



GRAND RAPIDS  
PUBLIC UTILITIES

*Service is Our Nature*

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500 SE Fourth Street • Grand Rapids, Minnesota 55744

Section: <b>Electric</b>	Category:
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## **Section I – Introduction**

This policy was developed to be used as a guide by Grand Rapids Public Utilities (GRPU) personnel and to provide each customer the greatest practicable latitude in the use of service consistent with reliable, economical and safe service to all customers. The Grand Rapids Public Utilities Electric Department Rules is on file at the Grand Rapids Public Utilities office, 500 SE 4th Street, Grand Rapids, MN 55744, Telephone: 218-326-7024, Fax: 218-326-7499. Copies are obtainable by any customer upon request made in person, telephone, by email, or by mail at the GRPU office. The result of using this manual should be consistent, logical and fair treatment of GRPU customers in regard to electric service issues.

Legal ramifications of these policies are addressed in various parts of applicable code and regulations.

## **1. Definitions**

The following terms when used in these Service Regulations, in Rate Schedules and in Service Agreements, shall, unless otherwise indicated, have the meanings given below:

**Customer:** Any individual, partnership, association, firm, public or private corporation or governmental agency having GRPUC's electric service at any specified location.

**Customer Extension:** Any branch from, or continuation of, an existing line to the point of delivery to Customer, including increases in capacity of any of GRPUC's existing facilities, or the changing of any line to meet the Customer's requirements, and including all transformers, service drops and meters.

**Customer's Installation:** In general, all wiring, appliances and apparatus of any kind or nature on Customer's side of the point of delivery (except GRPUC's meter installation), useful in connection with Customer's ability to take electric service.

**Electric Service:** The supplying of electric power and energy, or its availability, irrespective of whether any electric power and energy is actually used. Supplying of service by GRPUC consists of the maintaining by it, at the point of delivery, of approximately the agreed voltage and frequency by means of facilities adequate for carrying Customer's contracted load.

**GRPUC:** Grand Rapids Public Utilities Commission a municipal corporation established under M.S.A. 412.321 – 412.391.

**Meter:** The meter or meters, together with auxiliary devices, if any, constituting the complete installation needed to measure the power and energy supplied to any Customer at a single point of delivery.

**Month:** An interval of approximately thirty days between successive meter reading dates, except when the calendar month is specified.

**Notice:** Unless otherwise specified, a written notification delivered personally or mailed by one party to the other at such other party's last known address, the period of notice being computed from the date of such personal delivery or mailing.

**Point of Delivery:** The end of GRPUC's service drop, or the point where GRPUC's wires are joined to Customer's service entrance conductors or apparatus, unless otherwise specified in Customer's Service Agreement. For underground services the point of delivery is either the top or first connection at the meter base, or the first connection into the current transformer metering cabinet

**Service Agreement:** The agreement or contract between GRPUC and Customer pursuant to which service is supplied and taken.

**Service Drop:** The wires, owned by GRPUC, connecting GRPUC's distribution mains to Customer's service entrance conductors.

**Service Entrance Conductors:** The wires provided by the Customer extending from Customer's main line switch or center at which circuits originate, to the terminal of the GRPUC's service drop.

## **2. Electrical regulations**

### **a. Purpose**

The primary purpose of these regulations is the practical safeguarding of persons, of buildings and their contents from hazards arising from the use of electricity for light, heat, power, radio and television signaling, and other safeguards to life and property. The National Electric Code Standards of the National Board of Fire Underwriters as approved by the American Standards Association are minimum requirements for electrical wiring and installations. Other requirements, as may be adopted by the Grand Rapids Public Utilities Commission, are included herein and shall be complied with by all licensed electricians or customers working within the jurisdiction of the Grand Rapids Public Utilities service area. Grand Rapids Public Utilities operates under the National Electric Safety Code.

### **b. General**

All electrical wiring, apparatus, and equipment for electric light, heat, and power, shall comply with rules and regulations of the Grand Rapids Public Utilities, and the latest edition of the National Electric Code. This includes compliance with the Railroad and Warehouse Commission, the Commissioner of Insurance, or the Industrial Commission, as applicable, the Minnesota Building Code and any other code as adopted by a governmental agency applicable to safe and adequate electric wiring and installation of equipment. Deviations from the regulations may be made only at the discretion, and with the approval of, the General Manager or the Electric Department Manager, Grand Rapids Public Utilities.

### **c. Access**

The Utility shall have access at all reasonable hours to meters, service connections and other property owned by it which may be located on customer's property. Access shall be provided for purposes of installation, maintenance, reading, checking or removal if necessary. Failure to provide access shall result in termination of service until it has been provided. It shall also be a requirement that the electric meter shall be located outside the building before service will be restored.

### **d. Service continuity**

The Utility will do all it can, when practical, to supply continuous service to its customers. It does not assume direct liability for loss or damage to persons or property due to its service, or as a result of failure of the service, interruptions, or variation because of an act of God, strikes, or any causes beyond the Utility's control.

The Utility reserves the right to curtail or temporarily interrupt the customer's electrical service, when necessary, to make repairs, and replacement changes to the Utility's facilities, either on or off the customer's premises, or during emergencies, when power may not be available on a short term basis.

### **3. Inspection**

#### **a. Affidavits**

Any electrical wiring within the service area of Grand Rapids Public Utilities requires a Certificate (Affidavit) of Electric Inspection issued and obtained by a licensed Master Electrician or from the State Electrical Inspector. Prior to connection to the Grand Rapids Public Utilities electrical system, this Certificate (Affidavit) will be verified to be complete by the utility.

#### **b. Connection refusal**

Refusal to permit the inspector to properly examine the wiring will be cause for Grand Rapids Public Utilities to refuse to connect the premises to electrical service or to discontinue the existing service until such time as the wiring may be inspected. Service connection may also be refused if the wiring is not completed in conformance with the National Electric Code as determined by the Electrical Inspector.

### **4. Customer Classification**

#### **a. Residential customers**

A residential customer is defined to include each separate house, flat, or other living quarters occupied by a person or persons constituting a distinct household using energy for general illumination, for operating household appliances, and space heating. Residential lighting use may be extended to include the use of energy for lighting private garages, private barns, or buildings which are adjacent to, connected with, and used exclusively for the residence being served.

#### **b. Apartment houses**

In buildings having two or more apartments (as defined below), each apartment shall be considered a single-family dwelling. The electrical circuits of each apartment building or portion of a building used for apartments which was constructed or materially changed, with the exception of apartment buildings constructed solely for occupancy by the elderly pursuant to a governmentally subsidized housing program, shall be arranged to permit the consumption of electricity by each apartment to be individually metered. GRPU will install meters to measure the consumption of electricity and will separately bill each individual apartment on the applicable rate schedule. Service shall not be submetered or resold at a higher rate than purchased from GRPU.

An apartment is defined as a portion of a building consisting of two or more rooms completely equipped for living purposes.

#### **c. Non-demand customers**

A commercial customer is defined to include each separate business enterprise, occupation, or institution taking service through a single meter, occupying for its exclusive use any unit or units of space (such as an entire building, entire floor, suite of rooms, or a single room), and using energy or the illumination of such space and for such incidental use as the schedule of rates applicable to the particular installation may permit.

Where a commercial unit and one or more residential units are combined so as to obtain electric service through one meter, the commercial rate shall apply.

Where a single business enterprise, or institution, occupies more than one unit of space in the conduct of the same business, each separate unit will be metered separately and considered a distinct customer, unless the customer makes the necessary provisions for approved circuits and loops by which to connect the different units to permit the metering of all the energy in the various units through one meter.

#### **d. Demand customer**

A demand customer is defined to include each separate business, enterprise or institution occupying, for its exclusive use, any unit or units of space (such as an entire building, entire floor, suite of rooms, or a single room), which falls under the applicable Grand Rapids Public Utilities demand rate customer policy.

Where a single business, enterprise or institution occupies more than one unit of space in the conduct of the same business and requires energy for power purposes (as defined herein in each unit of space), each unit will be metered separately and considered as a distinct customer unless the customer makes the necessary provisions for approved circuits and loops by which to connect the different units to permit the metering of all the energy used for power purposes in the various units through one meter.

#### **e. Types of service**

Types of service that may be available from Grand Rapids Public Utilities are as follows:

120/240 volt, 3 wire, single phase

240/480 volt, 3 wire, single phase

120/208 volt, 4 wire, 3 phase

277/480 volt, 4 wire, 3 phase

Any other voltage such as delta configuration shall be discussed with the Utility before installation. Primary metered or medium voltage services may be available when required.

#### **f. Large load requirements**

Any large loads that are to be added to the Utility system must be discussed well in advance of the installation, as it may require considerable work to make this available.

### **5. Meters - general rules**

#### **a. Complaints**

On complaints concerning high bills, and where a meter check is requested, the Utility will test the meter using calibration equipment under generally accepted industry procedure.

If a customer requests the removal and testing of their electric meter because of high bills, they shall deposit with the Utility the sum of the electric meter test fee in accordance with the applicable Grand Rapids Public Utilities policy and it shall be paid prior to removing the meter for test.

If the meter is found to be accurate within plus or minus three percent (3%), the fee will be retained by the Utility. If the meter is found to be in error beyond these limits, the Utility will bear the cost of testing and return the meter test fee and adjust the customer's bill in the amount of the error for the past six (6) month period.

#### **b. Sealing meters**

Meters, service entrance switches, and service entrance outlets are sealed by the Utility. Such seals shall not be broken or tampered with without the consent of the Utility except in cases of emergency. The Utility should be notified as soon as possible after a seal has been broken.



### **c. Metering facilities**

By-Pass meter sockets shall be installed on the exterior of the building suitable for radio reads closest to the utility transformer as practical as determined by Grand Rapids Public Utilities and located at a point four and one half (4 ½ ) feet above grade. Services that require current transformer cabinets or secondary connection cabinets shall have their meters located closest to the cabinet as practical. Current transformers shall not be located within the Utility transformer enclosure, and shall be located within a dedicated current transformer and secondary connection cabinet. Meters shall not be installed on the utility poles.

The Utility shall supply and retain ownership of all utility meters and metering current transformers.

Off Peak metering shall be at the same location as main meter, as described above.

Any meter located other than in the above fashion, shall be cleared by the Utility prior to installation, or it shall be changed by the customer, at their expense, to conform to the Utility standards.

### **d. Failure of meters to register properly**

In all cases where a utility meter, because of improper adjustment or defective parts, is found to be registering outside the allowable limits of error, correction in the customer's billing will be made as per the applicable Grand Rapids Public Utilities policy.

### **e. Unmetered energy**

When the Utility has reasonable evidence that a customer is obtaining their supply of electricity, in whole or in part, by means of devices or methods used to stop or interfere with the proper metering of the utility service being delivered to their equipment, the Utility reserves the right to estimate and present a bill for service unmetered as a result of such interference. Such bill shall be payable subject to a twenty-four (24) hour disconnection of service.

GRPU will consider depending on circumstance contact or make a report to local law enforcement for theft of utilities.

The customer will be required to pay the Utility for any and all damages to its equipment on the customer's premises due to such stoppage or interference with its metering.

The customer must further agree to comply with reasonable requirements to protect the Utility against further losses.

### **f. Meter malfunction**

When stoppage has been made to occur or interference has been found in connection with electric service metering, and the meter is located inside the building, the customer shall be required, at their own expense, to place all of their inside service and metering facilities outside the building.

Should the Utility subsequently have reasonable evidence that said customer is receiving any utility service, either wholly or partly, unmetered, either in their name or for their use, the Utility reserves the right to discontinue all utility service until proper restitution has been made.

### **g. Number of meters**

Customers shall be furnished one service and one meter to measure energy consumption on their premises unless otherwise approved by the Utility. This shall service all buildings that are electrically combined and are part of that complex. Additional meters shall be supplied for different rate programs such as but not limited to: off peak heating, time of use rates.

If a customer requires redundant service, the Grand Rapids Public Utilities must be advised as soon as possible so the feasibility of such service can be determined. If the Grand Rapids Public Utilities determines that redundant services can and will be provided, the customer will be required to reimburse the Grand Rapids

Public Utilities for the entire cost of the additional services, including all labor and materials. An agreement between the customer and the Grand Rapids Public Utilities may also be executed.

If for some reason, the customer requests and is granted a second meter on their premises, it shall be treated as a separate and individual customer.

#### **h. Redistribution of energy**

All energy sold by the Utility is to be used by the customer for the purposes designated or implied in the rate schedule applicable to their particular installation. Energy so sold may not be resold or redistributed to other metered users unless specifically approved by the utility. Energy sold by the Utility to customers such as apartments, mobile home parks, or similar may be compensated by tenants for purchase of power from the Utility but not at a higher rate than purchased from the Utility.

### **6. Underground and overhead services**

#### **a. General**

Underground services shall be installed in residential or commercial areas wherever practical as determined by the Utility. Any existing service, that is to be replaced, must be installed underground wherever practical.

All Commercial/ Industrial service entrances, through the service disconnecting device(s) shall be installed by a licensed electrician qualified by the State Board of Electricity. All residential service entrances, through the service disconnecting device(s) shall be inspected and approved by the State Electrical inspector.

#### **b. New area development**

Total underground service, both primary and secondary, will be made available in new area developments. Before this type of underground service can be made available, the subdivider must provide a ten (10) foot combined utility easement on the property if not already available. Final grades must be established before the system is installed, and ground brought to grade within at least six (6) inches from the final grade level. Large filled areas must be compacted to prevent settling. Lot boundaries shall be marked by the subdivider or owner prior to installation.

The subdivider shall pay up front all costs incurred by the Utility for the construction of the primary electric service less costs solely for the purchase of transformers and for individual services. Costs for individual services including but not limited to additional primary cable, cabinets, transformers, and secondary electric services will be paid for by either the Contractor constructing the structures, or by the customer if already established for the lot. If the transformer is to serve more than one customer, each customer will only pay for their portion of the shared infrastructure evenly divided between each customer served by the transformer. Infrastructure solely dedicated to each customer shall be paid for by the individual customer.

#### **c. New residential service**

New residential services shall be located underground and shall extend from the source designated by the Utility to the meter socket. Electrical contractor shall supply the appropriate meter socket. Grand Rapids Public Utilities will furnish and install the meter. Services shall be located entirely within the boundaries of the property served and the adjoining public right-of-way to the source of power designated by the Utility. Service entrance shall be located as follows:

At service pedestal on meter post which will be located as close to the transformer as practical. Owner furnishes, installs, and maintains secondary conductor from service pedestal to the residence. Utility furnishes, installs, and maintains secondary conductor from transformer to the pedestal.

**d. Residential service replacements**

Residential services to be replaced for any reason shall be placed underground and shall comply with the requirements of Section 5.c. - New residential service, where practical.

**e. Underground service construction**

Underground electric service depth shall be a minimum of twenty-four (24) inches for low voltage secondary cable less than 600 volts, and a forty-two (42) inches for medium voltage primary cable greater than or equal to 600 volts below the final grade. Conductor shall be installed in as straight a line as possible from power source to meter or service entrance. If trenched in, conductor shall be laid slack in trench. Conductor trench shall be back-filled and compacted with a good fill material, free of rocks and foreign material to prevent damage to cable. Conductor may also be bored or plowed in as a method of installation.

If owner requires electrical services after ground is frozen, owner can provide a trench of required width and depth at no cost to the Utility or Utility can provide a trench at an additional charge.

**f. New single phase underground service supplied to new customer in established areas**

Customer must supply trench and restoration and must comply with all other Utility policies.

**g. Maintenance of underground services**

The Utility reserves the right to cause the underground service to be replaced if such cable is damaged, overloaded, and hazardous or for any condition deemed necessary by the Utility.

The customer and their agents shall not perform work in or on service pedestals, transformers, switching cabinets, vaults, manholes, junction boxes, poles, or towers owned by the Utility.

**h. Underground commercial/industrial (non-demand/demand)**

All commercial and industrial service entrances shall be wired by a licensed electrician, so qualified by the State Board of Electricity. Commercial and industrial services shall be underground except by written authority of Grand Rapids Public Utilities.

The owner shall be responsible for the service entrance to the source of power as determined by the Utility. This includes the removal and replacement of sidewalks and/or pavement as necessary to provide complete service entrance continuity.

**i. Overhead service construction (used only as an exception)**

An overhead drop shall be furnished by the Utility to a suitable support on the customer's premises. This support shall be located so that the service wire will not cross over the building.

Customer's portion of the service shall consist of conduit, a weather-head, and wire furnished by the customer, and attached to their building. Tails shall be left on the customer service wires extending a minimum of three (3) feet beyond the weather-head. The neutral wire shall be identified and shall be continuous (no cut) from the weather-head to the entrance switch (unless otherwise approved by the Utility).

The service mast shall extend above the roof a distance of thirty (30) inches, and must use conduit with a minimum size of two (2) inches, terminating just above the meter connection.

If it is necessary that this service extend unusually high above the roof, the pipe size shall be increased accordingly, to give suitable strength to support the utility service connection. If the conduit is not increased in size, a tie to the building must be supplied by the customer to support the service wires.

The point of attachment to the customer's premises shall be high enough to allow for clearance above ground to allow for vertical clearance of conductors as per the National Electric Safety Code.

**j. Service termination**

No service shall be cut at any time by the customer and they shall not break the seal or remove the meter for any reason. The Utility must be notified and they will make any adjustments necessary. If this rule is not complied with, suitable penalties shall be imposed on the one interfering with this service.

**k. Service relocation**

When the utility pole or service pedestal must be replaced or relocated because of a request from the customer, the customer is responsible for reimbursing the Utility the cost of moving or replacing the underground service.

If the Utility replaces or relocates the pole or service pedestal of its own volition, the Utility is responsible for the expense of moving or replacing the underground service.

**7. Temporary Service**

**a. Construction**

Temporary service for construction purposes may be obtained upon compliance with the provisions of the Certificate (Affidavit) of Electrical Inspection and payment of the required fee plus customer deposit for service as per Utility policy.

**b. Extensions**

Temporary extensions of primary and/or secondary distribution shall be extended under the following rules:

The customer will reimburse the Utility for its expenditures in extending service.

The “cost of extending service” includes all items of labor and materials, with the customary overhead charges necessary to furnish the customer with the service requested. It shall also include any costs involved in the dismantling of materials and their return to stock. Where materials dismantled have a salvage value, the “cost of extending service” will be credited with such salvage value.

The Utility will require the customer to make an advance deposit sufficient to cover “cost of extending service” and the estimated bill for energy.

A connection to a permanent service for power used during construction is not considered to be Temporary Service under these rules.

**c. Measurement and costs**

All energy will be measured at one standard voltage at some convenient point designated by the Utility.

The customer will make necessary arrangements and provide for the necessary equipment in the event more than one voltage is required.

The cost of all construction (labor and materials) necessary to distribute energy on the premises occupied by the customer will be borne by the customer.

**d. Construction safety**

No connections will be made to any temporary switch unless it conforms to the current Utility standards and the National Electric Code.

All temporary services shall be equipped with ground fault equipment as required by the National Electric Code.

All temporary service shall be maintained in a safe manner so that injury to persons shall not result from contact with it in any manner. This shall only remain as temporary for a reasonable length of time and must be changed to a permanent one when directed by the Utility.

**e. Deposits and fees**

All deposits for electrical services shall be in accordance with the deposit rules as set forth by the Utility.

**8. Service Extension**

**a. General**

The following rules shall govern the extension of GRPU's electric distribution lines and service connections in all areas served by GRPU to all classes of retail Customers requiring GRPU's standard single or three phase electric distribution service.

The standard type of extension shall be the most feasible and economical as determined by GRPU and shall be constructed in accordance with reasonable engineering standards. When conditions require extensions from or connections to lines of voltages other than the standard voltage or where line construction other than GRPU's standard construction is required including alternate feeders, GRPU reserves the right to make adjustments to these rules for such non-standard extensions.

Facilities on the Grand Rapids Public Utilities side of the point of delivery shall at all times remain the sole property of GRPU, regardless of any contributions in aid of construction paid by Customers. When meter pedestals have been installed by GRPU, Customer shall be responsible for installing and will remain the sole property owner of all facilities on Customer's side of the meter. In the case of overhead service drops, Customer shall be responsible for installing and will remain the sole property owner of all facilities on Customer's side of the service drop. In case of cancellation of Customer's service agreement for any cause, GRPU shall have the right to remove all facilities installed for serving Customer.

**b. Extension cost**

The "Extension Cost" is the estimated cost of extending lines and the addition or relocation of facilities to serve new Customers or new loads. This shall be the total cost of extending the line, including all branch or lateral lines, but excluding the cost of transformer, current transformers, meter, and any system betterment's.

**c. Contributions**

The "Contribution in Aid of Construction," hereafter referred to as Contribution, is the additional amount required to support the GRPU's Extension Cost. Where a line extension other than GRPU's standard type extension is required, including alternate feeders, a Contribution shall be required to support any additional cost of such non-standard extension.

**d. Basis for making extensions for permanent service**

If the Extension Cost does not exceed Customer Service Allowance of \$950 and GRPU's standard type construction is used in making the extension, Customer shall not be required to make payment to GRPU for the Extension Cost. If the Extension Cost exceeds \$950, customer must pay Company in advance a Contribution for the Extension Cost in excess of \$950.

For multi-resident housing units such as apartments, multi-unit townhouses, resident care facilities, or similar, Customer must pay Company in advance a Contribution for the Extension Cost in excess of \$950 per transformer serving these facilities as deemed necessary by the Utility Engineer.

**e. Conversion from overhead to underground**

When Customers request conversion of existing overhead electric service facilities to underground facilities, GRPU may at its discretion make such conversions subject to the following conditions:

When an overhead service drop is replaced with an underground service drop, Customer shall pay Contribution to the GRPU equivalent to the GRPU's total estimated installed cost of the underground service drop plus the estimated undepreciated balance of the overhead service drop being replaced less the estimated replacement cost of the existing overhead service drop.

When overhead distribution lines and service drops are replaced with underground facilities:

All property owners on contiguous lots served by the distribution line or a portion thereof, which will be converted, are agreeable to the conversion.

Satisfactory easements and right-of-way necessary for the installation, operation and maintenance of the underground system can be furnished without expense to the Company.

Property owners shall pay a Contribution to the GRPU equivalent to the installed cost of the underground system plus the estimated undepreciated balance of the overhead system being replaced less the replacement cost of the existing overhead system.

#### **f. Special conditions**

Construction of an extension will commence when the following conditions have been met.

Agreements, when required, shall have been executed by each Customer and accepted by GRPU specifying initial contract period, guaranteed annual revenue, and any Contribution.

Each Customer has paid to GRPU his/her share of any Contribution.

Satisfactory right-of-way necessary for the construction, operation and maintenance of the extension (including any tree trimming rights) both for the purpose of providing access to the extension on Customers' premises and for continuing the extension to other Customers, has been furnished without expense to the GRPU.

The extension cost will include excess installation costs incurred by the GRPU because of special conditions that impede the installation of distribution facilities. Such special conditions include, but are not limited to ground frost, surface or subsurface impediments and submarine installations. Surface or subsurface impediments may include, but are not limited to: rock, bedrock, sub-surface structures and wetlands.

### **9. Motors**

#### **a. Authority**

Special permission shall be obtained from proper authorities of the Utility to install any motor larger than ten (10) HP on residential service lines. On commercial service, motors of twenty-five (25) HP or larger may require reduced voltage starters as determined by the Utility.

#### **b. Power factor**

If the power factor drops below 95% due to the operation of a large motor or a number of smaller motors in an establishment, suitable corrections must be made.

All motors operating at 220 volts or more, larger than 3 HP shall have capacitors to correct for power factor and these capacitors shall be energized when the motor is operating.

### **10. Generators**

To prevent a hazard to personnel and damage to Utility equipment, whenever approval has been given for stand-by generation, the customer shall install an approved double throw switch. This switch shall completely disconnect the Utility service from the customer's system whenever the generator is used.

## **11. Permits**

### **a. Responsibility**

The contractor shall be responsible for any damages to the property of the utility resulting from not following the guidelines of Gopher State One-Call. A violation of these regulations shall constitute a misdemeanor.

## **12. Policy history**

Effective: May 8, 2002

Adopted: May 8, 2002

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Revision: April 13, 2011

Revision: February 9, 2022 (revision to all sections)