

CITY OF MARSHALL

ORDINANCE NO. 2024-005

AN ORDINANCE AMENDING CHAPTER 86. UTILITIES. ARTICLE II.  
ELECTRICAL SERVICE. SECS. 86-55. DEFINITIONS, 86-56. RATES  
AND CHARGES AND 86-58. RULES AND REGULATIONS OF THE CODE OF  
ORDINANCES, CITY OF MARSHALL, ILLINOIS.

ADOPTED BY THE  
CITY COUNCIL  
OF THE  
CITY OF MARSHALL

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AN ORDINANCE AMENDING CHAPTER 86. UTILITIES. ARTICLE II. ELECTRICAL SERVICE. SECS. 86-55. DEFINITIONS, 86-56. RATES AND CHARGES AND 86-58. RULES AND REGULATIONS OF THE CODE OF ORDINANCES, CITY OF MARSHALL, ILLINOIS.

Section 1. That chapter 86. Utilities. Article II. Electrical Service. Secs. 86-55. Definitions, 86-56. Rates and charges and 86-58. Rules and regulations of the Code of Ordinances, City of Marshall, Illinois is hereby amended to read as follows, with strikeouts indicating deletions in text and underscores indicating additions to text:

Sec. 86-55. Definitions.

The following words, terms and phrases, when used in this article, shall have the meaning ascribed to them in this section except where the context clearly indicates a different meaning:

*Ampacity* means the maximum current a conductor can carry continuously without adversely affecting its electrical or mechanical properties.

*Ampere (A)* means a unit of electrical current that is equivalent to a steady current produced by one volt applied across a resistance of one ohm.

*Bonding conductor* means a suitably sized copper conductor used for connecting an earth ground to a system ground electrode.

*CSS* means customer service station.

*Cable termination* means a device installed at the connection point of an underground cable to limit electrostatic stresses on the cable's insulation. Additionally, it provides a method for the mechanical connection of a cable to an equipment busing or terminal.

*Capacitor* means a device used to store a fixed amount of electrical charge. In an alternating-current system, it is used to supply reactive power. Usually installed in parallel with inductive loads to increase the power factor of an installation.

*Conduit or rigid conduit* means a watertight pipe (steel, aluminum, or intermediate metallic tubing) suitable for containing electrical conductors.

*Current transformer* means a device used to transform the current which is actually drawn by an installation into a current of lesser magnitude (zero to five amps) by a fixed ratio.

*Demand (Kw)* means the highest kilowatt consumption established by an installation during the billing period.

*Demand register* means a device within the kilowatt-hour meter which is used to record the highest kilowatt usage during the billing period.

*Developer* means a person, partnership, corporation, or other organization developing land for sale, lease or rental and responsible for the installation of improvements such as streets, sewers, water and electric.

*ESS* means electric service station.

*Easement* means a grant by a property owner for the use of a strip of land by the general public, a corporation, or a certain person or persons for a specific purpose or purposes.

*Fence* means a barrier intended to prevent unauthorized entry into areas which may contain energized equipment or conductors.

*Foundation* means a suitably sized concrete base capable of supporting equipment without experiencing deformation or damage. Foundations are so constructed as to remain level.

*Fuse* means a device consisting of a fusible metal strip or wire which melts at a pre-set magnitude of current. Used to interrupt circuits under overload or fault conditions. The fuse must be of an adequate interrupting

rating for its particular location in the system.

*Fused disconnects* means a device of suitable interrupting rating which can be operated manually to disconnect all conductors except the grounded neutral conductor from the source of supply and provided with properly sized overcurrent protection.

*Fused disconnecting* means is an approved device used to disconnect all conductors except the grounded neutral conductors from the source of supply and provided with appropriate over-current protection.

*General service customer* is a nonresidential customer who does not resell or redistribute the energy received, ~~and who does not have any electric generating equipment used to produce all or a portion of the customers' electrical load requirements on a regular basis.~~

*Ground* means an object used to make an electrical connection to the earth to provide a near resistance-free return path for the flow of electrical current.

*Ground connection* means a ground connection consists of a conductor and clamps which are used to connect all metallic enclosures of an electrical installation and the neutral conductor to a permanent ground., a grounding electrode shall be installed in conformance with the standards set by the latest available issue of the National Electric Code (N.E.C.) as published by the National Fire Protection Association.

*Instrument transformers* means a transformer used to transform utilization voltage into low voltage (zero to 120 volts) and utilization current into low magnitude current (zero to five amps). The low voltages and low magnitude currents derived are characteristically used to operate metering equipment or relays.

*Instrument transformer cabinet* consists of a metal enclosure, a copper assembly suitable for the installation of instrument transformers, supports for the copper assembly, cables and color-codes conductors.

*Insulation* means material which cannot readily conduct electrical current.

*Interference* means voltage fluctuations of such magnitude and frequency as to adversely affect or annoy other customers of the city.

*Interrupting rating* means the maximum electrical current that an electrical device can safely interrupt.

*Kilovar (kVar)* means a unit which represents 1,000 VARs where VAR represents volt-amperes-reactive and is used to measure reactive power. Inductors and capacitors are devices responsible for the presence of reactive power.

*Kilovolt (kV)* means a unit which represents 1,000 volts.

*Kilovolt-ampere (kVA)* means a unit which represents 1,000 VA where a VA represents the vector sum of the real and reactive components of power. Also known as apparent power.

*Kilowatt (kW)* means a unit which represents 1,000 watts where a watt is used to measure real power. A watt is equal to the power expended in a resistor of one ohm which experiences a current flow of one ampere.

*Kilowatt-hour* means the power consumed by a continuous 1,000-watt load in a period of one hour.

*Meter connection device* is an approved device which provides a means for the city to connect a meter to measure electric consumption.

*National Electric Code* means the most current edition of the National Electric Code as published by the National Fire Protection Association.

*Service attachment* is a device used to secure an overhead service connection to a building or other structural support on the customer's premises. A service attachment may consist of insulating knobs, eye-bolts, or other approved devices depending on the requirements.

*Service entrance equipment- Overhead* means the service entrance equipment, in the case of an overhead service connection, will include some or all of the following items: a service head, a service run, fused and not fused disconnecting means, a meter connection device, an instrument transformer cabinet, and an approved grounding connection.

*Service entrance equipment-Underground* means the service entrance equipment, in the case of an underground service connection, will include some or all of the following items: a meter connection device, fused and not fused disconnection means, an instrument transformer cabinet, a service run and an approved grounding connection.

*Service head* is an approved weather-tight fitting attached to the free end of a service run and is used to prevent water from entering the service run.

*Service run* consists of a rigid galvanized steel (R.G.S.) conduit with enclosed service conductors and shall include all the necessary hardware from the point of connection to the city to the main service panel.

*Subdivision* is a subdivision of single-family lots; multi-family development; commercial development; industrial development; or any combination of these classifications.

(Ord. No. 99-20, § 2, 10-11-99; Ord. No. 05-9, § 21, 5-9-05)

Sec. 86-56. Rates and charges.

That there shall and there are hereby established rates and charges for the use of and for the service supplied by the electric system of the city, which rates and charges shall be called the electric facility charge, which rates and charges shall be based upon the amount of electricity consumed and for facilities provided as follows:

(1) *Residential rate (R1 and R2):*

a. *Availability:* Any customer located in territory served by the city may take service under this rate subject to the following conditions:

1. Residential customers in a single-family dwelling or single-family unit located in an apartment building or for general farm purposes;

2. That the energy delivered is not resold or redistributed; ~~and.~~

~~3. That the customer does not have any electric~~

~~generating equipment used to produce all or a portion of customer's electrical load requirements on a regular basis.~~

b. *Conditions of service:*

1. Service will be delivered to the customer at no more than one of the following standard service facilities:

i. For all new single-family and all-electric duplex residential customers, a standard service shall consist of a service of 200 amps of capacity per dwelling unit and supplied at a standard utilization voltage of 120/240 volt, single-phase, three-wire.

A. For pre-manufactured homes and for existing service upgrades, a standard service shall consist of a minimum service of 100 amps of capacity per dwelling unit and supplied at a standard utilization voltage of 120/240 volt, single-phase, three-wire.

ii. For duplex residential customers that are not all-electric, the standard service shall consist of a service of 100 amps of capacity per dwelling of a standard utilization voltage of 120/240 volt, single-phase, three-wire.

iii. For services used exclusively for parking lot or area lighting, the standard service shall consist of a service of 100 amps of capacity at a standard utilization voltage of 120/240 volt, single-phase, three-wire.

2. The city will provide and maintain all facilities necessary to deliver one standard delivery voltage at one specified location to customer. The customer shall provide all necessary facilities for utilization of service at the specified delivery voltage and for the receipt at a single point of delivery.

3. The customer will maintain its electric service entrance facilities in good repair and in full compliance with the requirements of all local,



state and national codes and standards including all applicable terms and conditions of the latest issue of the National Electric Code ("NEC") and the National Electric Safety Code ("NESC").

c. *Rates:* The total rate shall be the customer service charge plus energy charge plus energy cost adjustment as follows:

1. *Customer service charge:*

~~Inside, per month.....\$ 6.66~~

~~Outside, per month.....\$13.28~~

The present customer service charges established by the City Council can be obtained at City Hall.

Commencing with the first billing for each customer after July 1 of each year, there shall be a four percent increase to the customer service charge in effect prior to the increase.

The "inside" charge will be applicable to all electrical service customers located within the city's corporate limits. The "outside" charge will be applicable to all electrical service customers located outside of the city's corporate limits.

2. *Energy charge.* The following charges shall apply to all usage:

~~All energy, per kWhr: \$0.06983~~ The present energy charge established by the City Council can be obtained at City Hall.

Commencing with the first billing for each customer after July 1 of each year, there shall be an increase to the energy charge, which increase shall be calculated by subtracting \$0.04538 from the energy charge in effect prior to the increase and multiplying the resulting figure by four percent.

3. *Energy cost adjustment:* The energy charges in subsection (1)c.2. of this section are subject to an energy cost adjustment ("ECA"). The ECA shall be in



addition to the stated base rates and charges, and an additional amount shall be added to each bill for the ECA.

The ECA is hereby defined to be the increase in the average cost of energy per kWh purchased by the city during the base period and average cost of energy per kWh sold by the city during the current comparison period.

The base period for this energy cost adjustment clause is hereby designated as January 1, 1995 to December 31, 1995, and the base cost per kWh during the base period has been computed at \$0.04538 per kWh.

The current comparison period shall be defined as the month previous to the billed usage period.

That as soon as possible after the end of each current comparison period the ECA shall be computed. The ECA shall be expressed as an amount per kWh and the ECA shall go into effect at the next billing period after the end of the current comparison period and shall remain in effect until a new ECA has been computed.

The ECA rate shall be multiplied by the number of kWhs consumed by each customer and added to each bill for electrical service rendered.

(2) *General service without demand (GS-1):*

a. *Availability:* Any customer located in territory served by the city may take service under this rate subject to the following conditions:

1. Customer is nonresidential;
2. That the energy delivered is not resold or redistributed; and
3. That the customer does not have any electric generating equipment used to produce all or a portion of customer's electrical load requirements on a regular basis.

b. *Conditions of service:*

1. Services will be delivered to customer at no more than one of the following standard delivery voltages:

Single phase service- 3 wire 120/240 volts

Three phase service- 4 wire 120/208 volts, grounded wye

2. The city will provide and maintain all facilities necessary to deliver one standard delivery voltage at one specified location to customer. Customer shall provide all necessary facilities for utilization of service at the specified delivery voltage and for the receipt at a single point of delivery.

3. Customer will maintain its electric service entrance facilities in good repair and in full compliance with the requirements of all local, state and national codes and standards including all applicable terms and conditions of the latest issue of the National Electric Code ("NEC") and the National Electric Safety Code ("NESC").

c. Rates: The total rate shall be the customer service charge plus energy charge plus energy cost adjustment as follows:

1. Customer service charge.

~~Inside, per month.....\$13.28~~

~~Outside, per month.....\$26.56~~

The present customer service charge established by the City Council can be obtained at City Hall.

Commencing with the first billing for each customer after July 1 of each year, there shall be a four percent increase to the customer service charge in effect prior to the increase.

The "inside" charge will be applicable to all electrical service customers located within the city's corporate limits. The "outside" charge will be applicable to all electrical

service customers located outside of the city's corporate limits.

2. *Energy charge.* The following charges shall apply to all usage:

~~For all energy, per kWhr: \$0.04770~~ Energy charges established by the City Council can obtained at City Hall.

Commencing with the first billing for each customer after July 1 of each year, there shall be an increase to the energy charge, which increase shall be calculated by subtracting \$0.04538 from the energy charge in effect prior to the increase and multiplying the resulting figure by four percent.

3. *Energy cost adjustment.* The energy charges in subsection (2)c.2. of this section are subject to the ECA outlined in subsection (1)c.3.

d. When both GS-1 and GS-2 service is available to a given customer, the choice of service shall lie with the customer. A customer having selected a class of service may not change to another class of service within a 12-month period unless there is a substantial change of reasonable permanency in the character, condition or extent of the customer's service.

(3) *General service with demand (GS-2):*

a. *Availability:* Any customer located in territory served by the city may take service under this rate subject to the following conditions:

1. Customer is nonresidential;
2. That the energy delivered is not resold or redistributed;
3. That the customer does not have any electric generating equipment used to produce all or a portion of customer's electrical load requirements on a regular basis; and
4. Customer's monthly demand, as determined by the city, is more than 20 kW.

b. *Conditions of service:*

1. Services will be delivered to customer at no more than one of the following standard delivery voltages:

i. *Secondary service:*

Single phase service-3 wire  
120/240 volts

3 wire 120/208 volts (Network)

Three phase service-4 wire  
120/208 volts, grounded wye

4 wire 277/480 volts, grounded wye

ii. *Primary service.*

7,970/13,800 volts, 4-wire  
grounded wye connected, and  
as available at customer's  
location.

iii. Other standard voltage will be provided by the city, as available, under the terms of the city's rules and regulations applying to electric service.

2. The city will provide and maintain all facilities necessary to deliver one standard delivery voltage at one specified location to customer. Customer shall provide all necessary facilities for utilization of service at the specified delivery voltage and for the receipt at a single point of delivery.

i. Should a customer install capacitors on the secondary side of the city's transformation facilities to improve the power factor of this installation, the customer shall provide, at the customer's expense, over-voltage protection to ensure that such added capacitance can be safely and automatically disconnected should the secondary voltage rise to unacceptable levels due to over-correction.

3. Service shall be metered for both energy (kWh) usage and demand (kW) usage. Demand integration shall be over a 15-minute period.
4. Customer shall be responsible for maintaining power factor at or above 85 percent lagging. If a customer's power factor falls below 85 percent lagging, the city will provide written notice to the customer of requirement to improve power factor above threshold level of 85 percent lagging. If the customer fails to correct the power factor within 90 days of such notice to a level acceptable to the city, the city reserves the right to apply power factor correction facilities outside of the customer's facilities at the cost of the customer.
5. Customer will maintain its electric service entrance facilities in good repair and in full compliance with the requirements of all local, state and national codes and standards including all applicable terms and conditions of the latest issue of the National Electric Code ("NEC") and the National Electric Safety Code ("NESC").

c. Rates: The total rate shall be the customer service charge plus energy charge plus demand charge plus energy cost adjustment as follows:

1. Customer service charge:

~~Inside, per month.....\$13.28~~

~~— Outside, per month.....\$26.56~~

The present customer service charge approved by the City Council can be obtained at the City Hall

Commencing with the first billing for each customer after July 1 of each year, there shall be a four percent increase to the customer service charge in effect prior to the increase.

The "inside" charge will be applicable to all electrical service customers located within the city's corporate limits. The "outside" charge will be applicable to all electrical service customers located outside of the city's corporate limits.

2. ~~Energy charges. The following charges shall apply to all usage:~~

~~First 360 x kW demand, per kWhr:.....\$0.08375~~

~~Over 360 x kW demand:.....0.03221~~

Energy charges approved by the City Council are available at City Hall.

Commencing with the first billing for each customer after July 1 of each year, there shall be an increase to the energy charge for the first 360 kWh per kW, which increase shall be calculated by subtracting \$0.04538 from the energy charge in effect prior to the increase and multiplying the resulting figure by four percent.

3. *Demand charge.* The following charges for demand shall apply to all usage:

~~For all demands, per kW month:.....\$7.59~~

The present customer service charge approved by the City Council can be obtained at the City Hall.

The maximum demand per month shall be the maximum demand established in the billing month.

Commencing with the first billing for each customer after July 1 of each year, there shall be a four percent increase to the demand charge in effect prior to the increase.

4. *Energy cost adjustment:* The energy charges in subsection (3)c.2. of this section are subject to the ECA outlined in subsection (1)c.3.

d. When both GS-1 and GS-2 service is available to a given customer, the choice of service shall lie with the customer. A customer having selected a class of service may not change to another class of service within a 12-month period unless there is a substantial change of reasonable permanency in the character, condition or extent of the customer's service.

(4) *Private outdoor lighting:*

a. *Availability:* Any customer located in territory served by the city for outdoor lighting service notwithstanding availability provisions in any other rate that all requirements be supplied thereunder.

b. *Service to be furnished:* The city will furnish and operate the necessary facilities to supply service for outdoor lighting from dusk to dawn for the number of lighting units ordered by the customer, subject to the limitations set forth below.

c. *Monthly charges:*

~~175 Watt.....\$ 8.53~~

~~400 Watt.....14.50~~

1. The present customer service charge approved by the City Council can be obtained at the City Hall.

Standard equipment for lighting units shall consist of a standard mercury vapor lamp, mounted in a luminaire, supported on a short bracket (approximately 30 inches), with photoelectric control.

2. If the connected load served hereunder requires the installation of a transformer exclusively to serve such load, the transformer shall be treated as an additional facility.

d. *Additional facilities:* If the installation of a standard lighting unit requires the installation by the city of facilities not required by the city for distribution purposes other than private lighting, the city will furnish, install, own and maintain the additional facilities (including wood poles of the type established as standard for service hereunder) which may be necessary to provide such lighting from nearby distribution lines. The city will make a monthly charge, in addition to the charges set forth above, of 2.1 percent of the cost to the city of furnishing and installing such facilities. In determining the amount of such monthly charge, the city may use unit prices for such additional facilities as the cost base, provided that such unit prices are at or below the city's average unit cost for such facilities.



e. *Ownership and maintenance of facilities:* The city shall own and be responsible for the maintenance of the city facilities installed to render the service ordered by the customer, but the city shall not be required to remove obstructions or trim trees that may interfere with proper distribution of light from lighting units. The customer will be responsible for the following:

1. The removal of any obstruction to the installation of facilities.
2. Provide any permits or easements required for their installation and maintenance.
3. Provide for access to them by the city trucks.

If a customer desires installation of a lighting unit on a customer owned pole, such pole must meet the city standards at the time of installation and as long as the lighting unit remains in service.

(5) *Temporary service; deposit required:*

- a. A customer desiring temporary service of any kind shall be required to fill out the appropriate application for electric service form.
1. A customer requesting temporary service shall be responsible for providing metering equipment permanently mounted to a wood pole or other approved structure per the city's specifications.
- b. As soon as possible after the proper application is received by the city, an estimate of the costs of furnishing, installing and removing the required facilities to provide for the temporary service shall be mailed to the address, as supplied on the application form, of the party requesting the service.
- c. A charge of \$100.00 will be included in the estimate. Fifty dollars of the said amount is nonrefundable. Fifty dollars of this said amount will be held as a deposit to ensure the return of the revenue meter supplied by the city. This deposit shall be returned to the customer upon return of the meter in good working order.

d. If after reviewing the estimate supplied by the city, the customer wishes to proceed with the installation of a temporary service, the estimated cost figure provided by the city plus the fee described in the paragraph above, shall be paid in advance by check made out to the city before any work shall be performed by the city.

e. A temporary service shall not be installed until the city's zoning department has approved a building permit for the property.

(Code 1976, § 12-50; Ord. No. 96-13, § 1, 8-12-96; Ord. No. 99-20, § 3, 10-11-99; Ord. No. 05-36, § 1, 12-12-05; Ord. No. 06-14, § 1, 3-13-06; Ord. No. 11-24, § 1, 9-12-11, eff. 11-1-11; Ord. No. 14-12, § 1, 6-23-14)

Editor's note- Ord. No. 14-12, § 1, adopted June 23, 2014 states, "That the City of Marshall forego or waive the four percent (4%) increase scheduled to take effect on July 1, 2014 as contained in the following Sections of the Code of Ordinances, City of Marshall, Illinois: 86-56-(1)c 1, 86-56-(1)c 2, 86-56-(2) c 1, 86-56-(2) c 2, 86-56-(3) c 1, 86-56-(3) c 2, 86-56-(3) c 3"

Sec. 86-58. Rules and regulations.

The following rules, regulations and laws are hereby adopted for the control, management, government and operation of the electric system of the city:

(1) Obtaining information.

a. Information desired from the city relative to subject matters covered by these rules and regulations may be obtained by personally visiting, telephoning or corresponding with the office of the superintendent.

b. A copy of these rules and regulations will be available for public inspection at the office of the superintendent during normal business hours of 7:00 a.m. to 4:00 p.m., weekdays. Copies of these rules and regulations may also be purchased at the City Hall for the sum of \$10.00 per copy.

(2) Application for service-General information.

a. Application for a new residential service connection or an upgraded residential service connection shall be submitted by the customer or his or her agent in writing at the office of the superintendent a minimum of two weeks prior to the expected date the new or upgraded service facilities are required. Applications for electric service must include the following additional information:

1. A description of the proposed new service required or a description of the required service modifications or upgrade.

2. A listing (in the form of a load schedule) of all of the customer's motor and static loads with motor horsepower and load sizes in kW.

3. A plat of survey (or a reasonably accurate representation of such) with the location of the existing and proposed service entrance equipment shown.

b. Application for a new commercial or industrial service connection or an upgraded commercial or industrial service connection shall be submitted by the customer or his or her agent, in writing, at the office of the superintendent at the time of application for a construction permit; but in all instances, a minimum of one month prior to the date the new or upgraded service facilities are required.

1. By application, the new commercial or industrial customer recognizes that there are inherent delays experienced in obtaining a new or upgraded service connection. Such delays may be due to long lead times that may be associated with the

procurement of new transformers, cables, metering equipment and other facilities necessary to provide the new or upgraded service connection.

2. The city will make every reasonable attempt to expedite the installation of new or upgraded service connections when given adequate notice.
- c. Application for the installation of new electrical distribution facilities within a new residential, commercial, or industrial subdivision shall be submitted by the developer or his or her agent, in writing, at the office of the superintendent at the time the subdivision plat is submitted for approval to the appropriate agencies.
- d. Examples of the application for electric service to be filled out by an owner, customer, or developer requesting a new service connection or an upgraded service connection for a residence, commercial or industrial development shall be on file in the office of the superintendent.
- e. Before an application for a new service connection, or an upgraded existing service connection, can be accepted or acted upon by the, the application form is to be filled out accurately and in its entirety and the appropriate fees must be paid.
- f. Any work on new or existing service entrance facilities that is performed within the service territory of the city by a customer, contractor, developer, or his or her agent without the filing of an application for electric service shall be considered in violation of this article.
- g. By the act of submitting an application for electric service, as defined in this section, the customer or developer acknowledges and agrees to follow and comply with all of the applicable ordinances, rules, and requirements of the city.
- h. By the act of submitting an application for electric service, as defined in this section, the customer or developer acknowledges that there may be times (i.e. winter weather conditions) when the city may not be able to respond as promptly as usual to

requests for new or upgraded services or to requests for service to new developments.

(3) Electric service types and characteristics.

- a. Certain types of electrical service configurations are not available in every location within the city's service territory. The type of service which can be provided at any particular location will be determined by the city based on one or more of the following criteria:

Configuration of city's service lines available at that location.

Available system capacity at that location.

Voltage of available service lines at that location.

Type, size and characteristics of load to be served at that location.

- b. The standard types of service and secondary utilization voltages for loads which will be supplied within the city's service territory are as follows:

Single-phase, three wire, 120/240 volt service

Three-phase, four-wire WYE, 120/208 volt service

Three-phase, four-wire WYE, 277/480 volt service

- c. Customers and potential customers whose installations may require service voltages other than those normally available, as described in paragraph b above, are requested to consult the superintendent to determine the conditions under which such a type of service can be provided by the city.

- d. The voltage and characteristics of the city electric lines supplying a customer's load shall be determined by the city on the basis of the size and characteristics of the customer's load and its relation to the city's primary or secondary service facilities located in or proposed for the area in

which the customer is to be served or is presently being served.

- (4) All installation of electrical wires, apparatus and necessities shall be inspected by the superintendent, and shall be performed under the superintendent's supervision, and after its completion the same shall also be inspected by the superintendent. Any obstruction which may interfere with and prevent a perfect inspection of wires carrying electrical current, such as lath, plaster, boards and partitions, must be removed upon order of the superintendent.
- (5) The director of public works and superintendent shall have full management of the electric system and the inspection of all electrical work within the city, inside of buildings and above, underneath and upon the surface of streets and other real estate, in all electrical matters in which the city is interested.
- (6) All electrical wiring and installation of any house, building, office or dwelling or other place within the city shall be under the direction of the superintendent, in full and faithful accord and compliance with the latest rules concerning the same adopted by National Electrical Code, the National Electrical Safety Code and the American Insurance Association.
- (7) No person but the superintendent shall attach to or make any connections with any electrical wire with the purpose of procuring electrical current therefrom. Any person so attaching and connecting to any such wire for such purposes, without order from the superintendent and compliance with the rules of this article, shall be prosecuted for theft.
- (8) No claim for damages shall be made against the city by reason of the breakage of any transformer, reducer, meter or wire carrying current; nor shall the city be liable in damages to any customer deprived of electrical current by reason of any breakage or any machinery or a stoppage for improvement or repair; nor shall the city be liable for any loss, injury or damage resulting from the interruption, restoration or reduction of electrical service from any cause.

(9) The superintendent shall have power to cut off and deprive a customer of electric current when the superintendent is satisfied that the building and place is not properly wired, or wired according to the rules, or for violation of any of the rules hereby adopted, or for nonpayment of any rate, rental or other charge, and shall not again attach such customer until all rules violated have been fully complied with and all sums due for electric current and other charges and demands due the city are fully paid. Disconnection for nonpayment shall be pursuant to section 86-24.

(10) The superintendent shall have full power to trim any shade tree or bush, remove any obstruction within the streets, alleys and public places of the city which hinder or obstruct the wires or the free and efficient delivery of the electric current to the several parts of the city.

(11) The superintendent shall also have the right to order the removal of any pole or post of any telegraph or telephone line which in any way impedes the efficiency of the lines conveying electric current and power, and shall take all other precautions necessary to prevent the electric current coming in contact with wires of the lines other than the electric system, so that no harm may occur to any person.

(12) The standard service voltage for all locations is 120/240 volts single-phase, three-wire. Any other service voltage or three-phase service is considered nonstandard.

(13) Nonstandard service voltage; excess facilities.

- a. There may exist locations where an existing distribution network has other than standard secondary service voltage. Some of these nonstandard voltages are 240 volts, three-phase, three-wire; 120/240 volts, three-phase, four-wire;



and 480 volts, three-phase, three-wire. These systems are not being expanded, but in certain cases a new service may be installed at the existing voltages in the existing network.

b. If a nonstandard service voltage or three-phase service is desired, the owner shall consult with the superintendent before purchasing heavy duty residential, commercial or industrial equipment for installation on the electric system. If it is practical in the opinion of the superintendent, the nonstandard service voltage may be provided; however, the owner shall bear the additional expense, at the discretion of the city, of special distribution transformers, and the risk of extended loss of service in the event of a transformer failure.

c. Should an existing customer wish to upgrade his or her electric service beyond the standard service installation which is supplied by the city, or should it be necessary to upgrade service to a customer because of increased load or because customer's load is interfering with service to other city customers, such necessary additional facilities shall be regarded as "excess facilities."

d. The customer shall be responsible for the costs of all facilities installed on the customer's premises and for the city's out-of-pocket costs, as required, to provide any facilities beyond the standard service facilities normally provided by the city.

(14) The following types of customer service taps are provided by the city electric system:

a. *Overhead tap*-Overhead service area shall be delivered to the individual residence by means of overhead cable from the electric system pole structure to a designated point on

the dwelling of sufficient height to comply with applicable code clearances. The location of the service entrance shall be such as to provide for the shortest route from the structure to the home as practical. The owner or contractor shall provide the service head, riser conduit, meter base and all other materials and installations required to make a complete installation. Conductor tails of two-foot length shall extend out the riser weatherhead to facilitate making connections to the triplex service conductors provided by the city.

b. *Underground tap-Underground service area.* In areas designated for underground service, the service shall be delivered to the residence by means of a buried triplex cable from pedestal, vault or pad mount transformer located on or near the property line, to a point designated on the dwelling. The location of the service entrance shall be such as to provide the shortest route from the pedestal, vault or pad-mounted transformer to the house as may be practical. All obstructions such as debris, dirt piles, brush and the like shall be removed prior to the installation of service, and a lot shall be graded to within one foot of final grade.

Underground service is not guaranteed by the electric utility as circumstances may force service to be provided to any location by overhead service.

- c. *Underground tap-Overhead service area.* Underground service in an overhead service area will be available, provided engineering considerations will not prohibit service, in the opinion of the superintendent. The conversion of existing overhead service to underground service may be available, but only on the availability of city personnel.
- d. *Overhead service-Underground service area.* Overhead service in an underground service area will not be permitted unless, in the opinion of the

Underground service is not guaranteed by the electric utility as circumstances may force service to be provided to any location by overhead service.

- c. *Underground tap—Overhead service area.* Underground service in an overhead service area will be available, provided engineering considerations will not prohibit service, in the opinion of the superintendent. The conversion of existing overhead service to underground service may be available, but only on the availability of city personnel.
- d. *Overhead service—Underground service area.* Overhead service in an underground service area will not be permitted unless, in the opinion of the superintendent, due to engineering considerations this is the only feasible and practical manner in which service may be provided.
- e. *Meter sockets—All types of service area.* All residential meter and self-contained meter sockets shall be provided by the customer. ~~off the city's approved listing~~. The transformer rated meter socket shall be purchased by the customer from the city.
- f. *Overhead and underground secondary service connections:*
  1. All buildings, including multiple-occupancy buildings or other similar structures, shall be served by a single service connection and provisions shall be made by the customer to provide for a single point of metering. The term "single point of metering" is intended to refer to a single point of attachment for the city's secondary service conductors and a single meter or a single multiple-meter bank.
  2. For multiple-occupancy buildings where two or more meter sockets are required, the customer will service all the meter sockets from a common overhead or underground service cable.
  3. Each unit in a multiple occupancy building shall be metered separately.
  4. In a multiple occupancy building, the electric service entrance and distribution facilities for each unit shall not pass through or enter another unit.
  5. Electric service entrance connections shall not be routed through unattached garages or other structures.
  6. An overhead or underground secondary service connection is that portion of the supply conductors, with appropriate connectors, between the city's secondary distribution system and the customer's service entrance equipment.

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7. Should a customer require a service entrance connection, whether an initial connection or an upgraded connection, he or she shall be required to fill out the necessary forms as required in this article.

8. For a new service entrance connection, a fee shall be required in advance at the time the application for electric service is submitted for the city to provide the requested service connection. This fee may be included along with the balance of the fees submitted prior to the award of a building permit by the city.

~~The fee schedule for all new or upgraded service entrance connections shall be as follows: The Fee Schedule approved by the City Council may be obtained at City Hall.~~

~~Residential service single phase service entrance connection (100A or 200A) (Note 1) .....\$200.00~~

~~Duplex residential (as defined in this article) and area lighting (as defined in this article) single phase service entrance connection up to 200A (single phase (Note 1) .....150.00~~

~~General service entrance connection up to 200A (single phase) (Note 1) .....300.00~~

~~General service entrance connection (three phase):~~

~~For less than 75 kVA of estimated maximum demand (Note 1) .....375.00~~

~~For less than 150 kVA of estimated maximum demand (Note 1).....750.00~~

~~For less than 300 kVA of estimated maximum demand (Note 1).....1,500.00~~

~~Additional capacity beyond 300 KVA (per KVA of estimated maximum demand) (Note 1).....5.00~~

Note 1: For services to residential apartment buildings or multi-tenant commercial buildings, add \$50.00 for each living unit within the apartment building or tenant space within the commercial building beyond the base unit, which is included in the basic residential service entrance connection fee quoted above.

9. Fees for residential service entrance connections exceeding 200 A (single-phase) and general service customers exceeding 300 kVA in maximum demand will be determined on a case-by-case basis and will be generally based on the city's out-of-pocket costs.

10. Minimum service size for apartments shall be 100 A.

11. Minimum service size for trailers and pre-manufactured homes shall be 100 Amps.

12. The standard fee for general service entrance connections, as listed above, shall only cover the costs associated with the installation of a standard overhead or underground service connection as defined below.

13. Any residential overhead or underground electric service installation which exceeds the following definitions of a standard service connection in length shall incur an additional ~~per foot charge of \$5.00 per foot~~ equal to the cost of the materials used.

14. A standard residential overhead service connection shall be rated at 200 A and shall not exceed 150 feet in length from the city's take-off point to the location of the customer's service attachment.

15. A standard residential underground service connection shall be rated at 200 A and shall not exceed 150 feet in length from the city's takeoff point to the location of the customer's meter socket.

16. Under no circumstances shall an underground service connection be provided which is to be covered by a deck, porch, walk or any other building addition without the installation, by the customer, of a suitable duct through which the customer may pull service conductors, provided by the city. See subsection (17)g.

17. The allowable total length of an overhead service drop beyond what is considered standard will be determined by the city on the basis of the conductor size required and on the characteristics of the pole from which the service conductors originate. In no case will the length of the service drop exceed 150 feet.

18. If an overhead service connection is longer than the allowable length of a service drop and requires intermediate supports, the service drop shall be considered the portion between the city's distribution facilities and the first point of attachment on the customer's property. The remainder of the service connection, including the first support on private property, shall be furnished, installed, owned, and maintained by the city at the customer's expense.

*g. Overhead service attachment requirements:*

1. A service attachment may consist of insulating knobs, eyebolts, or other city approved devices depending on the requirements.
  - i. In the event that the city must reattach or replace a service attachment for the purposes of emergency service restoration, the customer may be held responsible for any costs incurred by the city to reattach or replace the service attachment. In no event shall the city be held liable for any direct or consequential damage that may result from the city's efforts to restore service.
2. The service attachment shall, in all cases, be furnished, installed, and maintained by the customer and shall meet the requirements and specifications of the city.
3. The service attachment shall be located at a point designated by the city and shall be sufficiently high enough above ground to maintain the minimum clearances as specified by Paragraph (232) of General Order 160 of the Illinois Commerce Commission and ANSI C2-National Electrical Safety Code, latest edition.
4. Under no circumstances shall a service attachment be located on a parapet or a chimney.
5. In case a building is too low to provide for the minimum clearance required, a riser or a roof bracket shall be installed in accordance with the city's specifications.
6. The service head and attachment shall be installed in such a manner to ensure that the following clearances are met:
  - i. All wiring which is outside of the riser shall clear downspouts, gutters, and other building appurtenances by a minimum of three feet.
  - ii. All wiring which is external to the riser shall be installed a minimum of three feet from windows, porches, or any other part of a building ordinarily accessible to the occupants or the public.



7. The city shall, in all cases, make the final connection between the customer service equipment and the city's secondary service conductors.
8. The customer or his or her agent is prohibited from disconnecting, connecting, or making any changes to the city's secondary service conductors.

h. *Service entrance requirements.*

1. Service entrance equipment shall consist of the following components consistent with city's specifications:

- i. In the case of an overhead service connection, a service connection shall consist of some or all of the following: A service head, a service run, a disconnecting means (in the form of a circuit breaker in a rain-tight enclosure), a meter connection device, an instrument transformer cabinet, and an approved grounding connection.

- ii. In the case of an underground service connection, a service connection shall consist of some or all of the following items: A meter connection device, disconnection means (in the form of a circuit breaker in a rain-tight enclosure), an instrument transformer cabinet, a service run, and an approved grounding connection.

2. All residential customers with more than six metersockets shall be required to install an externally operable fused main disconnect switch, or circuit breaker, that can be used to disconnect the building's electric service equipment from the incoming city system. Such a fused main disconnect switch, or circuit breaker, shall have provisions for the installation of a lock supplied by the city to prevent unauthorized operation. Provisions shall be included with the fused main disconnect, or circuit breaker, that will permit the customer to operate the main disconnect in the event of emergency, independent of the city.

3. If, in a multiple-occupancy building, there is a mixture of residential and general service customers, an externally operable, fused main disconnect switch, or circuit breaker, shall be installed that can be used to disconnect all services from the incoming city system. Such a fused main disconnect switch, or circuit breaker, shall contain provisions for the installation of a lock supplied by the city to prevent unauthorized operation. Provisions shall be included with the fused main disconnect, or circuit breaker, which will permit the customer to operate the fused main disconnect, or circuit breaker, in the event of emergency, independent of the city.
4. All general service customers shall be required to install a fused main disconnect switch, or circuit breaker, which can be used to disconnect the customer's service from the incoming city system. Such a fused main disconnect switch, or circuit breaker, shall contain provisions for the installation of a lock supplied by the city to prevent unauthorized operation. Provisions shall be included with the fused main disconnect, or circuit breaker, which will permit the customer to operate the fused main disconnect switch, or circuit breaker, in the event of emergency, independent of the city.
  - i. For customer service entrance equipment rated up to, and including 800 A, the fused main disconnect, or circuit breaker, must be installed external to the building and adjacent (within five feet) of where the city's secondary service conductors attach to the building.
  - ii. For customer service entrance equipment rated larger than 800 A, the fused main disconnect switch, or circuit breaker, can be located within a dedicated electrical closet or room within the building. Such fused disconnecting switch, or circuit breaker, must be provided with shunt trip capability with the shunt trip indicating switch located in a lockable, weather-tight enclosure at a location outside of the building as directed by the city and by this section.

5. Buildings will not be served by the city at more than one utilization voltage (i.e. 120/208 VAC or 277/480 VAC but not both).

6. The location for the installation of all meter sockets shall be determined by the city as dictated by any, or all, of the following conditions:

i. Customer meter sockets must be placed outside the customer's building in locations readily accessible to city's personnel.

A. Customer meter sockets shall not be placed on unattached garages or other nearby structures.

B. Customer meter sockets shall not be placed within fenced-in back yards.

C. Customer meter sockets shall not be placed where access is only available by the use of stairs.

D. Customer meter sockets shall not be placed where it is not possible to read and service meter without the use of stepladders or other aids.

E. Customer meter sockets shall not be placed inside screened in porches or over decks.

F. Customer meter sockets shall not be placed on utility poles. In the event the city replaces a utility pole on which a customer meter socket is located, the affected customer shall be responsible for the relocation of the meter socket to a location permitted by this article.

ii. Customer meter sockets shall be placed where most readily accessible from the city's distribution facilities.

A. For underground installations, locations that necessitate the crossing of sidewalks or

driveways with the service wires by the city shall be avoided.

B. Locations which necessitate the use of more than 150 feet of overhead-type or underground-type service conductor shall be avoided.

iii. Customer meter sockets shall not be placed near natural gas meters or other natural gas facilities.

A. Meter sockets shall not be placed over a natural gas meter or natural gas facility.

B. Meter sockets shall maintain a minimum of ten feet horizontal clearance from a natural gas meter or natural gas facility.

iv. For buildings with two or more meter sockets, all the meters shall be grouped together ("ganged") in a common area accessible to city personnel.

7. In all cases, the service run (for overhead-type services only), the main disconnecting means, and the meter connection device must be installed entirely on the outside of the building to be served.

8. The customer shall furnish, install, own and have complete responsibility for the maintenance of all service entrance equipment, with the exception of the meter.

9. If at any time, and in the exclusive judgment of the city, the customer-owned service entrance facilities become dangerous, unserviceable, or inadequate for continued service, the city may require the customer to repair or replace the service entrance facilities as a condition for continued service.

10. For electric service installations requiring potential and current transformers, the customer shall supply the instrument (potential and current) transformer cabinet, the meter socket and the interconnecting wires and test switches as part of a pre-assembled and pre-wired UL-approved assembly. All of the customer-supplied equipment will be subject to the approval of the city.

11. The conductors and conduit of the service entrance equipment shall be continuous (i.e., conductors shall not be spliced; the conduit system electrically and mechanically continuous) from the city's point of connection to the meter socket (or instrument transformer cabinet) and from the meter socket (or instrument transformer cabinet) to the fused main disconnect.
12. Weather-tight fittings shall be used in connecting a service run to an outdoor meter connection and; generally, where any part of the service entrance equipment is exposed to the weather.
13. All overhead service runs shall be equipped with weather-tight service heads.
14. Metered and unmetered conductors shall not be installed within the same conduit or enclosure.
15. Aluminum conductors shall not be used as part of a service run or for the connection from the city's point of attachment to the customer's first overcurrent protective device (circuit breaker panel for residential services or fused main disconnect, or circuit breaker, for general service services).
16. All service run conductors shall be sized per the requirements and standards as set by the National Electric Code. In no case, however, can the service entrance equipment be smaller than that considered as a "standard service" for the purposes of this article.
17. The city assumes no responsibility for the adequacy, safety or satisfactory performance of a customer's service entrance equipment.
18. The grounded neutral conductor of the service entrance equipment shall be identified in such a way as to be readily distinguishable.
19. The conductor for the phase having the highest voltage ("wild leg") or a three-phase four-wire Delta installation shall be placed at the center of the three-phase conductors within the service entrance equipment and shall

be identified in such a way as to be readily distinguishable from the other conductors.

20. No over-current device shall be inserted in series with a grounded service conductor except a circuit breaker that simultaneously opens all conductors from a circuit.

21. When located outdoors, the disconnecting means (fused main disconnect switch or circuit breaker) shall be either of weatherproof construction or mounted inside a weatherproof box and shall have provisions for the installation of a lock supplied by the city to prevent unauthorized operation.

22. For general service installations over 800 A, if the disconnecting means are installed within a building, the disconnecting means shall be located within a nominal five feet of the point where the secondary conductors enter the building and shall be provided with a shunt-trip mechanism which permits opening of the disconnecting means from the exterior of the building. This shunt-trip mechanism shall have provisions for the installation of a lock supplied by the city to prevent unauthorized operation. Provisions shall be included with the shunt-trip device which will permit the customer to operate the disconnecting means, in the event of emergency, independent of the city.

23. In all cases, the disconnecting means shall be installed in locations that permit unobstructed access to the city's personnel.

*i. Grounding requirements.*

1. All metal conduit cabinets, other enclosures and the neutral or grounded phase conductor shall be permanently grounded by means of an approved ground connection.

2. The following grounding installations shall be provided in accordance with Article 250 of the latest issue of the National Electric Code:

- i. Systems, circuits and equipment required, permitted or not permitted to be grounded.
- ii. Circuit conductor to be grounded on grounded systems.
- iii. Location of grounding connectors.
- iv. Types and sizes of grounding and bonding conductors and electrodes.
  - v. Methods of grounding and bonding.
  - vi. Conditions under which guards, isolation or insulation may be substituted for grounding.
  - vii. Connection of lighting arresters.

(15) The following metering rules and regulations shall be adhered to:

a. *Metering/general requirements.*

1. Metering equipment that will be provided by the city consists of such of the following items as may be required for a particular installation. These items include watt hour meters, demand registers, recording demand devices, associated relays and devices, and current and potential transformers.
2. A meter-switch-fuse sequence is an installation where the metering equipment is connected on the supply side of the disconnecting means installed in conjunction with the meter.
3. A switch-fuse-meter sequence is an installation where the metering equipment is connected on the load side of the disconnecting means installed in conjunction with the meter.



4. A meter-switch-fuse sequence shall be followed, where practicable, for all installations where single-phase or three-phase self-contained meters are used.
5. For instrument transformer type installations where practicable, the instrument transformer cabinet shall always be placed ahead of the main disconnecting means.
6. Where the utilization voltage is higher than 240 V, current and potential transformers shall be installed for all new or upgrade metering installations.
7. If the voltage of the electricity to be metered is 240 V or less, and the customer's disconnecting means has a rating of 200 amperes or less, self-contained metering equipment shall be installed for all new or upgraded installations.
8. For all new installations or metering installations upgraded to provide additional load where the supply voltage is 240 V or less, and the customer's disconnecting means has a rating in excess of 200 amperes, current transformer cabinets shall be installed. This provision shall not apply to a multiple-occupancy building where each customer is supplied with a service of 200 amperes or less.
9. For all instrument transformer cabinet installations, the customer shall furnish specifications and prints for the approval of the city before any equipment is purchased and will install the same under the provisions of this article.
10. Customers are prohibited from the removal of city-installed meter seals or locks. Customers who remove such seals or locks shall be subject to the penalty provisions of this code of ordinances.

i. For the purpose of determining responsibility for the removal of such seals or locks, the city shall assign responsibility to the owner of the property in question.

b. *Location of metering equipment.*

1. Metering equipment will consist of instrument transformers, city-approved instrument transformer cabinet and appropriate conduit and fittings.
2. Unless otherwise approved by the city, all metering equipment shall be located outside of the customer building at a location adjacent to where the main service entrance conductors attach to the customer's building.
3. The customer shall provide a suitable place on his or her building for the installation of the metering equipment.
4. The metering equipment shall be so located that adequate space and unobstructed access (i.e. cannot be located within a fenced in area) are provided for the purposes of reading, testing, inspecting and exchanging of such equipment by city personnel. The customer shall consult the city regarding the proper location of the equipment.
5. The metering equipment location shall be free from moisture, but when a damp location is unavoidable, the customer shall furnish and install, at his or her own expense, a moisture-proof cabinet to contain the metering equipment.
6. Metering equipment shall not be placed underneath water pipes or other piping systems.
7. Metering equipment shall not be placed closer than ten feet from a gas service entrance, gas regulator, or gas appliance of any type.
8. If there is a possibility that the metering equipment may be exposed to excessive dust, metal filings, or similar substances, the customer shall

furnish and install, at his or her own expense, a suitable dust-proof enclosure to protect the equipment.

9. All metering equipment that is installed outdoors will be housed within an approved weather-tight (NEMA 3R) enclosure, as directed by the city.

10. The choice for the location of the metering equipment is subject to the approval of the city.

*c. Meter and meter connection device.*

1. For all new or upgraded single-phase and three-phase installations, the meter and meter connection device shall be placed on the outside of a building and shall be readily accessible to city personnel.

2. Indoor meters shall only be allowed, with the approval of the city, under the following circumstances:

i. Where there is a large number (greater than 20) of meters serving a single building.

ii. Where using outdoor metering is impractical or inadvisable.

3. A meter and meter connection device shall not be installed where it shall be readily susceptible to damage including mechanical injury due to, but not limited to, vehicular traffic and vandalism.

i. If such a situation should arise with an existing service, within 30 days after notification by the city, the situation shall be corrected by the customer to the satisfaction of the city.

ii. Should the customer fail to take such corrective action, as recommended and approved by the city, and should the meter sustain subsequent damage after the allowed 30-day period, for whatever reason, the customer shall be billed for the cost of repair or replacement of same.

iii. Correction of this situation, to the satisfaction of the city, may be a condition for continued service.

4. A meter and meter connection device shall be installed as near as practical to the point where the service entrance is attached to a building.
5. For large (greater than 20 individual residences) multiple-occupancy buildings, such as apartment houses, meters and meter connection devices are to be installed grouped in dedicated electrical closets which are readily accessible to city personnel at all times. The size, arrangement, and location of the electrical closets and the access provisions will be subject to the approval of the city.
6. Meter connection devices of an approved type shall be furnished and installed by the customer.
7. Maintenance, repair or replacement of a meter connection device, associated hardware and surface attachment means, shall be the responsibility of the customer.
8. When metering equipment is installed in a multiple-occupancy building, all meter connection devices shall be labeled, tagged or stenciled in a permanent manner showing the complete address and location of the area served by each meter connection device.
9. The meter connection device shall be installed at a maximum height of six feet and a minimum height of four feet when measured from finished floor or final grade to the centerline of the meter socket in such a manner as to be plumb and to ensure a permanent attachment to a rigid vibration-free wall or structure.
10. Metered load conductors shall not pass through adjacent meter connection devices unless such conductors are an integral part of an approved pre-wired multiple-position meter socket assembly.

11. If meter connection devices are installed in locations not adjacent to the service entrance, the unmetered feeder conductors shall be installed with a continuous run (i.e. no junction boxes or LBS permitted) of rigid conduit and cable.

12. If the meter connection device for an instrument transformer installation is not adjacent to the instrument transformer cabinet, the customer shall provide a continuous (i.e. no junction boxes or LBS permitted) rigid conduit and color coded conductor harness (not to exceed 50 feet in length) extending between the instrument transformer cabinet and the meter connection device. The conduit and conductor harness, installed by the customer, shall be subject to the approval of the city. The city will make the final terminations at the potential and current transformers and at the meter connection device.

13. For instrument transformer installations, the city shall furnish and install all metering transformers at its expense.

14. The potential leads for any instrument transformer installation shall be connected to the line side of the current transformer leads.

d. *Testing.* Any municipal electric meter shall be taken out of service and tested upon complaint by the customer, upon payment of a fee of \$10.00. If upon test the meter is not within three percent of being accurate, it shall be repaired or replaced and the \$10.00 fee returned to the customer. If the meter is within three percent of being correct, the fee will not be refunded and the meter may be placed back in service.

e. *Meters stopped or registering inaccurately.* Customer billing will be based on estimated usage when meters are found stopped or registering improperly. Such estimates will be based on comparable months' billings or previous years' billings amended to the current rates and conditions when such information is available.

(16) The following rules of service shall apply:

- a. The superintendent shall deny or discontinue service to a customer when in his or her opinion the wiring and equipment is unsafe, causes unacceptable interference with the service of other customers or has objectionable conditions. However, the city will cooperate with the customer in order to determine the necessary remedial action for such conditions.
- b. The city reserves the right to inspect and test any equipment connected to its system and to require that such equipment be provided with nameplates showing the voltage, phase, full-load current, maximum current, maximum kilo-volt amperes, and such other information as may be necessary to determine the operating characteristics of the equipment.
- c. All of a customer's lighting equipment, motor-driven equipment, apparatus, and appliances shall have such characteristics or be equipped with corrective devices so as to enable the city to maintain a satisfactory standard of electric service. In the case of high motor starting current, violently fluctuating or intermittent loads and the like, the city reserves and shall have the right to require the customer to install, at the customer's expense, transformers and apparatus to correct the objectionable conditions. These cases may include welders, hoists, elevator motors, pumps, and similar apparatus.
- d. When a separate or oversized substation or transformer must be installed specifically to eliminate the effect of the objectionable load condition, and the distribution system would otherwise have the capacity and equipment required to supply a normal load service of the same size, or where separate transformers and/or service are installed at the customer's request, the substation or transformers are considered a corrective device under subparagraph a. of this paragraph, and shall be provided at the customer's expense, at the discretion of the city.

- e. The city electrical rates for general service customers are based on all such customers maintaining a power factor of not less than 85 percent lagging. If a customer's power factor is less than 85 percent during periods of normal operation, the city reserves the right to require the customer to install, at his or her own expense, such corrective equipment as may be required to increase such customer's power factor to not less than 85 percent lagging.
- f. When a customer fails to install the necessary facilities on his or her premises to correct the objectionable conditions of his or her load, or fails to prevent such objectionable conditions from interfering with the city's supply of satisfactory service to other customers, the city shall have the right to deny service to the customer until the objectionable conditions shall have been corrected in a manner satisfactory to the city.
- g. Where corrective equipment is installed by the city on its distribution system to correct any objectionable conditions, the customer whose service caused the objectionable conditions shall be required to pay, at the discretion of the city, without refund, the installed cost of such corrective equipment, and the corrective equipment shall remain the property of the city. In lieu of such payment, and subject to approval by the city, a customer may elect to pay a monthly charge equal to 1.5 percent of the installed cost of such corrective equipment installed by the city.

(17) Changes to existing electric service facilities.

- a. Should it become necessary, strictly in the interest of the city, to change the voltage or characteristics (i.e. change from overhead to underground type) of lines entering the property of an existing customer, the city shall bear the costs associated with modifying or replacing the city's existing facilities, as necessary, to provide the



same level and type of electric service as was available prior to the date of the required change.

- b. Any changes which are required to the electric service entrance facilities of the customer to accommodate the revised or upgraded city electric service facilities will be made by the customer at no cost to the city.
- c. The city shall retain sole responsibility for deciding to change the voltage or the characteristics of the lines entering the property of an existing customer for any reason which is determined, by the city, to be in the best interest of the city and its customers.
- d. If, because of public improvements such as street widening, grading, excavating or other reasons beyond the city's control, the city must move facilities with which it serves the customer, the city, as a condition of continued service, may require that a new service connection be established under the same terms as an original service connection from the standpoint of city and customer's expense and installation.
- e. If the city determines that a change in the voltage or characteristics of the lines entering an existing customer's facility are necessary, the city will:
  - 1. Notify the customer of this fact in writing;
  - 2. Furnish an estimate of the charges which will be incurred by the customer due to the necessary improvement. The cost estimate will be prepared based on information which is available to the city at the time and will be based upon the most economical service plan consistent with good engineering and operating practice, as determined by the city, and in accordance with all applicable codes and regulations.
- f. As a condition for continuing to receive electric service from the city, the customer must advance the estimated cost of the required improvement by the city. The customer must

also make all of the necessary arrangements and fund any improvements which are required on the customer's service entrance equipment.

g. Should a customer desire to install a deck, porch, walk or any other building addition above an existing underground service connection, the customer shall choose to follow one of the following two options:

1. The customer may apply for an upgraded service connection to be installed at the present location but which will include a duct installation as described under subsection (14)f.16. above.

2. The customer may apply for an upgraded service connection to be installed in a different location not affected by the proposed building addition.

h. Should a customer desire to install a pool or other structure beneath an existing overhead service connection, the customer shall apply for an upgraded service location which will not be affected by the proposed additions.

i. For customers requiring modifications to their existing overhead or underground electric service entrance facilities as per subparagraphs g or h above, the customer shall be responsible for reimbursing the city for all out-of-pocket costs that are incurred by the city in making any required modifications to the customer's existing service entrance facilities.

(18) Resale.

a. Electrical energy provided by the electric system shall not be sold to a third party or otherwise disposed of by a third party. The energy provided by the electric system shall be for the sole use of its customers.

b. When a customer elects to upgrade the existing electrical facilities in an existing multiple occupancy premise, the installation of the upgraded facilities shall have to conform to the requirement established by this paragraph as well as this article.

(19) Motors and electrical apparatus used by customers on the electric system shall comply with the following:

- a. The city reserves the right to select the type of service to be supplied, and shall be consulted before the equipment is purchased or ordered by a customer, regarding the general characteristics of service, including those services having five hp and larger or where the aggregate load of smaller motors is more than seven and one-half horsepower (hp).
- b. In general, seven and one-half hp and larger motors will be three-phase, and motors smaller than seven and one-half hp may be single-phase. There may be, at the city's sole discretion, exceptions to this rule, as follows:
  1. In outlying and residential areas where three-phase energy is not readily available, larger single-phase motors may be permitted, but only with prior approval of the superintendent.
  2. Where the customer is already using three-phase energy, motors smaller than seven and one-half hp may be added to the three-phase service, upon notification to the city.
  3. Three-phase service is not normally available for residential customers and is considered nonstandard service.
- c. Motor and motorized equipment will generally be approved for use on the electric system only if the total locked rotor current does not exceed an acceptable level, as determined by the superintendent.
- d. Whenever, in the judgment of the city, a motor starting current is of a magnitude to cause interference to other customers, the customer shall be required to provide a starting device of a type which will eliminate such interference.

e. Manually-operated reduced voltage starting devices shall be so constructed that they cannot be placed in the running position before passing through the starting position.

f. Application of reduced voltage starting and the application of under-voltage release starting equipment are recommended for all motors seven and one-half horsepower or larger. The under-voltage release shall be of a type that will return the starting device to the off position when the electric supply is interrupted.

(20) Rented private lighting luminaires (dusk-to-dawn lights or security lights) for homes, schools, security, churches, commercial areas, and industry shall be provided where feasible and in keeping with good electrical practice upon request, as per the following specifications:

a. A self-contained automatic dusk-to-dawn 175-watt mercury vapor lighting fixture shall be furnished and installed, or caused to be installed, by the city, such fixture to meet standards and specifications of the city, on existing wood pole structures. The city will be responsible for making the installation, furnishing the electricity for the operation of the lamp, providing all the necessary maintenance (including the replacement of lamps, but excluding malicious damage) for the length of service, as agreed to by the city.

b. Dusk-to-dawn lights shall be installed on wood poles with a normal ground-to-lamp height of approximately 25 feet. Should a customer desire his or her lighting on steel, aluminum, concrete, decorative-type poles and/or underground cable installation, the city may, at its discretion, install or cause the special service to be installed. The customer shall bear the total cost that is above that of a normal wood pole installation, and the additional charge shall be payable by the customer prior to installation.

c. The customer shall have the responsibility to notify the city of any interruption of service of the dusk-to-dawn lights. The city will restore service only

during regularly scheduled working hours and shall, in any event, be under no obligation to do so before 72 hours from the time of notification. If the city is unable to effect repairs not caused by the customer within this period, the city's only responsibility will be to abate the charges on a pro-rata basis for each day after 72 hours in which service is not available. The customer shall remove any obstruction to the installation of the city-owned facilities.

(21) Extensions of electric service facilities.

a. If an extension of the city's system becomes necessary to service a new development or a block of new customers under a common development, the city shall furnish and install the necessary electrical distribution facilities necessary to provide service to the new development or block of new customers.

1. The improvements necessary to provide electric service to a new development or block of customers shall consist of "off-site" improvements and "on-site" improvements.

2. "Off-site" improvements shall refer to extensions of the city's basic transmission, substation, or distribution system necessary to provide for the load of the new development or block of new customers.

3. "On-site" improvements shall refer to the extension of the city's distribution system and roadway lighting system located within the property of the new development or block of new customers, as required, to provide for local distribution of electrical service and for roadway illumination.

Overhead or padmount switches or other devices which are installed to provide a point of take-off for the "on-site" improvements shall be regarded as "off-site."

4. The city shall bear the cost of all "off-site" and "on-site" improvements.

b. For such "off-site" and "on-site" city system extensions, the developer's responsibilities will be as follows:

1. All necessary easements or rights-of-way, dedicated to the city shall be provided by the developer at no cost to the city.

2. The developer shall be responsible for providing the city with level grade to three inches of final and staking of all rights-of-ways, easements, curbs, and lot lines at no cost to the city.

3. The developer shall be responsible for all final grading, seeding or sodding necessary after the installation of the facilities.

4. The developer shall be responsible for any costs which are incurred by the city, after initial installation of the "on-site" electric distribution system, for modifications to the installed "on-site" electric distribution system which are necessitated by subsequent changes to the layout, arrangement, or elevation of the development which are beyond the control of the city.

5. The developer shall be responsible for any costs incurred by the city, after initial installation of the "on-site" electric distribution system, for damage to such system facilities until such facilities are used to serve city customer loads.

c. Under all circumstances, the city shall own, operate and maintain the electrical distribution facilities provided for under this paragraph within the service territory of the city.

d. The electrical distribution system in all new developments shall be installed underground.

e. Roadway lighting shall be installed by the city as part of the "on-site" improvements for new developments and shall be owned, operated and maintained by the city.

1. The number, type, and placement of roadway lighting standards shall be determined by the city.

2. The city-installed roadway lighting standards shall consist of mercury vapor security luminaires installed on wood poles.

3. The city-installed roadway lighting standards shall be placed only at intersections and at mid-block throughout the development.

4. Should the developer wish to upgrade the roadway lighting system installed in new developments, such upgraded lighting systems shall be designed, furnished, and installed by the developer.

f. If an extension of the city's distribution system becomes necessary to furnish exclusive service to a particular customer, it shall be the responsibility of the customer to pay any expenses, in advance, incurred by the city in providing this extension. This extension to the city's distribution system shall only be provided under the following conditions:

1. All necessary easements or rights-of-way, dedicated to the city shall be provided by the customer at no cost to the city.

2. The customer shall be responsible for providing the city with level grade to three inches of final and staking of all rights-of-ways, easements, curbs, and lot lines at no cost to the city.

3. The customer shall be responsible for all final grading, seeding or sodding necessary after the installation of the facilities.

4. The customer shall be responsible for any costs which are incurred by the city, after initial installation of the electric distribution system, for modifications to the installed electric distribution system which are necessitated by changes to the layout, arrangement, or elevation of the customer's property or development.



5. The customer shall be responsible for any costs which are incurred by the city, after initial installation of the electric distribution system, for damage to such system facilities until such facilities are used to serve city customer loads.

6. Should it become necessary and practical, due to unforeseen future development, for the city to serve additional loads from distribution lines initially paid for by a particular customer as per the procedure outlined above, it shall be the prerogative of the city, as a condition for using these facilities, to purchase these lines from the customer for a sum equal to the remaining life cost of the distribution lines in question, as determined by the city.

7. Any extension of the city's distribution system shall be owned, maintained and operated by the city, with the exception of customer-owned service stations or other customer-owned facilities.

g. If an extension of the city system is proposed in an area where certain non-city owned electric improvements already exist, costs of the "on-site" improvements may include a proportionate share of all expenses, prior to connection, incurred by city, including the costs of purchasing the existing "on-site" distribution systems, and any improvements deemed necessary for the safe and efficient operation of the system, including the roadway lighting system.

(22) Customer-owned facilities.

a. Every residential structure and/or unit located within the city shall be connected to the city electrical distribution system, and such connection shall serve as the only means by which electrical energy is supplied to any part of the structure used or occupied for human habitation. Supplemental generators (defined as those used only for purposes of supplying emergency power in the event of a power outage or generating facilities as authorized in section 86-59) herein shall be permitted provided that connection of such supplemental generators to the electrical distribution system of the residence or residential unit shall conform to all requirements of the National Electrical Code.

b. A nonresidential customer may choose to furnish, install, own and maintain facilities used exclusively for the distribution of electric service within the customer's own property.

c. Such electric service facilities cannot be used for purposes of submetering to third party facilities.

d. Such facilities typically take the form of a primary-metered (metering at 2,400 volts or higher) customer-owned electric service station.

e. All customer-owned facilities shall be subject to the approval of the city as to necessity, type and method of construction.

f. The city takes no responsibility for the safety or adequacy of any customer-provided and customer-owned facilities.

(23) Transformer installations on customer's property.

a. *Definition of facilities.* Where line voltage (2,400 volts or higher) is reduced on the customer's property to the service voltage required by the customer, the facilities necessary to accommodate the transformer or transformers shall be designated as follows:

1. An electric service station (ESS) if furnished, installed, owned, operated, and maintained by the city.

2. A customer service station (CSS) if furnished, installed, owned, operated, and maintained by the customer.

b. *Electric service station.*

1. An electric service station shall include transformers, metering equipment, foundations, fencing, land rights, primary cables (from a distance of ten feet beyond the lot line of the customer's property to the site of the ESS), cable terminations, switches, fusing or protection, conduit and required appurtenances.

2. Upon inspection of the application for electric service submitted by a prospective customer, following the procedure outlined in subsection (2), the city will determine the most practical and economical method by which to provide

service to the prospective customer. Where practical, such customers shall be served from an ESS.

3. If it is determined from the information provided in the required application form filled out by the customer that the customer's projected load shall be less than or equal to what is defined as a standard service installation in subsection 86-56(1)b.1 the city shall bear the costs of providing such facilities.

4. If it is determined from the information provided in the required application form filled out by the customer that the customer's projected load shall be greater than what is defined as a standard service installation under subsection 86-56(1)b.1. the customer shall be responsible for the costs incurred by the city to provide such facilities.

5. Should it be necessary to obtain space on the customer's property in order to locate an ESS, the customer shall provide this space at no cost to the city.

6. The location of such facilities shall be determined by the city as dictated by the following conditions:

i. Location of existing service lines with respect to customer's property.

ii. Accessibility of location to city personnel. The city must have nonobstructed access to such facilities to perform inspection, maintenance, and replacement of said facilities at the discretion of the city.

iii. The foundation(s) for the transformer(s) comprising an ESS shall be furnished and installed by the customer in compliance with the city's specifications.

iv. All electric facilities located beyond the secondary bushings of the transformer in an ESS shall be furnished, installed, owned and maintained by the customer. These facilities shall be subject to the provisions of the National Electric Code as published by the National Fire Protection Association.

v. Connection to transformer secondary bushings shall be made by the city. Fittings and connectors necessary to make such connections shall be furnished by the customer in compliance with the city's requirements.

vi. The installation and maintenance of any EES fencing as required by city, will be the responsibility of the customer.

vii. If the customer's utilization requires electricity to be distributed on the premises at line voltage (2,400 volts or higher), the facilities necessary to accommodate the primary metering equipment may, of themselves, constitute the electric service station. Any facilities beyond such primary metering will be considered to be part of a customer service station.

*c. Customer service station.*

1. A customer service station may include transformers, metering equipment, foundations, fencing, land rights, primary cables (from the take-off point on the city's system), cable terminations, switches, fusing or protection, conduit and required appurtenance.
2. As a result of a customer request and after a determination of compliance with subsection (2), the approval of such a city connection to a customer service station shall be subject to the following conditions:
  - i. The city will primary meter the installation regardless of size.
  - ii. The cost of the necessary primary metering facilities shall be borne by the customer.
  - iii. The city shall assume responsibility only for the service wires to the point of take-off from the city's primary metering facilities.
  - iv. The facilities which shall comprise the customer service station shall be subject to approval of the city.

v. Appropriate measures shall be taken by the customer in the design of the customer service station to provide for means to disconnect the customer's equipment from the incoming service lines should a problem develop with the customer's equipment which may affect service to other city customers. These measures shall be subject to the recommendations and approval of the city.

vi. The city assumes no responsibility for the adequacy, safety or satisfactory performance of the equipment and facilities owned and installed by the customer.

(24) Crossing adjacent property. If, in order to supply service to a customer, it becomes necessary for the city to cross adjacent property with its facilities, then the customer shall be responsible for securing and maintaining, at no cost to the city, the consent of the owner of the adjacent property for an easement or right-of-way dedicated to the city which will accommodate the necessary facilities.

(25) Inspection.

a. The city shall have the right to inspect the installation of customer-owned electric service entrance equipment, including, but not limited to, grounding facilities, metering sockets, and customer-owned service connections up to the service panel, as a prerequisite for supplying electric service.

b. The city will not assume any responsibility for the adequacy, safety or satisfactory performance of the equipment and facilities installed and maintained by the customer.

c. If upon inspection of customer-owned facilities by representatives of the city, the facilities are found to be in an inadequate or unsafe condition, the city may require the facilities brought up to present standards as soon as practicable thereafter as a requirement for continued electrical service.

(26) Construction of services shall in general be in accordance with the drawings on file in the office of the superintendent.

(27) The electric committee shall have the power to promulgate any other rule or order necessary for the proper management and control of such system and as the emergency may require. The

committee shall reduce such rule or order to writing and submit it to the council for enactment as an amendment hereto.

(Code 1976, § 12-52; Ord. No. 90-11, § 1, 6-11-90; Ord. No. 99-20, § 4, 10-11-99; Ord. No. 05-9, §§ 22, 23, 5-9-05; Ord. No. 16-4, § 1, 4-11-16; Ord. No. 19-10 , § 1, 7-22-19)

Section 2. If any provision of this Ordinance, or application thereof, is held invalid by any Court, other provisions or applications of this Ordinance which can be given effect without the invalid provision or application shall not be affected, and to this end the provisions of this Ordinance are declared to be severable.

Section 3. That this Ordinance shall take effect ten (10) days after its passage and approval as provided by law.

~~NAYS~~

~~ABSENT~~

AYES

NAYS

Michael Smitley  
Warren J. Le Fever  
Vickie Wallace  
Jarod Green  
Josh Sanders  
Robert Nelson  
Foster Propst  
Rob Knott

✓  
✓  
✓  
✓  
✓  
✓  
✓  
✓

PASSED this 26 day of February, 2024.

APPROVED this 26 day of February, 2024.

  
MAYOR

ATTESTED, filed in my office,  
and published in pamphlet form  
this 26 day of February, 2024.

  
CITY CLERK

(SEAL)