

CHAPTER 55: ELECTRIC REGULATIONS

55.01 Electric

A. **PURPOSE AND INTENT.** The City has, early in its history, made provision for and did establish a public utility providing for electrical power for the residents of Lanesboro. It is the intent of the City to establish regulations and standards for the city's electric utility. It is the purpose of this Chapter to establish appropriate regulations which assists in maintaining the ability of the City to provide electrical service to its residents. General regulations regarding the administration of the utility are also established.

B. **DEFINITIONS.** For the purpose of this Chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

Application for Service: The agreement or contract between the City and the customer under which electric service is provided.

Accessible: Admitting close approach, not guarded by locked doors, elevation, fence or other effective means.

City: The City of Lanesboro Public Utilities

Customer: Any entity taking delivery of electrical energy from the City by means of connection to its electric distribution system.

Customer's Service Equipment: The necessary equipment and accessories located near the point of delivery at a customer location which constitute the main control and means of disconnecting the supply to that location. This equipment usually consists of a circuit breaker or a switch and fuses.

Electrical Contractor: Any person, firm or corporation engaged in the business of installing, maintaining or altering, by contract or otherwise, electrical equipment for the use of electric energy supplied for light, heat or power in any building or structure which is, or will be, connected to the City's electric distribution system.

Electrical Distribution System: The system, in whole or in part, over which electrical energy is supplied by the City to its customers.

Facilities: The conductors, transformers, pedestals, switching cabinets, meters and other associated equipment that comprises the Electric Distribution System.

Facilities Installation Charge (FIC): The charge made to the customer by the City for the cost of the installation of the on-site electric distribution system.

Meter Socket and Trough: The mounting device consisting of jaws, connectors, and enclosure for socket-type meters. The mounting device may be either a single socket or a trough. The socket may have a cast or drawn enclosure. The trough and assembled enclosure may be extended to accommodate more than one mounting unit. This equipment is owned and maintained by the City.

National Electric Code (N.E.C.): The latest revision of the National Electric Code of the National Board of Fire Underwriters as approved by the American National Standards Institute.

National Electrical Safety Code: The latest revision of the National Electrical Safety Code as approved by the Institute of Electrical and Electronics, Inc. and approved by the American National Standards Institute.

Nominal Voltage: A specific voltage value assigned to a circuit or system for the purpose of convenient designation.

Point of Delivery: The point where the electric energy first portion of the electric distribution system owned by the City and enters the portion of the electric distribution system owned by the customer unless otherwise specified in the customer's application for service. This is not necessarily the location of the meter.

Power Factor: The relationship (ratio) between the active power and the volt Amperes in any particular alternating current circuit.

Primary Voltage: The voltage on the supply side of a transformer.

Secondary Voltage: The voltage on the load side of a transformer.

Service Entrance: The point at which the customer's service equipment connects to L.P.U. facilities.

Service Location: The point of attachment of the service cables to the customer's building.

Structure: An object which is constructed or erected requiring permanent location on land.

Temporary Service: The installation of a service of a temporary nature, usually for construction purposes, for a period of time not to exceed one (1) year from the date on which the temporary service is installed.

Utilization Equipment: Any customer owned equipment, apparatus, appliance or device located on a customer's premises or used by a customer.

C. LIABILITY.

1. The City is not responsible for and will not install, maintain or otherwise service the electrical distribution system beyond the point of delivery except for City-owned equipment. The City shall not be liable to any customer or to any third party for damage resulting from the customer's use of the service or from the presence of City-owned equipment on the customer's premises.
2. The customer is solely responsible for any accidents, fires or failures resulting from the condition and use of the electric distribution system beyond the point of delivery.

D. ACCEPTANCE OF RULES AND SERVICE. Any person making application for service, accepting or using the City's electrical service by connecting to the City's electrical distribution system thereby agrees to conform to and abide by all applicable federal, state and local rules and regulations for the operation of the electrical distribution system.

1. The City considers its customer to be the owner of the property receiving service. The owner must complete an application for utility service. Service normally continues until the customer requests that service be discontinued or until such time that the customer fails to adhere to the rules and regulations of service. Upon request of discontinuation of service, the meter reading is recorded and, if no other arrangements have been made in advance, the service shall be discontinued.
2. The owner of any real estate in the City of Lanesboro, which is served by City utilities, shall ultimately be responsible for the payment of utility bills.
3. The City MAY send a duplicate billing statement for the utilities to a second party for the convenience of the owner, but this shall not remove the responsibility for ultimate payment of the utilities by the owner.

E. ACCESS TO FACILITIES.

1. Any properly authorized agent of the City shall have free access to the customer's premises at all reasonable hours for the purpose of reading, examining, inspecting, repairing, replacing or removing any element of the electric distribution system owned by the City.
2. No customer shall build or install any structure such as a deck, porch, patio or addition over or around City-owned facilities or otherwise block access to existing City-owned distribution system equipment.
3. The City may relocate City-owned distribution system facilities to accommodate a customer's needs where:

- a. The customer makes a written request for the relocation of City facilities and agrees to pay all costs associated with such relocation;
 - b. The City determines that the requested relocation is technically feasible.
4. Any customer blocking access to City-owned facilities shall be given written notice of such violations and shall be given a specified period of time within which to provide for appropriate corrective action acceptable to the City.
 5. Any violation of this Section not corrected within the specified time shall be corrected by the City and the customer shall be billed for all costs associated with such corrective action.
 6. To effect the safe operation of the electric distribution system, the City hereby reserves the right to remove any trees, bushes, fences or other obstructions located on a customer's property which blocks access to City-owned facilities.

F. APPLICATION FOR SERVICE.

1. Application for a new, additional, temporary or rehabilitated electric service shall be made the City at city hall, located at 202 Parkway Avenue S.
2. All applications shall contain:
 - a. A description of the service requirements. This may include the electrical load data and the expected magnitudes of connected and peak load. Additional data in the form of construction drawings and proposed service entrance may also be necessary for the City to adequately determine the arrangement of service to the customer.
 - b. Exact location of premises to be served, including the street address.
 - c. The approximate date that electric service is required.
 - d. The name, address and telephone number of the customer's designated representative who will be responsible for working with the City's representatives in providing the electric service.
 - e. The name, address and telephone number of the party who will be responsible for costs and usage charges.
3. The City must be advised of planned installations as soon as possible so that construction may be completed by the desired date.

G. AUXILIARY POWER SUPPLY. Where the customer provides for an auxiliary power supply, an adequately sized “double-throw disconnecting device” must be provided to open all ungrounded conductors from the normal supply before connection is made to the emergency supply in accordance with the requirements of the latest edition of the National Electric Code.

H. BALANCING LOADS.

1. All separate electric loads within a service shall be balanced.
2. Where three-phase services are provided, single-phase loads shall be evenly divided between each of the three phases as the voltage permits.
3. Where single-phase services are provided, the load shall be evenly divided between the energized conductors.

I. CHARACTER OF SERVICE.

1. Normal Service

- a. Service supplied by the City shall be alternating current at a nominal voltage and at a frequency of 60 HZ.
- b. The City hereby disclaims any liability and does not guarantee to maintain the accuracy of the nominal values under all conditions.

2. Standard Classes of Service.

- a. All customers shall call the City before designing electrical service. Not all voltage characteristics are available in all service areas.
- b. Three-phase service shall not be provided for loads with an expected peak demand of less than 75kw.
- c. The City shall not provide 120/208 volt service to any customer with a service entrance exceeding 2,500 Amps.
- d. Customers should obtain specific characteristics of available service before proceeding with the purchase and installation of any equipment.
- e. Information concerning the specific classes of service available may be obtained from the City.

J. ELECTRIC SERVICE OVER 200 AMPS

1. The customer shall consult with the City before selecting any service location.

2. The customer and the applicant for service, if different than the customer, shall be jointly and severally responsible for the payment of the Facilities Installation Charge (FIC), which includes the cost of the construction and installation of the on-site electric primary distribution system.
3. Where City-owned facilities need to be relocated or upgraded due to any development, re-development, rehabilitation, addition, site modification, increase in load or customer request, and the costs shall be fully reimbursed at the sole expense of the requesting party.
4. City-owned Equipment.
 - a. The city shall furnish and own the transformer pad and transformer or the secondary pedestal, all primary cable and all associated equipment. All primary cable and associated equipment furnished or installed by the City is the property of the City.
 - b. The meter and associated metering equipment furnished by the City is the property of the City. The City shall furnish and own the meter socket, meter and current transformers.
 - c. The City shall furnish the connectors and make the final connection between the customer's service conductors and the transformer terminals or the Point of Delivery.
5. Customer-owned Equipment.
 - a. The customer or property owner shall install, maintain and replace as necessary the entrance conduit, entrance wire and the City-furnished metering equipment in accordance with the N.E.C. standards for all services over 200 Amps.
 - b. The customer or property owner shall be solely responsible for the ownership, installation, maintenance and replacement of all components of the electric distribution system located beyond the Point of Delivery.
 - c. The customer or property owner shall install concrete-filled, eight inch (8") steel posts to protect the service transformer and the metering installation where the City determines that it is required for safety. Upon the customer's or property owner's written request, the City may approve other forms of protection.
 - d. Where applicable the customer shall provide the necessary equipment for mounting current transformers. (See section U of this Chapter)
6. All meters shall be located outside of the structure unless prior written authorization approving inside installation is obtained from the City.

7. Meters shall be installed so that the center of the meter is between forty inches (40") and sixty-six inches (66") above final grade.

8. Meters shall be located so that there will be no obstructions for meter reading, meter testing or other maintenance.

K. GENERAL DESIGN GUIDELINES FOR COMMERCIAL AND INDUSTRIAL INSTALLATIONS.

1. The City shall provide only one electric service connection to any structure.

2. The City shall provide only one standard class of service to any structure.

3. Except as otherwise provided, all new electrical metering and switchgear installations shall be located in one location as close to the transformer as the City determines to be reasonable.

L. CONSTRUCTION PROCEDURES.

1. The owner, sub-divider, builder or developer shall provide the City with a construction schedule so the electric distribution system can be installed in an orderly and timely manner.

2. The ground in which electric service will be located shall be brought to within four inches (4") of final grade and all other underground utilities to be located beneath the electric service shall be installed prior to the installation of the electric distribution system.

3. The owner, sub-divider, builder or developer shall provide the City with a clear, unobstructed path across the property as required for the installation of the on-site electric distribution system.

4. Prior to the actual construction, the developer or customer shall provide:

a. Final grades (where electric service will be installed)

b. Staking for all lots located in the subdivision or development

c. Requested easements

d. Payment of the Facility Installation Charge or portion thereof when required

5. The owner, sub-divider, builder or developer shall be responsible for the cost of moving or rebuilding any facilities as a result of their errors, omissions or changes.

6. The owner, sub-divider, builder or developer shall coordinate the installation of streets so that the City can install street crossing conduits before the road base is constructed.

a. The owner, sub-divider, builder or developer shall provide the City with no less than thirty (30) days notice to make the necessary street crossing installation(s).

b. Where the owner, sub-divider, builder or developer fail to coordinate such street installations with the City, they shall be responsible for additional costs incurred by the City as a result of boring, tunneling, street repairs, and any other such costs that may arise.

7. When, in the sole judgment of the City, difficult installation conditions exist, such as frost, rock, ledge, etc., the City shall not be bound by any construction schedule which may have been stated, written or otherwise implied. Such installations may also be subject to additional charges as determined by the City.

8. Prior to the start of construction, the owner, sub-divider, builder, or developer shall arrange for a site inspection with the City and any communications access provider to determine the suitability of the site for a common trench. Suitability will be at the sole discretion of the City.

9. The owner, sub-divider, builder or developer shall be solely responsible for any additional costs incurred by the City to remobilize the City's construction crew if such work is stopped because the City determines that a portion of the site is not suitable for construction of the electric distribution system.

10. The City shall schedule its work after all necessary easements are granted and the project site is ready as determined by the City.

M. CUSTOMER EQUIPMENT

1. The customer is responsible for selecting and installing motors, apparatus and devices which are suitable for operation with the character of the service available and supplied by the City.

2. The City hereby reserves the right and authority to gain access to inspect and test any customer-owned equipment which is connected to the City's system.

3. The City shall be the sole authority in determining whether any customer-owned equipment connected to the City's system is causing a deleterious effect on the quality of service provided by the City to its customers.

4. The City hereby reserves the right and authority to require the customer to install, at the customer's sole expense; any equipment which the City determines is required to prevent any deleterious effects on the quality of service provided by the City to its customers.

5. All new permanent service conductors shall be installed after the enactment of the Chapter shall be installed underground from the point of service entrance to the service location.

N. DAMAGE TO CITY-OWNED FACILITIES

1. Any person working in the vicinity of City-owned electric facilities shall be solely responsible to take whatever precautions are necessary to avoid damaging such facilities.

2. Any person causing damage to the City's equipment or facilities shall be responsible to reimburse the City for any costs incurred to repair such damage.

O. EASEMENTS

1. As required, property owners shall dedicate by plat or grant by written agreement, public utility easements to the City of Lanesboro for use in the construction, maintenance and replacement of the electric distribution system.

2. All required easements shall be dedicated or granted without cost to the City of Lanesboro. This shall include any additional or relocated easements which may be required by the City due to circumstances or conditions unforeseen prior to the beginning of construction.

3. Standard easements shall customarily follow property lines. If such customary easement location is not possible due to field conditions (hills, slopes, obstructions etc.), required easements shall be located in the nearest suitable area that will insure the safety of the individuals and equipment involved in the constructing, installing or relocating of City facilities.

4. Easements shall be shown and recorded on the sub-division plat.

P. ELECTRIC UTILITY FACILITY INSTALLATION

1. All new facilities shall be installed so that they are capable of being looped.

2. The City hereby reserves the right to install temporary or emergency facilities in the most economical manner using accepted engineering principles and practices.

Q. FAULT CURRENTS. The customer's service equipment and other devices shall be adequate to withstand and interrupt the maximum available fault current. The customer should contact the City to determine maximum existing and future anticipated fault currents.

R. GOPHER STATE ONE CALL.

1. In accordance with State Statute, the City is connected to the Minnesota Gopher State One Call System.

2. All requests for locating underground facilities should be made at least 48 hours in advance of the excavation. The excavation notice may be made by calling the Gopher State One Call at 1-800-252-1166 and provide the following information:

- a. Name of the individual calling
- b. Precise location of the proposed excavation
- c. Name, address and telephone number of the excavator
- d. Excavator's field telephone number
- e. Type and extent of proposed excavation
- f. Any anticipated use of explosives
- g. Date and time when excavation is to commence.

3. An excavation is defined as any activity that disturbs the soil by use of machine-powered equipment or explosives. Excavation does NOT include:

- a. Installation of agricultural drainage tile
- b. Extraction of minerals
- c. Opening of a grave in a cemetery
- d. Street maintenance that does not change the original grade or any ditching if any exist
- e. Farm activities that disturb the soil to a depth less than 18 inches
- f. Landscaping or gardening to a depth less than 12 inches

4. Any damage to the electric distribution system occurring during excavation must be reported immediately by calling the City.

S. INTERRUPTION AND TERMINATION OF SERVICE

1. Planned interruptions of service in the normal course of business will be prearranged with the customer whenever practical.

2. The City hereby reserves the right to curtail or temporarily interrupt a customer's service when the City determines that repairs, replacement or modification of the City's facilities are required either on or off the customer's premises.

3. The City hereby reserves the right to interrupt the supply of service to customers in the case of emergencies or whenever such interruption is required to comply with an order from any jurisdictional authority.

4. The City hereby reserves the right to terminate electrical service or disconnect the customer from the electric system when the City or any jurisdictional authority determines that the customer-owned equipment is unsafe or is causing an unsafe condition.

5. The City may terminate any customer's service for nonpayment of funds owed to the City.

a. It is the policy of the City to discontinue utility service to customers by reason of nonpayment of bills only after notice and a meaningful opportunity to be heard on disputed bills. The city's form for application for utility service and all bills shall contain, in addition to the title, address, and telephone number of the employee in charge of billing, clearly visible and readable provisions to the effect:

i. That all bills are due upon receipt and payable on or before the date set forth on the bill;

ii. That if any bill is not paid by or before the due date, a second bill will be mailed containing a cutoff notice that if the bill is not paid within ten (10) days of the mailing of the second bill, service will be discontinued for nonpayment; and

iii. That any customer disputing the correctness of his or her bill shall have a right to a hearing at which time he or she may be represented in person and by counsel or any other person of his or her choosing and may present orally or in writing his or her complaint and contentions to the city official in charge of utility billing. This official shall be authorized to order that the customer's service not be discontinued and shall have the authority to make a final determination of the customer's complaint.

b. Requests for delays or waiver of payment will not be entertained; only questions of proper and correct billing will be considered. In the absence of payment of the bill rendered or resort to the hearing procedure provided herein, service will be discontinued at the time specified, but in no event until the charges have been due and unpaid for at least thirty (30) days.

c. When it becomes necessary for the City to discontinue utility service to a customer for nonpayment of bills, service will be reinstated only after all bills for service then due have been paid, along with a turn-on charge as established by the City Council.

d. Cold weather rule. Pursuant to Minnesota Statutes 216B.097, as may be amended from time to time, no service of a residential customer shall be disconnected if the disconnection affects the primary heat source for the residential unit when the disconnection would occur during the period between October 15th and April 15th, the customer has declared inability to pay on forms provided by the City, the household income of the customer is less than 185% of the federal poverty level as documented by the customer to the City and the customer's account is current for the billing period immediately prior to October 15th or the customer has entered into a payment schedule and is reasonable current with payments under the schedule. The City Clerk shall, between August 15th and October 15th, of each year, notify all residential customers of these provisions.

6. The City may terminate any customer's service if the City determines the customer has illegally diverted any source of energy or has permitted, approved of, or benefited from such a diversion.

7. The City may terminate any customer's service if the City determines that customer-owned equipment is causing or may cause damage to the City's equipment or facilities, or that the customer's continued connection to the City's system may cause power quality problems for any other City customer.

8. The City shall not be liable for any loss or damage to property resulting directly or indirectly from any interruption or termination of electric service for any reason. Customers requiring service reliability and/or stability exceeding the City's normal service should consider uninterruptible power supplies, isolation transformers, power conditioners, redundant services or other options to provide the level of service required.

T. LOCATION OF PAD-MOUNTED TRANSFORMERS.

1. Non-Combustible Walls. For the purposes of this section the class of non-combustible walls includes wood-framed brick-veneered buildings, metal-clad steel-framed buildings, asbestos-cement-board-walled metal-framed buildings and masonry buildings.

a. Doors. Pad-mounted oil insulated transformers shall not be located within a zone extending twenty (20) feet outward and ten (10) feet to either side of a building door.

- b. Air Intake Openings. Pad-mounted oil insulated transformers shall not be located within a zone extending ten (10) feet outward and ten (10) feet to either side of an air intake opening located at the level of the transformer. If the air intake opening is located above the transformer level, the distance from the transformer to the opening shall be a minimum of twenty-five (25) feet. The term “level of the transformer” is to be interpreted as within ten (10) inches of the ground.
 - c. First Story. Pad-mounted oil insulated transformers shall not be located within a zone extending ten (10) feet outward and three (3) feet to either side of a building window or opening other than an air intake.
 - d. Second Story. Pad-mounted oil insulated transformers shall not be located less than five (5) feet from any part of a second story window or opening other than an air intake.
2. Combustible Walls. (For the purposes of this section combustible walls includes wood buildings and metal clad buildings with wood frame construction). Pad-mounted oil insulated transformers shall be located at a minimum of ten (10) feet from the building’s wall. In addition to the clearance from building doors, windows and other openings set forth for non-combustible walls. The immediate terrain adjacent to the transformer shall be sloped away from the building.
3. Barriers. (For the purposes of this section barriers shall include reinforced concrete, brick or concrete block barrier walls). If the clearance specified above cannot be obtained, a fire resistant barrier shall be constructed in lieu of the separation. The following methods of construction are acceptable:
 - a. Non-Combustible Walls. The barrier shall extend to a projection line from the corner of the pad-mount to the furthest corner of the window, door or opening in question. The height of the barrier shall be one (1) foot above the top of the pad-mounted transformer.
 - b. Combustible Walls. The barrier shall extend three (3) feet beyond each side of the pad-mounted transformer. If a combustible first floor overhang exists, the twenty-four (24) inches specified shall be measured from the edge of the overhang rather than from the building wall.
4. Fire Exits. Pad-mounted oil insulated transformers shall be located such that a minimum clearance of twenty (20) feet is maintained from fire exits.
5. Decorative combustible enclosures. Decorative combustible enclosures (fences etc.) installed by the customer around pad-mounted transformers adjacent to a combustible building wall shall not extend more than twenty-four (24) inches beyond the transformer towards the combustible wall. A ten (10) foot clearance is required in front of the pad-mount transformer doors. Adequate transformer accessibility and ventilation must be provided.

6. Minimum clearances around pad-mounted transformers and equipment shall be ten (10) feet in front and twenty-four (24) inch sides and back shall be maintained. Fences, shrubbery and trees may be installed by the customer provided the specified clearances are maintained, the grade is not altered and any underground cables are not endangered.

U. METERING.

1. General.

- a. All electricity furnished by the City shall be metered unless the customer has entered into a written agreement with the City to otherwise account for the customer's use of energy.
- b. Responsibilities for the purchase and installation of metering and related equipment shall be set forth in the City of Lanesboro's policy manual and may be changed from time to time.
- c. Sub-metering of electricity by customers for the purpose of resale is prohibited.

2. Meter Locations.

- a. Meter location for new, modified or rehabilitated installations will be agreed upon by representatives of the customer and the City, subject to final approval by the City.
- b. All meters shall be located outdoors unless special permission has been obtained from the City.
- c. Meters shall be located to facilitate the setting, changing, testing and reading of meters.
- d. All metering equipment shall be located in an area openly accessible to the City and shall be grouped to minimize the number of metering points.
- e. The customer shall be solely responsible at all times to maintain a clear forty-eight (48) inch work area in front of each meter location as well as a suitable approach to the meter location , as determined by the City.
- f. The customer or property owner shall install concrete-filled, eight (8) inch steel posts to protect the metering installation where meters are located outdoors in paved areas or in any other areas where the City determines the metering installation is susceptible to damage.

3. Meter Testing.

- a. Any customer who believes that a meter is failing to properly register the use of electricity may request a meter test by contacting the City. The City will install a new meter and the removed meter shall be

tested using standard calibration equipment and generally accepted test procedures within a reasonable period of time.

b. Customers who request additional tests of the same meter installation within a twelve month period may be charged for the additional tests at a fee established by the City.

c. Whenever any meter is found upon test to have an average error of more than two (2) percent fast, the City shall refund to the customer the overcharge. Whenever any meter is found upon test to have an average error of more than two (2) percent slow, the City may charge for electricity consumed but not included in bills previously rendered. The refund or charge for both fast and slow meters shall be based on corrected meter readings for a period equal to one-half of the time elapsed since the last previous test but not to exceed six months, unless it can be established that the error was due to some cause, the date of which can be fixed with reasonable certainty, in which case the refund or charge shall be computed to that date, but in no event for a period longer than one year. (Minnesota Rules, Public Utilities Commission, Utility Customer Service, Chapter 7820.3900 or as amended)

d. When the average error cannot be determined by test because the meter is not found to register or is found to register intermittently, the City may charge for an estimated amount of electricity used, which shall be calculated by averaging the amounts registered over corresponding periods in previous years or in the absence of such information, over similar periods of known accurate measurement preceding or subsequent thereto, but in no event shall such charge be for a period longer than one year. (Minnesota Rules, Public Utilities Commission, Utility Customer Service, Chapter 7820.3900 or as amended).

e. If the recalculated bills indicate that more than \$1 is due an existing customer or \$2 is due a person no longer a customer of the City, the full amount of the calculated difference between the amount paid and the recalculated amount shall be refunded to the customer. The refund to an existing customer may be in cash or as credit on a bill. Credits shall be shown separately and identified. If a refund is due a person no longer a customer of the City, a notice shall be mailed to the last known address and the City, upon demand made within three (3) months thereafter, shall refund the amount due. If the recalculated bills indicate that the amount due the utility exceeds \$10, the City may bill the customer for the amount due. The first billing rendered shall be separated from the regular bill and the charges explained in detail. (Minnesota Rules, Public Utilities Commission, Utility Customer Service, Chapter 7820.3900 or as amended).

f. If a customer has called to the City's attention his or her doubts as to the meter's accuracy and the City has failed within a reasonable time to check it, there shall be no back billing for the period between the date of the customer's notification and the date the meter was checked.

(Minnesota Rules, Public Utilities Commission, Utility Customer Service, Chapter 7820.3900 and as amended).

4. Meter and Equipment Seals.

- a. The City shall seal all meters and points of access to unmetered wiring on the customer's premises.
- b. The customer shall call the City if it becomes necessary to gain access to any sealed equipment.
- c. No unauthorized person shall break any seal, close any by-pass switch, connect, disconnect or tamper with any of the City's metering equipment.
- d. Any person (s) determined to have violated this rule shall be prosecuted per Title 1900 and shall be liable for the cost of all energy supplied which has not been billed due to unauthorized use, alteration or tampering with metering equipment.
- e. The customer shall be liable for the costs of any such unauthorized use of energy.

5. Meter Installations.

a. General

- i. Single-phase meters up to 240 volts, 200 Amperes shall be installed with through-type meter sockets that are provided by the City.
- ii. All devices designed to interrupt service or protect against vandalism shall be installed on the load side of the meter (s).
- iii. Where meter damage occurs or is anticipated, outdoor meters shall be protected by a suitable box with hasp and staple for the installation of a padlock.
- iv. Where the City determines that a protective box is required to protect against possible vandalism or meter tampering, such a protective box shall be installed and maintained by the City.

b. Meter Sockets shall be furnished by the City and installed by the customer.

c. The customer shall install a City-furnished manual bypass meter socket for each of the following single-phase installations:

- i. All commercial installations; and
- ii. All residential installations rated at 200 Amperes

d. After meter sockets are installed, the interior of the socket must be protected if exposed to the weather or if the terminals are energized. The

City will furnish and install cover plates for unused meter sockets at the time meters are installed on other loops.

e. Multiple Meter Installations

- i. The City shall review and approve all multiple meter service requests prior to the installation of any equipment.
- ii. Multiple meter bank assemblies shall be designed so that the center of the top meter is no more than sixty-six (66) inches above the floor or the ground and the center of the bottom meter is no less than forty (40) inches above the floor or the ground.
- iii. Where two or more meters are installed at a location, provisions shall be made so that the specific address or area served by each meter is easily determined.

f. No part of the metering set may be used as a junction box for the customer's wiring.

6. Instrument Transformer Meter Installations.

a. The installation of all meters rated over 200 Amperes shall include the necessary equipment for mounting current transformers.

b. The City shall furnish, own and maintain all instrument transformers required to provide electric service.

- i. The customer shall provide the necessary equipment for mounting bus bar type current transformers and install a one (1) inch conduit from the meter socket to its respective instrument transformer enclosure.
- ii. The meter socket will be located on an outside building wall, between forty-four (44) and sixty-six (66) inches above final grade and in such a position that there will be no obstructions to meter reading, testing or other maintenance.
- iii. In certain cases where a pad-mounted transformer is installed for one customer and no additional customers are anticipated, the City may grant special permission for the installation of the current transformers within the secondary compartment of the transformer. The customer must furnish and install a one (1) inch metering conduit from the transformer compartment to a meter location approved by the City. Conduit runs shall not exceed 125 feet except with special permission from the City. If more than one customer is to be served from the same pad-mounted transformer, current transformers cannot be installed in the secondary compartment of the transformer and each customer must install a separately mounted metering current transformer box.

V. ELECTRIC MOTOR INSTALLATIONS. The Customer shall install equipment to protect a motor installation from high-voltage, low-voltage, "single" phasing or reverse phasing conditions.

W. PLANS AND DRAWINGS.

1. The owner, sub-divider, builder or developer shall provide to the City complete and accurate drawings and layouts for subdivisions, or any other project requiring the installation or replacement of City electrical facilities.

2. The owner, sub-divider, builder or developer shall provide the City with complete architectural drawings for any commercial project for which the City is reviewing. Such drawings shall include:

- a. The requested service voltage;
- b. The service entrance Amp rating;
- c. The connected load (in kw) broken down by load type;
- d. The electrical switchgear and metering lineup;
- e. The one-line diagram; and
- f. The specifications for the HVAC equipment, etc.

X. POWER FACTOR

1. In order to improve the efficiency of the City's electric distribution system, the customer's utilization equipment shall maintain an average power factor as close to unity as possible.

2. The City will calculate the power factor as necessary by installing electronic metering capable of determining power factor.

Y. PROTECTION OF CUSTOMER-OWNED EQUIPMENT.

1. The City does not guarantee the supply of electric service as to quantity or quality. Irregularities and interruptions may occur and the City hereby disclaims any liability for any damages or lost business incurred by any such irregularities or interruptions.

2. The customer may install circuit protection devices to protect against possible equipment damage at the customer's sole expense and liability for the purchase, installation, use or misuse of any such devices.

Z. RATES AND FACILITIES INSTALLATION CHARGES (FIC). Electrical rates are set for in Chapter 54 of this Code.

AA. ELECTRIC SERVICE 200 AMPS AND LESS.

1. The City shall construct and install all on-site electric distribution systems in new or existing subdivisions or developments.
 - a. All such distribution systems shall be constructed in conformity with the requirements of the National Electric Safety Code, in effect or as amended, which are adopted by reference.
 - b. All services shall be installed underground in accordance with these rules and policies.
 - c. The City shall provide only one electric service connection to each customer location.
 - d. The City will provide each customer location with electric service rated at 120/240 volts, single phase, 200 Amperes, in accordance with standard service rules for new construction.
2. The owner, sub-divider, builder, developer and/or customer shall install, maintain and replace as necessary the entrance conduit and the City furnished metering equipment in accordance with the NEC standards.
 - a. Meters shall be located to maintain completely open access at all times for meter reading, meter testing or other maintenance.
 - b. The center of any meter shall be located between forty (40) and sixty-six (66) inches above final grade.
 - c. The electric meter shall be located at the side or rear of the structure, which is nearest to the point of connection with the City's system. The owner, sub-divider, builder, developer or contractor shall provide a straight, clear, unobstructed path across the property as required for the installation of the on-site electric distribution system.
3. The owner, sub-divider, builder, developer and customer shall be jointly and severally responsible for the payment of the Facilities Installation Charge (FIC).
4. Where City owned facilities need to be relocated or upgraded due to any development, re-development, rehabilitation, addition, site modification, increase in load or customer request, all required work shall be performed by the City. The associated costs incurred shall be fully reimbursed by the requesting party.
5. At the sole discretion of the City, the owner, sub-divider, builder, developer or customer may be required to pay for required on-site distribution system equipment before the City orders such equipment.
6. The ground in which electric service will be located shall be brought to within four (4) inches of final grade and all other underground utilities to be

located beneath the electric service shall be installed prior to the installation of the electric distribution system.

7. Where the City determines it is necessary to relocate an existing electric meter due to meter failure or alterations or additions to an existing dwelling unit, the meter shall be located in conformity to this Chapter and shall be at the expense of the customer.

BB. SPECIAL EQUIPMENT. Where the customer's service demands include the use of electrical service to operate equipment or devices which create a high demand on the operation of City facilities for a relatively short period of time, the City may determine that the installation of special equipment may be required to maintain satisfactory service. In all such cases, the customer shall reimburse the City for costs incurred to purchase special equipment or facilities.

CC. STREET AND SECURITY LIGHTING. The City designs, maintains and upgrades the street lighting systems on all City streets. Further, the City does not install or maintain private security, parking lot or alleyway lighting.

DD. TEMPORARY SERVICE

1. The City will provide temporary service to any customer where such service may be provided from the City's existing electric distribution system. Where a customer applies for routine temporary service, the customer shall provide an approved meter socket and maintain suitable equipment for a service entrance. All required service conductors shall be sized in accordance with all applicable codes.

2. The customer shall pay a temporary service connection fee for single-phase temporary service in addition to regular monthly charges at the applicable service rate.

3. The customer shall pay a temporary service connection fee for three-phase, temporary service in addition to regular monthly charges at the applicable service rate.

4. Temporary service requests that do not conform to the conditions specified above may be granted at the sole discretion of the City. The customer shall reimburse the City for all costs associated with installing and removing such "non-routine" temporary services.

5. Temporary service is intended for limited use only and should not exceed a period of one year. Permanent service entrance equipment shall be installed as soon as practicable.

EE. WIRING CERTIFICATION.

1. The City shall not connect any new or rehabilitated service to the City electric system except upon certification that the new wiring conforms in all respects to the Minnesota State Board of Electricity and this Chapter.
2. As required by Minnesota State Statute 326.242, and as amended, all wiring in mobile home parks must be performed by properly licensed employees of licensed electrical contractors. Owners of manufactured homes, park owners, or other unlicensed persons are not permitted to install wiring for any purpose.
3. As required by Minnesota State Statute 326.244, and as amended, all new or replacement wiring is required to be inspected. This includes connection of new or relocated manufactured homes.
4. The City reserves the right to make a further inspection of service entrance and grounding equipment before making any connection to its electrical system.
5. Any inspection by the City shall not be deemed to be an approval of the adequacy of any wiring or certification that such wiring conforms to the rules and regulations of any authority having jurisdiction.

55.02 Extension or Upgrade of Existing Lines

(1) Meter Installations.

- a) Any new or Replacement Meter Installations. The City shall make the determination of the type and form of metering devices to be installed. This will be in the best interests of the City and shall be determined by the Utility Superintendent or their agent.

(2) Secondary Service Installations

- a) All New Single & Three Phase Overhead Secondary Service Installations. The expense of the installation of overhead secondary service wire to the top of the meter mast and the cost of the meter shall be paid by the City. The expense of installation of the complete service pole, meter loop, which includes wiring, conduit, meter can, weather head, metering transformers, etc., shall be at the consumer's expense, and the City assumes no responsibility with reference thereto. Maintenance and replacement expense shall be apportioned in the same manner.
- b) All New Single & Three Phase Underground Secondary Service Installations. On single and three phase underground secondary services the City shall have the expense of the meter and allow to the consumer the cost of service wires had an overhead service been installed. The expense of installation of the complete meter loop, which includes riser pole, wiring, conduit, meter can, weather head, metering transformers, trenching, etc., shall be at the consumer's expense, and the City assumes

no responsibility with reference thereto. Maintenance and replacement expense shall be apportioned in the same manner.

- c) Transformer Connections. In the event an underground service is to be connected inside of a pad mount transformer, the consumer shall leave ample amount of wiring in the transformer to allow the City to make the connections to the transformer lugs.

(3) New Permanent Installations and Line Extensions

- a) All overhead and underground distribution system installations/extensions. Based upon the recommendation of the Utility Superintendent or his agent, the City may allow up to the maximum amount of two thousand dollars (\$2,000.00) toward the cost of new permanent installations made to the electrical distribution system. Customer shall be responsible for all costs that exceed the amount allowed by the City. Customer may sign a three (3) month installation contract with the City of payment of the costs in excess of two thousand dollars (\$2,000.00), in the event they are unable to pay the total amount upon installation. As for line extensions, the City will pay for the first 400 feet of the line extension. The customer is responsible for actual costs, including equipment and cost of labor, over 400 ft.

- b) New permanent installations or line extensions shall be defined as: Anytime it is deemed necessary, by a customer's request, to extend any part of the permanent electrical distribution system to provide an electrical service a distant point. This includes all costs of all additional material and equipment such wires, poles, conduits, transformer(s), cabinets, etc. that is added to the existing electrical distribution system.

(4) Electrical Distribution System Upgrades, Service Upgrades, Relocating of Existing Service (a) Commercial, Industrial, and Residential Services. Whenever a customer requests a change to an existing electrical service, whether it be an equipment upgrade, which includes transformers, primary/secondary wiring, pole size, metering components, etc., or relocation of the existing electrical equipment, the City shall only pay those expenses deemed necessary by the Utility Superintendent or their agent.

(5) Temporary Installation

- a) For any service single phase temporary service requiring an extension of one span or less, including the removal of the same upon the completion of the service, the customer will be charged the normal meter connection deposit. Customer shall provide meter loop and pole.
- b) For any temporary which involves the extension of one span or more or requires a three (3) phase service, a nonrefundable fee will be collected in advance of construction. This charge will be equal to the estimate in and out costs to install and remove this service. Customer shall provide meter loop, metering transformers (if necessary) and pole. Examples of temporary extension may include carnivals, construction sites, etc.

(6) Means of Disconnection on All New and Replacement Services

- a) For the protection and safety of utility workers and fire department personnel, all new construction of commercial, industrial, or residential services and the replacement of existing services will require a means of disconnection to be located on the exterior wall of the structure accessible from the outside.
- b) All services of 400 amps or less must have a single throw switch or circuit breaker on the load side of the meter. This is to include all single and three phase services.
- c) All enclosures holding the disconnection device will be UL listed and be of weatherproof construction. All installations require a Minnesota State Electrical Permit and must be inspected by the State Electrical Inspector before the City Electric Department will energize the service.
- d) This Ordinance shall take effect and be in force following its passage, approval, and publication as required by law.