
**CITY OF FOUNTAIN ELECTRIC DEPARTMENT
REVIEW COMMENTS**

TO: HR GREEN DEVELOPMENT, LLC, ON BEHALF OF GOODWIN KNIGHT
FROM: TRACY TILLMAN DISTRIBUTION SYSTEM DESIGNER
SUBJECT: PUD/PRELIMINARY PLAN FOR THE COTTAGES AT MESA RIDGE PROJECT,
GENERALLY LOCATED WEST OF THE POWERS BOULEVARD AND MESA
RIDGE PARKWAY INTERSECTION.
DATE: 10/05/21
CC: DAN BLANKENSHIP; CARL CHRISTIAN CODY CLARK; RANDAL BURROWS
KRISTY MARTINEZ; GABBY SERRANO; MELANIE ESTRADA

Please be advised this document is to serve as the City Of Fountain Electric Review Comments for the PUD/Preliminary Plan for the Cottages at Mesa Ridge project, generally located west of the Powers Boulevard and Mesa Ridge Parkway intersection.

Upon reviewing the materials submitted for this project the City of Fountain Electric Department has determined we will be pleased to serve this project as it falls within our electric service territory.

Please note that the developer will be required to provide all off site easements to serve this development, to include easements that will provide a redundant loop feed to ensure reliable service for the entire project. The developer will also be responsible for and costs associated with all off-site improvements including line extensions and street lighting, etc.

We have attached a copy of the City of Fountain Regulations Governing Electric Service and Development Guidelines for reference purposes.

A CAD copy of the site plan and completed Load Data Form will be required to assist in planning the additional power load for this new project.

For any further questions or concerns please contact Tracy Tillman at 322-2061.

REGULATIONS GOVERNING ELECTRIC SERVICE

TABLE OF CONTENTS

I. INTRODUCTION

General Statement and Delegation of Authority
Availability of Regulations
Revisions
Conflict
Liability and Indemnification

II. DEFINITIONS

III. SERVICE CONDITIONS

Customer's Installation
Interference with Quality of Service
Phase Balancing
Customer's Wiring and Equipment
Welders
Motor Protective Devices
Instantaneous Demand
Harmonics and Harmonic Current Distortion Limits
Power Factor

IV. METERS

Point of Delivery
Meter Locations
Construction Specifications
Meter Tests
Separate Meter for Each Class of Service
Additional Meters; Prohibition on Resale of Electricity

V. MISCELLANEOUS

Additional Load
Attachments to Utility Property
Customer Power Outage
Diversion of Electric Energy
Service Failures
Notice of Trouble
Resale of Electric Energy
Right of Access

Complaints
Computation of Time
Line Extension Policy
Cogeneration and Small Power Production

I. INTRODUCTION

General Statement and Delegation of Authority

The following Regulations are issued pursuant to the authority conferred upon the Utilities Director by the Utility Code. They are issued in order to provide for the efficient and reliable operation and administration of the City of Fountain's Electric Utility (hereafter referred to as "Utilities" or the "Electric Department" as the case may be). The following Regulations shall govern all classes of service and all territory served by the Electric Department.

Availability of Regulations

Copies of these Regulations and any amendments thereto shall be available for inspection during regular business hours in the office of Utilities and shall be posted and maintained on the City's website under "Utilities".

Revisions

These Regulations may be revised, amended or otherwise changed at any time by written action of the Utilities Director, subject to Charter, Utility Code, applicable ordinances, resolutions and statutory and constitutional provisions. These Regulations cancel and supersede all previous "Rules and Regulations Governing Electric Service".

Conflict

In the case of conflict between any provisions of a particular rate schedule and these Regulations, the provisions of the particular rate schedule shall govern.

Liability and Indemnification

See Utility Code.

II. DEFINITIONS

Unless the context specifically indicates otherwise, the definitions below are in addition to the definitions set forth in Section 1.04.030 of the City Code and those contained in the Utility Code and such definitions are fully incorporated by reference in these Regulations.

Codes: Safety, installation, and equipment standards generally used and applied in the electric utility industry and by the Electric Department. Such codes include, but are not limited to, the National Electric Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), the American National Standards Institute (ANSI), the National Electrical Manufacturers Association (NEMA), and the National Electrical Safety Code (NEESC).

Electric Specifications: Electric Department's Design Standards and Construction Specifications.

Kilovolt-Ampere (KVA): A unit of apparent electric power in thousand volt-amperes.

Line Extension: Any addition to Utilities existing distribution lines and facilities.

Point of Delivery (Service Point): The point of delivery is that point on the customer's premises (or other agreed point) where the Electric Department terminates its electrical service conductors and the customer's wires are connected to Electric Department conductors.

Power Factor: A ratio of kilowatts to kilovolt-amperes.

Primary Voltage: A nominal electric distribution voltage, typically 7200/12470 volts.

Secondary Voltage: Nominal electric service voltage, typically 120/240 single phase, 120/208 and 277/480 three phase.

Rate: The amount imposed for a unit of service for the delivery of service, for the availability of service during a specified time period regardless of use, or for a combination of the above. Unless otherwise excepted by statute, rate includes an amount subject to public hearing under 40-3.5-104(1)(a), C.R.S. relating to electric service. The term does not include fees or charges but a rate may be used to determine fees and charges.

III. SERVICE CONDITIONS

Customer's Installation

- A. Before purchasing or beginning construction of a proposed installation, the customer shall confer with the Electric Department to determine if the type of service, capacity, and voltage desired by customer is available; to determine if extensions of, or additions to, the Utilities facilities will be required; and to determine the definite location of the point of delivery. Before any additions to or alternations of existing installations are made by the customer which will materially affect the amount of service required, or which may require a change in the type of service or the point of delivery, the Electric Department must be notified reasonably in advance as to the proposed additions or alterations in order that it may be first determined by the Electric Department if the service desired is available and, if so, that the necessary changes in the Utilities facilities may be arranged for and completed.
- B. All wiring and other electrical equipment on the customer's side of the point of delivery will be furnished, installed and maintained at all times by the customer in conformity with good electrical practice and with the requirements of the National Electric Code (NEC), the National Electric Safety Code (NESC), the wiring regulations of the public body having jurisdiction, and in accordance with these Regulations as well as administrative rules adopted by the Electric Department. The Electric Department may also require the customer to meet additional safety conditions when deemed necessary due to the customer's proposed use or installation. It shall be the customer's responsibility to provide suitable protective equipment to adequately protect the customer's wiring and equipment.
- C. The customer's side of the point of delivery, service wiring and equipment shall be required to meet the service conditions set forth in these Regulations, Line Extension and Service Standards and also all requirements adopted by the Pikes Peak Regional Building Department. Failure to meet these conditions shall constitute cause for refusal to serve or discontinuance of service, whichever is appropriate. Any waiver by Utilities of any service condition contained herein must be in writing. The Electric Department retains the sole discretion to determine compliance with these service conditions.

Interference with Quality of Service

If, in the opinion of the Electric Department, service to a customer creates interference with the quality of service supplied to neighboring customers, including those situations where the customer fails to comply with these Regulations and the Codes, the Electric Department may require the customer to provide at the customer's own expense such special or additional equipment as is required. The Electric Department may, in its discretion, provide such equipment if customer fully pays the net estimated installed cost of such equipment. If the customer refuses to provide its own corrective equipment, or to

reimburse the Electric Department for the cost of such additional or special equipment as is required to eliminate interference with the quality of service to neighboring customers resulting from the failure to install corrective equipment or take appropriate corrective practices, Utilities may refuse or discontinue the customer's service.

Phase Balancing

- A. Where any single phase or three phase service is supplied, the load must be balanced as nearly as practicable between the two sides or several phases, respectively. In no case is the load current on one side of a three-wire single-phase service to be greater than twice that on the other. Additionally, the load currents of a three-phase wye-connected service shall be balanced within 5% between phases.
- B. If the customer does not comply, within 30 days of a request by the Electric Department to balance the service, Utilities has the option of discontinuing service or upgrading the facilities at the customer's expense to accommodate the imbalance. The repair of any damage to the Utilities facilities caused by the imbalance will be at the expense of the customer causing the imbalance.

Customer's Wiring and Equipment

It shall be the customer's responsibility to provide suitable protective equipment such as fuses, circuit breakers and relays to adequately protect their equipment. If three-phase equipment is used, it shall be the customer's responsibility to protect it against phase failure, phase reversal, and under and over voltage. Specific requirements governing conditions of service shall be contained in standards, specifications or guidelines issued by the Electric Department.

Welders

- A. Utilities will serve, at the applicable rate and without additional compensation, welding equipment of the limited input type which conforms to the standards of the National Electrical Manufacturers Association (NEMA), and which has a maximum input (primary) current rating not exceeding 12 amperes at 120 volts or 50 amperes at 208 or 240 volts.
- B. Welding equipment which does not meet the standards of NEMA, or which exceeds in input rating 12 amperes at 120 volts or 50 amperes at 208 or 240 volts, will also be served at the applicable rate, at the discretion of the Electric Department, provided that service to such welders has no detrimental effect on service to neighboring customers. Such equipment may, at the direction of the Electric Department, require an upgrade in service to the customer. All costs of said upgrade will be paid by the customer.

Motor Protective Devices

All motor installations shall have protective apparatus or construction within the motor to accomplish equivalent protection as follows:

- A. Suitable overload and overcurrent running protection shall be provided for each motor so as to disconnect the motor from the line to protect it from damage caused by overheating.
- B. Phase reversal and open-phase protection is required on all three-phase installations, and is required for such installations involving elevators, hoists, and similar equipment to disconnect motors from the line in the event of phase reversal or opening of one phase.
- C. In the event any of the above is not followed and damage to customer equipment occurs, Utilities will assume no responsibility.

Instantaneous Demand

In order to protect service and equipment, motors of ten (10) HP or larger shall have such characteristics, or be equipped with a starter of such design, that the instantaneous starting current requirement will be limited to approximately 300% of normal full load current.

Harmonics and Harmonic Current Distortion Limits

- A. Each customer requesting electric service from Utilities, single-phase or three-phase, shall be responsible for limiting the harmonic current distortion levels at their electric service metering point to the levels prescribed in the latest edition of the Institute of Electrical and Electronics Engineers (IEEE) 519 standard.
- B. The requirements, terms, conditions and remedies for noncompliance with the harmonic current distortion levels may be set forth in a rate schedule approved by Council.

Power Factor

- A. All non-residential customers with a maximum monthly demand in excess of 20 kw shall be required to maintain a 95% power factor at the customer's peak. Failure to maintain a 95% power factor may result in additional charges to the customer pursuant to the terms of the rate schedule approved by Council for the particular service category.
- B. All 5 HP or larger motors shall be required to install capacitors connected to the motor starter to be energized when the motor is running.
- C. In the event it is not practicable for the customer to correct the power factor as required by these Rules, Utilities may, at the option of the customer, discontinue

service or install corrective equipment on the Utilities system at the customer's expense.

- D. All services, equipment, and installations must meet all applicable Codes.

IV. METERS

Point of Delivery

Metering Equipment Requirements:

- A. The point of delivery is that point on the customer's premises (or other agreed point) where Utilities terminates its electrical service conductors and the customer's wires are connected to Utilities conductors. All equipment on the load side of the point of delivery shall belong to, and be the responsibility of the customer, except meters and other equipment provided by Utilities, including instrument transformers. If an outage occurs due to failure of the housing components, the customer is responsible for repairs.
- B. It shall be the responsibility of the customer, or the customer's electrical contractor, to obtain the Electric Department's most current standards, specifications or guidelines and to advise the Electric Department of the customer's requirements in advance of installing the service entrance equipment, and to ascertain that the location is acceptable to the Electric Department.
- C. The customer shall furnish and install a meter housing approved by the Electric Department for the installation of the Electric Department's metering equipment. If, in the Electric Departments' discretion, instrument transformers are required, the customer shall furnish and install an approved suitable metal enclosure for the installation of instrument transformers and the metering sockets for which the Electric Department will furnish and install the meters. In the case of meter clusters, the customer shall furnish and install metering equipment that has been approved by the Electric Department's Engineering and Metering Divisions. Electric Department staff will inspect installations at the time of service connection.
- D. In multi-unit buildings each meter socket shall be plainly and permanently marked with an engraved brass badge to indicate which apartment or unit it supplies. The marking shall be the same as the mailing address for each apartment or unit. The owner or developer shall be responsible for all electricity delivered through unmarked, illegible or incorrectly labeled meter sockets. Utilities will bill all expenses incurred by the Electric Department related to correcting improperly labeled meters to the developer or owner, who shall pay such expenses within 30 days of receipt of said billing.

Meter Locations

- A. Meter housings for all types of services shall be located on the outside of the building or structure and accessible to personnel of the Electric Department. The location of meters and metering equipment will be located at the front third of the garage, unencumbered by any permanent structures, and readily accessible at all reasonable hours for reading, testing, inspecting, and other maintenance purposes. Meters will not be installed where they will interfere with traffic, sidewalks, driveways or behind fences.

Construction Specifications

- A. Meters shall not be installed in places difficult to access, such as over open pits, moving machinery, hatchways, in the path of water from eaves or rain spouts, or subject to live steam or corrosive vapors. It shall be the responsibility of the customer to maintain a clear space of at least 36 inches in front of the meter. No hazardous plants, shrubs or other obstructions shall be placed within the 36-inch clearance area. If a violation of this requirement occurs, the customer shall be given 7 days to comply after written notice. After the expiration of the 7 days, the Electric Department, in its discretion, may conform the meter access to these requirements at the customer's expense or discontinue service.
- B. Meters shall not be installed on poles or on pad-mount equipment.
- C. Meters shall be installed at a height of approximately five and one-half (5 ½) feet on center above the ground or platform (except in meter pedestals provided by the Electric Department). In cases where unusual conditions exist, the Electric Department shall be consulted prior to installation.
- D. All electric meters and enclosures containing metering equipment shall be sealed. The seals are not to be broken without prior permission from authorized personnel of the Electric Department. Personnel of the Electric Department will seal all compartments, including instrument transformer compartments, and main switch enclosures located on the line side of multiple metering installations. Breaking of seals shall be grounds for terminating service and the imposition of diversion fees.

Meter Tests

- A. The Electric Department will, at its own expense, make periodic tests and inspections, as required, on its meters to insure a high standard of accuracy. Utilities may, in its discretion, test a meter at any time. Utilities will, at its own expense, make one meter test per year upon the customer's request. A meter shall be considered accurate if it tests within 2% plus or minus. Bills will be adjusted if a meter tests in excess of the 2% accuracy standard, but the maximum adjustment period shall not exceed the time from the last meter test or 6 months, whichever is less.

- B. Additionally, more frequent tests will also be made at the request of the customer. However, in the event the meter is found to register within 2% plus or minus, the customer will be required to pay a test fee as set forth in the then current Fee Schedule. If the meter is found to exceed the 2% limit plus or minus, the bill may be adjusted accordingly for the preceding six (6) month period or until the previous test, if tested less than six (6) months before, and no charge will be made for the testing.

Separate Meter for Each Class of Service

When the customer receives service under more than one rate schedule, a separate meter must be installed for service under each rate schedule. The customer will be billed under each rate schedule based on the measurement registered by the applicable meter and under the applicable rate schedule.

Additional Meters; Prohibition on Resale of Electricity

Should the customer desire the installation of additional meters other than those deemed necessary by the Electric Department to adequately measure the service taken by the customer, such additional meters shall be provided, installed and maintained at the expense of the customer. Electricity supplied by Utilities is for the exclusive use of the customer. The customer may not, by sub-metering, determine a quantity of electric energy and resell said electric energy with any type of mark-up to any other person or persons on the customer's premises or for use on any other premises.

V. MISCELLANEOUS

Additional Load

If the customer desires a material change in load, the customer shall notify the Electric Department in writing and in advance of the material change so that, if necessary, the Electric Department may change its line and/or service equipment at customer expense. In the event the customer fails to notify the Electric Department, and, as a result, the equipment of the Electric Department is damaged, the customer shall be liable for the cost of such damage. Utilities will not be responsible for providing adequate service in the event that it is not properly notified as set forth herein.

Attachments to Utility Property

No posters, banners, placards, radio or television aerials, or other objects will be attached to the poles or other utility property of Utilities. Any attachment to Utilities poles or other utility property must have the express prior written authorization of Utilities. Attachment to the pole by others under the 1996 Federal Telecommunications Act for providing services must be made pursuant to a pole attachment agreement provided by the city.

Customer Power Outage

If service fails, the customer shall endeavor to determine if blown fuses, tripped breakers,

or, customer equipment is at fault before calling the Electric Department. If an Electric Department service employee is sent out at the customer's request and it is determined that the customer's equipment is at fault, a charge may be made for the call as set forth in the Fee Schedule adopted by Council.

Diversion of Electric Energy

- A. Definitions. See Utility Code.
- B. Prohibited Activity. Energy diversion constitutes theft and a safety hazard. As such, energy diversion is prohibited. Because energy diversion activities are inherently unsafe, discovery by the Electric Department that energy diversion has occurred shall be grounds for immediate disconnection of service without prior notice to the customer or user at such premises, and service shall not be reconnected until any and all deficiencies in wiring, connections, meters and/or electric facilities at the premises have been repaired, corrected or otherwise altered to conform with the requirements of the Electric Department. In any case where energy diversion has occurred and immediate disconnection is effected, Utilities will give notice concurrent with the disconnection or as soon as practicable thereafter and provide an opportunity for hearing as provided in the Utility Code regarding possible resolution of the dispute.
- C. Estimated Bill. In all cases where the Electric Department discovers that energy diversion has occurred, Utilities may bill the customer for estimated energy consumed but not properly registered. Such billing shall include, in appropriate circumstances the cost of any consultant retained by Utilities to assist in determining the estimated energy use.
- D. Additional Charges. Where Utilities discovers that energy diversion has occurred, Utilities, in its discretion, may charge the customer for the reasonable costs of investigation and the costs resulting from the installation of protective devices by the Utilities.
- E. Waiver. The foregoing rule and payment by the customer of any charges thereunder in no way limits or waives Utilities rights to pursue any and all remedies provided or affects any action or prosecution, under applicable Colorado laws and ordinances of the City of Fountain, absent an express written agreement to the contrary.

Service Failures

- A. Utilities will endeavor to provide a constant and uninterrupted supply of power and energy to its customers and to avoid service failures, but does not guarantee same. Utilities shall not be liable for any loss or damages, including consequential or special damages, resulting from service failures caused by

accidents, acts of God, action of the elements, public enemy, strikes and other work stoppages, wars, authority or orders of government, required maintenance work, equipment breakdown, the unavoidability, restriction or interruption of its wholesale power and energy supply, or any other causes or contingencies beyond its control.

- B. Service failures include, but are not limited to, phase reversals and/or single phasing of three-phase services, voltage transients, frequency deviations, wave shape deviation and service interruptions. In addition to the causes listed above, service failures may result from generally accepted utility system design, construction or operating practices and procedures.
- C. The customer shall provide at its expense any devices necessary for adequate protection of its equipment, processes, products or personnel against such service failures. Utilities shall not be liable for any loss or damages caused by service failures resulting from utility system design, construction or operating practices and procedures unless both the Utilities acted in a negligent manner and the loss or damage would have occurred despite the proper installation and operation of the appropriate protective devices by the customer.

Notice of Trouble

In the event service is interrupted or is not adequate, or any hazardous condition is known to exist, it shall be the obligation of the customer to promptly notify Utilities of such existing condition.

Resale of Electric Energy

Electric energy supplied by Utilities is for the exclusive use of the customer. The customer may not, by sub-metering, determine a quantity of electric energy and resell said electric energy to any other person or persons on the customer's premises or for use on any other premises. A master meter customer may, however, check meter tenants, lessees, or other persons to whom ultimately the electricity is distributed for the purpose of reimbursing the master meter customer through an appropriate allocation procedure. In that event, Utilities reserves the right to check said meters and evaluate the reimbursement procedure to protect against inequities and guarantee that the customer is not reselling the electric energy. Utilities' reserves the right to refuse to furnish electric service to any customer where the purchase of such service is for the purpose of resale by the customer to others. In the event electric energy is sold in conflict with this rule, Utilities shall have the right to discontinue service to the offending customer.

Right of Access

Access to the premises of customers shall be provided by the customer at all reasonable times for authorized employees of the Electric Department for any proper purpose incidental to the supplying of electric service. This includes, but is not limited to, reading meters and testing, inspecting, repairing or replacing any equipment which is the property of Utilities; investigating possible energy diversion; and responding to emergency

circumstances to protect the public safety and welfare. If access to the property or any equipment is limited in any fashion, the customer shall take all steps, including the provision of keys where necessary, to provide access to the Electric Department's authorized employees or contractors. All easement areas shall be maintained for adequate access to Utilities equipment. Utilities shall have the right to remove any obstruction at the customer's expense if the customer does not correct the access problem within 72 hours after notification of the problem. In the case of an emergency, Utilities may correct the access problem without notice.

Complaints

- A. Utilities will investigate promptly all complaints by its customers. Utilities will keep for at least two (2) years, a record of all written complaints including:
1. The complaint itself;
 2. The date received;
 3. The date finally disposed; and
 4. The actual disposition of the complaint.
- B. The following procedure governs complaints to Utilities:
1. A customer may contact Utilities informally by telephone or in person to attempt to resolve any complaint. The appropriate staff person will investigate the complaint and may take appropriate action.
 2. If the customer is not satisfied with the outcome of the informal complaint process, the customer may request a formal hearing pursuant to provisions contained in the Utility Code.

Computation of Time

In computing any period of time required or allowed by these Regulations, the day of the act, event, mailing or delivery from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, Sunday or a City of Fountain observed holiday, in which event the period runs to the end of the next day which is not a Saturday, Sunday or observed holiday. All references to a number of "days" herein, shall refer to calendar days and not working days, unless indicated otherwise.

Line Extension Policy

- A. General Information. The Electric Department is responsible for the standards; electrical engineering and design associated with all Utilities-owned and maintained electric facilities. All electric distribution systems will comply with the requirements outlined in these Regulations and the "Line Extension and Service Standards" ("Electric Specifications"), as adopted by the Utilities

Director. Line extensions will begin at the closest suitable point of the electric distribution system, as determined by the Electric Department. The developer or owner will be responsible for acquisition of easements outside of developing areas that may be needed for system upgrades in order to serve the project. Utilities shall own, install, and maintain all primary voltage systems, including transformers. The developer or owner shall pay all construction and installation costs required for street lighting systems designed by the Electric Department along public roadways within the development, and the appropriate portion of costs required for street lighting systems along public roadways contiguous to the development.

B. Residential Service Extensions. Residential subdivision developments within the Utilities electric service territory will incorporate front of lot underground facilities, with a redundant loop feed to ensure reliability. Individual building lots within areas with established overhead facilities and rural subdivision developments may incorporate either overhead or underground facilities pursuant to the requirements of the Electric Specifications. Underground installations will utilize pad mounted transformers. Available single phase voltage will be 120/240 volts. The extension will end at the customer's point of delivery and the responsibility for service facilities is:

1. Meter Pedestals: The customer will install, own, and maintain the service facilities from the meter pedestal. These facilities shall be in accordance with the requirements of the NEC and the Pikes Peak Regional Building Department.
2. Secondary Junction Vaults: Where secondary junction vaults have been installed in residential subdivisions in lieu of pedestals, the Electric Department will install the secondary service to the home. The customer will install the meter housing and associated wiring on the home. Customer installed facilities shall be in accordance with the requirements of the NEC and the Pikes Peak Regional Building Department or governing inspection agency.
3. Overhead and the secondary voltage system: Utilities will own, operate and maintain service wiring to the service mast. The customer will own, install, and maintain the service facilities including the mast and attachment point for the secondary service wire drop that is secure and provides proper NESC clearance for associated wiring. Customer installed facilities will be in accordance with NEC requirements and be inspected and approved by the Pikes Peak Regional Building Department or governing agency.

C. Connections

1. **Underground Service:** All connections to Utilities-owned facilities must be made by Electric Department personnel.
 2. **Overhead Service:** Under standard practice, Electric Department personnel will connect the Utilities-owned service drop to the customer-owned mast wiring.
- D. **Procedures.** To initiate the design and cost estimating process for residential development, the builder or developer shall contact the Electric Department for project coordination.
- E. **Costs.** The on-site and off-site cost will be paid by the developer or builder or other responsible party.

"On-site" refers to facilities directly associated with service to the development or building and/or facilities physically located on the development or building site.

"Off-site" refers to facilities directly associated with service to the development or building site that are not located on the development or building site. The cost will be the total of material, labor, labor overheads, equipment, Utilities subcontracted work associated with the project, and engineering/administration costs, based on standard estimating procedures established by the Electric Department. Additionally, a line extension fee will be charged to the builder or other responsible party for the cost associated with the service line from the residential meter to the source of power together with the installation cost. This line extension fee is collected as part of the permit fee issued by the City Clerk. Currently, that fee is \$500.00. Any change to this line extension fee will be posted in these Regulations. The developer or builder is responsible for paying all costs required for street lighting systems within the development, and the appropriate portion of costs required for street lighting along public roadways adjacent to the development. A System Development Charge (SDC) for all new electric services is required. Specific details of the SDC are found in the electric rate schedule entitled "System Development Charge" as approved by the City Council. Payment will be made as required by Utilities.

- F. **Commercial/ Industrial Service Extensions.** Installation and Ownership of Facilities. Underground installations will utilize pad mounted transformers. Overhead installations are limited to a maximum transformer size of 150 kVA.
1. **Underground:** The customer will own, install, and maintain the service facilities from the transformer secondary spades to the facility. Customer installed facilities will be in accordance with NEC requirements and be inspected and approved by the Pikes Peak Regional Building Department or governing agency.

2. Overhead: Utilities will own service wiring up to the service mast. The customer will own, install, and maintain the service facilities including the mast, an attachment point for the secondary service wire that is secure and provides proper NESC clearance, and associated wiring. Customer installed facilities will be in accordance with NEC requirements and be inspected and approved by the Pikes Peak Regional Building Department or governing agency.
 3. Primary Meter Service: Utilities will own, install, and maintain all primary voltage facilities up to and including the customer's metering point. The customer will own, install, and maintain all facilities on the load side of the metering point unless determined otherwise by individual contract. All customer facilities will be in accordance with NESC and NEC requirements.
 4. Connections of Service Facilities: Customer-owned facilities must be inspected and approved by the Pikes Peak Regional Building Authority or appropriate governing agency prior to final connection to the Utilities-owned facilities and/or system.
 5. Underground Service: All connections to Utilities-owned facilities will be made by Electric Department personnel. Unless specifically approved by the Electric Department, the customer will install cable of sufficient length for termination.
 6. Overhead Service: Under standard practice, Electric Department personnel will connect the Utilities owned service drop to the customer-owned mast wiring.
- G. Procedures: To initiate the design and cost estimating process for Commercial/Industrial Service Extensions, the builder or developer shall contact the Electric Department for project coordination
- H. Residential Service Modifications. The service modification may include a meter relocation, electric panel upgrade, conversion from overhead to underground, etc., and may include the customer's point of delivery. The responsibility for service facilities is:
1. Overhead service to underground service modification. The Electric Department will furnish and install conduit and wire from pole to meter housing. The customer or owner will furnish trench from pole to meter housing and backfill after conduit and wire is installed. Customer is responsible for converting from an overhead mast to an underground service entrance including the meter socket.

2. 100 amp underground to 150 amp and above underground service modification. Utilities will furnish and install the conduit and service wire from the transformer or junction box to the meter pedestal. Owner may provide a trench in accordance with Utilities trench specifications, or, pay the Electric Department the cost to trench from the transformer to the new meter location.
3. 100 amp overhead to 200 amp overhead service modification. Utilities will furnish service wiring up to the service mast. The customer will install 200 amp service facilities including the mast and an attachment point for the secondary service.

All service modifications must be approved by Pikes Peak Regional Building Department or appropriate governing agency prior to final connection to Utilities-owned facilities and/or system. All connections to Utilities-owned facilities will be made by Electric Department personnel.

- I. Procedures. To initiate the design cost estimating process for residential modification the customer shall contact the Electric Department for project coordination.
- J. The costs associated with the service modification is established in the Line Extension and Service Standards and will be paid by the customer or other responsible party. Payment shall be made as required by Utilities.

Commercial/Industrial Service Modifications

Service Modification

The service modification may include meter relocation, electric panel upgrade, etc., and will include the customer's point of delivery. The customer is responsible for all modification and all cost of material, labor, equipment, Utilities subcontracted work associated with the project, and engineering/ administration costs, based on standard estimating procedures established by the Electric Department. These costs may include the relocation or alteration of existing electric facilities necessitated by the project. Payment shall be made as required by Utilities

Cogeneration and Small Power Production

- A. The Federal Energy Regulatory Commission (“FERC”) has promulgated regulations with regard to small power production and cogeneration (Part 292 of Title 18 of the Code of Federal Regulations (1984). As required by Federal law, Utilities, as a nonregulated electric utility, will implement the requirements of the FERC regulations through this rule.

- B. This rule applies to all qualifying cogeneration and small power production facilities (“qualifying facilities”), as defined in the FERC regulations, which are willing and able to enter an agreement with Utilities. This rule represents general guidelines, since the nature, size and character of qualifying facilities may vary widely. Utilities’ reserves the right to evaluate each qualifying facility on a case-by-case basis.
- C. Utilities shall purchase energy, or, if satisfactory conditions have been met, capacity and energy, from any qualifying facility who offers to sell energy or capacity and energy. The standard rates for purchases from qualifying facilities with a design capacity of 100kw or less are set forth on the appropriate rate schedule of Utilities as approved by the City Council. Rates for purchases from qualifying facilities with a design capacity in excess of 100kw shall be established by contract on a case-by-case basis.
- D. In establishing rates for purchases from qualifying facilities, Utilities shall consider the criteria set forth in the FERC’s regulations at 18 C.F.R. §292.304(e). Such rates shall: be just and reasonable, be in the public interest, and not discriminate against qualifying facilities. Whether capacity payments shall be made and the amount of capacity to be credited to a qualifying facility shall be determined based upon the criteria established by Utilities pursuant to 18 C.F.R. §292.304(e). Said criteria include, but are not limited to, reliability, availability, dispatch ability, the avoided cost of the Utilities wholesale suppliers, the type of equipment, degree of coordination with the Utilities power supply sources and the Utilities ability to avoid capacity costs.
- E. In the event of the imposition of any tax or payment in lieu thereof on the Utilities, by any lawful authority, on the production, transmission, sale or purchase of energy or capacity and energy that would not occur in the case of a comparable non-generating customer, such tax shall be paid by the qualifying facility.
- F. Upon notification to the qualifying facility, Utilities may discontinue its purchases from the qualifying facility if Utilities determines that purchases from the qualifying facility would result in costs greater than those that the Utilities would incur if it did not make such purchases.
- G. Utilities will determine the appropriate equipment required to meter capacity and/or energy provided by the qualifying facility. This equipment shall be installed, maintained and read at the expense of the qualifying facility.
- H. Utilities will provide electric service to all qualifying facilities located in its service territory pursuant to its standard applicable rate schedules and the Utilities rules and regulations governing electric service. Supplementary, back-up,

maintenance and interruptible power may be provided to qualifying facilities, upon request, at a contract rate determined on a case-by-case basis.

- I. Utilities must be consulted in advance of any construction or operation by a qualifying facility. The qualifying facility shall provide to Utilities all information requested by the Utilities relevant to the proposed construction and operation of the qualifying facility. Utilities will evaluate each proposal on a case-by-case basis and may prescribe reasonable terms and conditions governing construction, operations and interconnection of the qualifying facility.
- J. Utilities may require the execution of a written agreement prior to interconnection containing such terms and conditions as deemed reasonable by the Utilities governing the relationship between Utilities and the qualifying facility. In all cases where the design capacity of the qualifying facility is in excess of 100kw, a written agreement shall be required.
- K. Any and all costs of interconnection, including those incurred by Utilities, shall be the sole responsibility of the qualifying facility. Utilities will also charge the qualifying facility for administrative costs, consulting and legal fees incurred in processing the qualifying facility's application and negotiating an agreement.
- L. Based on mutual agreement, Utilities, in its discretion, may transmit energy or power and energy, supplied by the qualifying facility, to another utility, pursuant to an appropriate contract, to the extent that transmission capacity is available. Utilities may make an appropriate charge to the qualifying facility for such transmission.
- M. Utilities shall provide, upon request, sufficient data to allow a potential qualifying facility to determine the Utilities avoided costs. The data provided will generally conform to the outline provided in 18 C.F.R. §292.302 (1984).
- N. The qualifying facility shall comply with all requirements of the National Electrical Safety Code, National Electric Code, American National Standards Institute, Institute of Electrical and Electronic Engineers, American Society of Mechanical Engineers, and any other applicable local, state, or national codes (including any standards prescribed by Utilities) and shall operate its equipment according to prudent utility practice. In case of any conflict in the foregoing codes or standards, Utilities shall decide which shall govern.
- O. The qualifying facility shall, to the point of interconnection, furnish, install, operate and maintain in good order and repair and without cost to Utilities such relays, locks and seals, breakers, automatic synchronizers, and other control and protective equipment as shall be designated by Utilities as being required as suitable for the operation of the qualifying facility in parallel with the Utilities system. The qualifying facility shall take appropriate steps to ensure that

operating in parallel will not degrade in any fashion the quality of service to its customers that is normally maintained on the Utilities system.

- P. The qualifying facility, at its own expense, must provide switching equipment capable of isolating the qualifying facility from the Utilities system. This equipment must be designated for the exclusive use of Utilities and shall be accessible to Utilities at all times.
- Q. Utilities, in its sole discretion and without notice or liability, may choose to operate the switching equipment described above if, in the opinion of Utilities continued operation of the qualifying facility in connection with the Utilities system may create or contribute to a system emergency or safety hazard. Utilities failure to operate such equipment shall not relieve the qualifying facility of liability for any damage resulting to the Utilities system. Utilities obligation to purchase from the qualifying facility ceases when Utilities operates the switching equipment described above. Utilities shall endeavor to minimize any adverse effects of such operation on the qualifying facility.
- R. The qualifying facility shall indemnify and hold harmless Utilities from any and all liability arising from the operation and interconnection of the qualifying facility. The qualifying facility shall bear full responsibility for the installation and safe operation of the equipment required to generate and deliver energy or capacity and energy to the point of interconnection. All facilities constituting the qualifying facility are subject to the inspection and approval of Utilities, as often as deemed necessary by Utilities, at any time after construction has begun. This right to inspection shall continue after the qualifying facility has interconnected with Utilities. Utilities shall also have a right to inspect maintenance schedules and records. Such inspection or approval of facilities shall not be construed to endorse their design, warrant safety, durability or reliability, or waive any of the Utilities rights. The inspection and approval shall be solely for the use of Utilities. The qualifying facility must, at the request of Utilities, modify existing facilities or install additional facilities to comply with the existing or changing requirements of the Utilities system.
- S. The qualifying facility shall be required to procure and maintain such insurance as is deemed necessary by Utilities, solely at the expense of the qualifying facility.
- T. Utilities may, without cost or liability, discontinue purchases from the qualifying facility;
 - 1. To allow Utilities to perform maintenance, tests or repairs on the qualifying interconnection facilities;
 - 2. During a system emergency where continuing purchases would contribute to such emergency;

3. When the operation of a qualifying facility is jeopardizing the integrity of the Utilities system or interfering with the service to customers or other sources of generation and transmission on the Utilities system; or
 4. When monitoring or inspection by Utilities of the qualifying facility reveals a condition hazardous, in Utilities opinion, to the Utilities system or a lack of scheduled maintenance or maintenance records for equipment necessary to protect the Utilities system.
- U. The qualifying facility shall obtain and supply all easements necessary for operation and maintenance of those interconnection facilities owned by Utilities on the property of the qualifying facility or a third party. This shall include the switching equipment designated above and necessary metering equipment.

Development Guidelines

1. Developers must submit an **electronic copy and hard copy** of the plot plan to the electric department. **The electronic copy MUST be in NAD 1983 Stateplane Colorado Central FIPS (feet).** AutoCAD or ArcMap
2. **Easements:**
 - All easements must be usable to the point of service, of sufficient width for equipment access, within 4" of final grade, no more than 5 degree slope, property pins in place and properly labeled, electric facility must be installed prior to gas, telephone and cable as we are the deepest of these utilities. All apparatus must be accessible 24 hours a day for maintenance (transformers, cabinets, poles etc.)
 - When easements cannot be made usable, notify the Electric Department prior to electric service being designed.
 - When planning the utility easement for your project please do not include it as part of any drainage easement.
 - Exposing energized power lines for foundation over digs can no longer be tolerated. When side lot easements are occupied with power lines, typically for street crossings, the Electric Department **must be notified** of an excavation planning to expose cable. If these cables cannot be de-energized, the excavator or builder must use shoring or other methods in order to leave cables safely intact & covered. The developer or builder may obtain copies of the power design (showing the occupied

easements) from the City of Fountain Planning Department or the Electric Department.

- When front lot installation is necessary, please plat an additional front easement to total 15' in width. The developer will be responsible for acquisition of easements outside of developing areas that may be needed for system upgrades in order to serve the project. ***Don't allow contractors to block easements with equipment, dirt, debris, etc. The electric Department will not start installation of the electric distribution system within the development if the easements are obstructed with equipment, dirt or debris, etc.***
- Exclusive side lot easements. Any side lot used by the Electric Department (distribution & street lighting) will necessitate that easement be platted and filed by the developer as an Exclusive Electric Easement. This will be worded with our electric design and will highlight all such side lot easements for the developer.
- Permanent structures cannot be built in utility easements.

3. Electric Distribution System:

- The Electric Department will install the Electric Distribution System at the requesting party's expense.
- For Underground Electric systems, the Electric Department does not provide ditch compaction. If requested, the Electric Department will provide ditch compaction using a flowable fill mix meeting the Colorado Department of Transportation specifications. The Requesting Party will pay all costs associated with ditch compaction.

- At the discretion of the Electric Department, the requesting party may be required to furnish all necessary trenches, excavations, backfill and compaction. In these cases, the Electric Department will specify the backfill to cover all conduits. If the excavated material contains rock or other debris and will not be satisfactory for backfill, the requesting party will be required to supply proper backfill material and provide compaction if necessary.
 - Full payment is required prior to establishing a firm construction schedule date for the installation of the Electric Distribution system.
4. **House Services:** The Electric Department will install house service after the foundation is backfilled and before the driveway is poured. The Developer will mark an "E" on the foundation at the proposed service entrance prior to our installation of service. Developer's electrician installs conductor in meter can but does not terminate. Once positive notification from Regional Building Department of passed inspection is received we will terminate the conductor and set the meter.
 5. **Projected loads and voltages:** Developer must submit load and voltage requirements for the project so that an impact can be calculated on existing facilities. Fees will be calculated on the impact study to determine possible line extensions, power line upgrades to accommodate new load and percentage of the existing substation that will be used.