, meter rooms may be provided on each floor by special consent of the Company.

In cases where more than one meter is connected to the service (multiple occupancy buildings, mobile home parks etc.), meter sockets must be clearly and permanently marked indicating the floor, suite, room or building served by the meter before service connection. Entrance doors shall also be marked with the address number before a meter will be installed.

Drawing No. 7.11 of the *Standard Electrical Service Requirements* illustrates a typical prewired meter and breaker installation for a multiple occupancy installation. This equipment shall meet the following specifications:



- A) The type and manufacturer of equipment shall be approved by the Company prior to purchase and installation.
- B) Each meter position must be supplied with a screw type sealing ring.
- C) A barrier shall be provided between the meter sockets and the circuit breaker compartments.
- D) The Company will not supply or maintain the individual breakers or main switch. Individual breakers must be located on load side of the sockets.

4.3 LARGE COMMERCIAL AND INDUSTRIAL METERING PRACTICES

When load requirements exceed a sustained 200 amperes on standard services up to and including a nominal 480 volts, and on all services metered at voltages higher than a nominal 480 volts, and it is not feasible to meter the electric consumption with a self-contained meter, instrument transformers must be installed.

Instrument transformers and associated mounting brackets will be provided by the Company and normally will be installed by the customer. Where the Company deems it necessary or desirable to locate instrument transformers in or on Company owned facilities, such installation shall be by the Company.

The Company will specify the particular method of metering large services at the time of the application for service.

Instrument transformer enclosures, where required, must be of the size and type approved by the Company and shall be equipped with a hinged door, complete with a sealable latch or hasp. Only instrument transformers and their associated conductors will be permitted inside the instrument transformer enclosure. If instrument transformers are to be installed within the customer's switchgear, the compartment necessary for their installation will meet these same provisions, and the design of the compartment must be approved by the Company before it is built.



Continued from Sheet No. 5.540

Instrument transformer enclosures and conduits for instrument transformer secondary wiring shall be furnished and installed by the customer. The maximum distance allowed between instrument transformers and the meter shall be 50 feet. All conduit runs shall be made with 1¼" or larger conduit. Only continuous rigid metallic or Schedule 80 PVC conduit will be permitted.

The Company will install and connect the meter and the instrument transformer secondary conductors in the conduit between the instrument transformers and meter on all installations. No other conductors will be allowed in the metering conduit.

All instrument transformers furnished by the Company are for the exclusive use of the Company. Current transformers shall be, in all cases, installed ahead of all switches, giving a service-meter-switch sequence, unless specifically waived in writing by the Company Meter Supervisory personnel.

4.4 PROVISIONS FOR ENERGY PULSE DATA

The Company will provide energy pulses transmitted from the Company's metering equipment to provide data to energy management systems. Time pulses will not be furnished.

All access to Company metering equipment shall be for Company personnel only. The pulses will normally be provided from a separate junction box with a terminal block for customer access. Where the installation requires output from the Company of more than one pulse source, it shall be the responsibility of the customer to provide any required totalization of pulse data for his use.

Any replacement of material or equipment solely used to supply pulses to the customer shall be made by the Company at the owner's expense. Equipment replacement can be due to damage or customer requested modification.

All billing of demand and/or energy will be based upon the Company's meter readings or Company pulse data. The Company will not guarantee a certain pulse rate and the customer will be responsible for installing equipment necessary to change the pulse rate.

Data pulses will be provided through "dry" contacts only and will be limited to a customer imposed maximum of 14VA AC RMS or 20 VA DC.

4.4.1 Contribution by Applicant

The customer will contribute the full cost for the equipment and its maintenance. Maintenance of the equipment shall only be performed by the Company.

Continued to Sheet No. 5.560



4.4.2 Contract for Installation

An agreement or contract must be executed and the customer must make satisfactory arrangements for payment before installation can begin.

4.5 SELF CONTAINED METER SOCKET USES

4.5.1 General

The customer will provide and install meter sockets for metering purposes under the following guidelines:

4.5.2 Commercial - Residential - Single Phase

100 ampere maximum wire size, #1 Al @ 75°C * (For loads 0-85 amps).

200 ampere maximum wire size, 250 kcmil Al @ 75°C * (For loads 85-200 amps)

320 ampere maximum wire size (For loads 200-300 amps)

Single - 500 kcmil Al @ 75°C ⁽¹⁾

Parallel - 350 kcmil Al @ 75°C ⁽¹⁾

600 ampere k-base maximum wire size (For loads 300-600 amps) ⁽²⁾

Parallel 500 kcmil Cu or Al @ 75°C ⁽¹⁾

It is required that CT's be used for commercial loads in excess of 600 amps.

In situations where the customer's service entrance cable exceeds parallel 500 kcmil Al and the load current is less than 600 Amps, the Company will install CT metering and charge the customer accordingly, at its discretion.

⁽¹⁾ Maximum operating temperature

⁽²⁾ Single phase k-base meter socket shall be used on 120/240 volt services only.

4.5.3 Commercial - Residential - Three Phase

100 ampere maximum wire size, #1 Al @ 75°C * (For loads 0-85 amps.)

200 ampere maximum wire size, 250 kcmil Al @ 75°C * (For loads 85- 200 amps.)

320 ampere maximum wire size (For loads 200-300 amps.)



Single - 500 kcmil Al @ 75°C*
Parallel - 350 kcmil Al @ 75°C *

600 ampere k-base maximum wire size (For loads 300-600 amps)
Parallel 500 kcmil Cu or Al @ 75°C*

It is required that CT's be used for loads in excess of 200 amps.

In situations where the customer's service entrance cable exceeds parallel 350 kcmil Al and the load current is less than 200 amps, the Company will install CT metering and charge the customer accordingly, at its discretion.

* Maximum operating temperature

4.5.4 All Services Using the 320 Ampere Sockets

In single phase applications, this socket is used for 200-300 ampere residential applications or when cable entrance size precludes the use of 200 ampere sockets. In commercial applications, this socket may only be used where the customer's demand will not exceed 300 amperes . Any future growth will require the customer to convert his service to a 600 ampere k-base socket or current transformer metering. In a three-phase application, it is also used to accommodate large wire sizes. Terminals (Cable to Flat) for this socket shall be furnished by the customer.

4.6 INDIVIDUAL METERING

Individual metering shall be required for each separate occupancy unit of new commercial establishments, residential buildings, condominiums, cooperatives, marinas, and trailer, mobile home and recreational vehicle parks unless not required under Subsection (5)(a) of Section 25-6.049 of the Florida Administrative Code.

4.7 SUB-METERING

Where individual metering is not required under FPSC Rule 25-6.049 of the Florida Administrative Code and master metering is used in lieu thereof, reasonable apportionment methods, including sub-metering, may be used by the customer of record or the owner of such facility solely for the purpose of allocating the cost of the electricity billed by the utility. Any fees or charges collected by a customer of record for electricity billed to the customer's account by the utility, whether based on the use of sub-metering or any other allocation method, shall be determined in a manner which reimburses the customer of record for no more than the customer's actual cost of electricity.



All costs of owning, installing, maintaining and reading sub-meters, and any other costs associated with sub-metering, shall be the responsibility of the customer.

V. CUSTOMER EQUIPMENT

5.1 GENERAL

The Company shall have the right to insist that all apparatus connected to its circuits be operated and maintained so that no undesirable service characteristics are impressed on its system which might jeopardize the quality of service rendered any customer.

The Company shall have the right to require disconnection of any item of customer equipment which causes a voltage dip of 4 percent or more, or any objectionable voltage flicker, or which causes radio or TV or other high frequency interference. It shall also have the right to require disconnection of any customer's system which constitutes a fire hazard or endangers life in any way.

The customer must connect his equipment in such a manner that a reasonable degree of load balance is maintained over each phase of the Company's supply system as determined by the Company. The Company reserves the right to require the customer to install power factor correction equipment necessary to maintain his load at a power factor at or above 85 percent up to and including 100 percent (unity power factor).

5.2 AUXILIARY GENERATORS

If a customer installs an emergency generator for his use, an approved double throw switch, either manually or automatically operated, must be provided downstream from the metering equipment of this customer to preclude the possibility that any energy generated by customer's equipment might be backfed into the Company's system. Standby generators and their associated equipment shall not be connected to the Company's system without prior approval. Emergency or auxiliary generation equipment will not be installed in switchgear rooms or transformer vaults, must be at least 15 feet clear of any openings to switchgear rooms or transformer vaults, and are subject to AHJ inspection.

5.3 MOTORS

Approved starting equipment will be required to limit current inrush and voltage dip caused by the starting of motors larger than 7½ H.P., except on such special types of motors and/or installation where the starting device can be omitted by written permission of the Company.

Continued from Sheet No. 5.575

Deviations of 5 percent, plus or minus, from a stipulated nominal supply voltage are not uncommon to utility distribution systems, and deviations as high as 10 percent may occur on the customer's wiring system where equipment is installed. Motors are generally guaranteed by the manufacturer to operate satisfactorily within these ten percent limits, but because of this possible ten percent voltage fluctuation, caution should be exercised when applying a motor or other item of equipment having a different nameplate voltage rating from that of the nominal system voltage of the electric service furnished by the Company to the customer.

All motors should be installed with protective devices which will open the complete motor circuit in the event of excessive voltage drop or excessive line current in any phase. Complete protection usually requires sensing elements in all three phases, depending upon the type of device used. The Company shall not be responsible for damage to motors caused by single phasing.

In rendering new service to a 3 phase installation, the Company will not be responsible for the correct rotation of any motor connected thereto. The Company will provide only a reasonable amount of excess transformer capacity for starting loads of motors or other electrical equipment.

5.4 LARGE COMMERCIAL OR INDUSTRIAL DEVICES OTHER THAN MOTORS

If the installation of a high demand electrical equipment or apparatus is contemplated, the Company should be consulted prior to its purchase or construction. Devices whose electric demand exceeds 25 KW should normally be connected 3 phase with the phase currents evenly balanced.

5.5 ARC WELDERS

Arc welders, of the transformer type, usually have such severe load characteristics that voltage dip and lighting flicker may result during their operation. Welders of this type can be detrimental to the service being rendered other customers, especially when served directly from the Company's secondary lines. Before the purchase and application of such welders, the Company should be contacted for approval.

5.6 D.C. APPLIANCES OTHER THAN WELDERS

When installing alternating current (AC) to direct current (DC) converters where the DC voltage level is critical, care should be exercised in the selection of this equipment because of the voltage fluctuations normally existent in AC supply systems.

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Continued from Sheet No. 5.580

5.7 ELECTRONIC DATA PROCESSING EQUIPMENT

Although the Company will maintain the best possible service to the customer, care should be exercised in the selection of data processing equipment because of the voltage fluctuations and interruptions that may occur in electrical distribution systems.

CAUTION

THE CUSTOMER IS CAUTIONED AGAINST THE PURCHASE AND USE OF ANY TYPE OF ELECTRICAL EQUIPMENT THAT IS NOT OF STANDARD MANUFACTURE AND IS NOT APPROVED BY A COMPETENT AUTHORITY, SUCH AS UNDERWRITER'S LABORATORIES OR THE NATIONAL ELECTRICAL MANUFACTURERS' ASSOCIATION.