

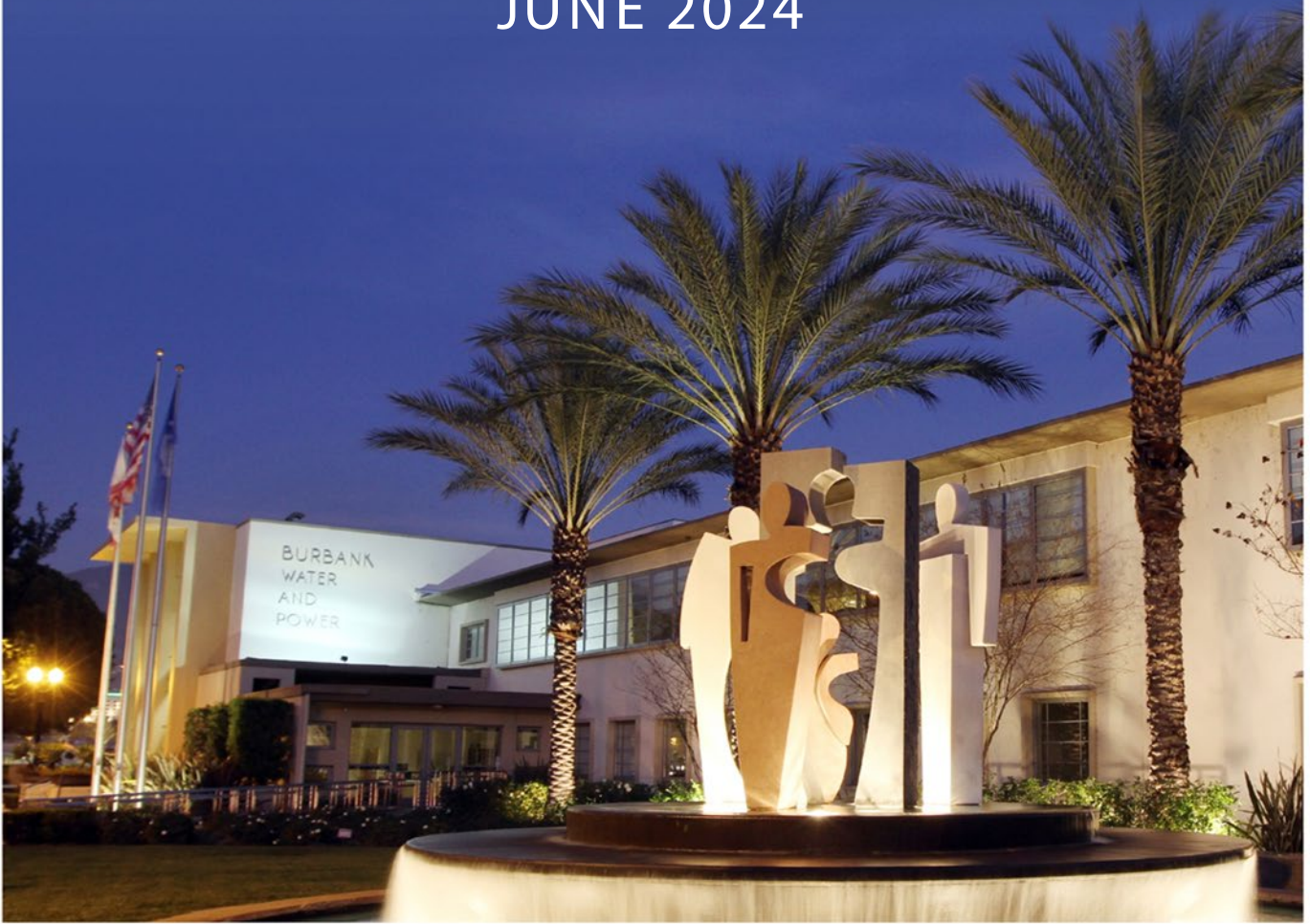


**WATER AND
POWER**

RULES & REGULATIONS

FOR UTILITY SERVICE

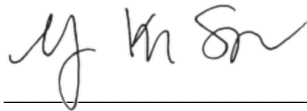
JUNE 2024



BurbankWaterAndPower.com

FOREWORD

The Rules and Regulations Governing Utility Service has been prepared by Burbank Water and Power. These Rules and Regulations are authorized by the Burbank Municipal Code; Title 8, Chapter 2, Utilities: Section 8.2: 102-103 (Water) and Sections 8.2: 202-203 (Electric), Rules and Regulations. All rates, fees and charges contained in the Rules and Regulations were approved by the Council of the City of Burbank and are specified in the Citywide Fee Schedule, updated each year.



MANDIP SAMRA
General Manager
Burbank Water and Power

7/1/2024

Date

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**WATER AND
POWER**

**PART 1
GENERAL RULES AND REGULATIONS
FOR UTILITY SERVICE**

Sean Aquino

Sean Aquino
Assistant General Manager
Customer Service
Burbank Water and Power

APPROVED:

7/2/2024

Date

PART 1 GENERAL RULES AND REGULATIONS FOR UTILITY SERVICE

1.00 GENERAL

Burbank Water and Power (BWP) provides utility services to residential and business properties within the City and boundaries. These Rules and Regulations set forth how BWP shall govern and administer its services.

1.01 GOAL STATEMENT

It is the goal of BWP to provide safe, reliable, quality service to our Customers. BWP strives to provide continuity of service with as few interruptions as possible, recognizing that utility services are valuable resources to the community and local economy. BWP provides utility products of high quality by the standards of the industry, and strives to promote conservation and wise use of these products, both by our Customers and by our own activities.

1.02 DOCUMENT FORMAT AND AVAILABILITY

1.02 (a) The Rules and Regulations are presented in seven parts. This first part is common to all BWP-provided utility services. The second part addresses electric service. The third part provides electric rates, fees, and charges. The fourth part addresses water service. The fifth part contains information related to use of recycled water. The sixth part provides general water and recycled water rates, fees, and charges. The seventh part addresses fiber optic service.

1.02 (b) Copies of these Rules and Regulations will be kept on file in the offices of BWP and on the utility's website, burbankwaterandpower.com. Reasonable effort will be made to keep these copies up to date.

1.02 (c) Changes may be made to these Rules and Regulations periodically. Applicants, Customers or others contemplating any expenditures or activities governed by these Rules and Regulations should assure themselves that they have correct information. Copies of the Rules and Regulations shall be available at cost at BWP. Electronic copies of the Rules and Regulations are available on the Burbank Water and Power website (www.burbankwaterandpower.com) at no cost.

1.02 (d) Proposed changes to the Rules and Regulations should be addressed to BWP, General Manager, 164 West Magnolia Boulevard, Burbank, California 91502 or PO Box 631, Burbank, CA 91503-0631.

1.03 APPLICABILITY AND AUTHORITY

1.03 (a) Rules and Regulations are effective for BWP Customers.

1.03 (b) These Rules and Regulations are authorized under the Burbank Municipal Code and are always subject to change or abolition by action of the Council.

1.03 (c) Utility service is subject to regulatory control by other governmental agencies, including those of the State of California and the United States of America. Such agencies may mandate immediate changes to utility operations and practices. BWP reserves the right to implement such changes on an interim basis until such time as Council acts by passing ordinances or resolutions which would change these Rules and Regulations, or on a permanent basis if it is determined that Council action is not required.

1.03 (d) The General Manager shall interpret the meanings of Rules and Regulations.

1.03 (e) Conflicts among Rules and Regulations, in general, or for a particular situation or application, may be found to exist. In all such cases, it shall be the responsibility of the General Manager to impartially consider the facts and render a decision, including, if deemed appropriate, proposed changes to the Rules and Regulations.

1.03 (f) If any rule or regulation is held to be unlawful, the decision shall not affect any remaining portions of these Rules and Regulations.

1.04 DEFINITIONS

The following terms and expressions, when used in these Rules and Regulations, shall have the indicated meanings:

1.04 (a) **Account:** The record kept by BWP of the experience with a Customer, including financial and physical data, service history, and/or consumption history.

1.04 (b) **Applicant:** Person requesting BWP to supply utility service.

1.04 (c) **Application:** Request to BWP via mail, telephone, fax, internet, in person, and/or written form(s) provided by BWP for utility service or other municipal service.

1.04 (d) **Backflow Prevention Assembly:** To prevent a backflow of water from private system into the public drinking water system.

1.04 (e) **Battery Energy Storage Systems (BESS):** A battery system for use by a customer as renewable energy storage, energy backup, or as a demand reduction device.

1.04 (f) **Battery of Meters (water):** A metering installation consisting of two or more meters installed at the same service location and operating in parallel as a substitute for a single larger meter. This practice is no longer allowed for new service.

1.04 (g) **Bill:** Written or electronic demand for payment for services rendered to the Customer.

1.04 (h) **Billing demand (electric):** The Customer's monthly load or demand expressed in kilowatts (kW) or kilovolt Amperes (kVA) and used for computing charges under certain electric rate schedules.

It may be the connected load, the measured maximum demand, or a modification of either as provided for by the applicable rate schedule.

1.04 (i) **Billing period:** The time interval between two consecutive meter readings that are taken for billing purposes or an established and regular billing cycle for unmetered services.

1.04 (j) **Burbank Water and Power or BWP:** Burbank Water Power, a department of the City of Burbank.

1.04 (k) **BWP offices:** The office is located at 164 West Magnolia Boulevard, Burbank, California 91502.

1.04 (l) **BWP's operating convenience:** The term refers to the utilization, under certain circumstances, of facilities or practices not ordinarily employed which contribute to the overall efficiency of BWP's operations; it does not refer to Customer convenience nor to the use of facilities or adoption of practices required to comply with applicable laws, ordinances, rules or regulations, or similar requirements of public authorities.

1.04 (m) **City:** City of Burbank, California.

1.04 (n) **Council:** City Council of the City of Burbank, California.

1.04 (o) **Connected load:** The sum of the rated capacities of all the Customer's electrical equipment that can be connected to BWP's lines at any one time as more completely described in the rate schedules.

1.04 (p) **Consumer:** See Customer.

1.04 (q) **Customer:** Person in whose name service is rendered as evidenced by telephone, fax, internet, or other application and/or by signature on the application, contract, or agreement for that service, or, in the absence of a signed instrument, by the receipt and payment of bills regularly issued in the Customer's name regardless of the identity of the actual user of the service, or by a person benefiting directly from the service.

1.04 (r) **Customer's mailing address:** The address specified in a Customer's application, or any other address given in writing, by telephone, fax or internet to BWP Staff by the Customer or Customer's authorized agent, to which any notice or other communication is to be mailed, sent, or delivered.

1.04 (s) **Delivered:** Any notice or communication shall be considered delivered by BWP when it is 1) mailed, postage prepaid, to the Customer to whom the service is billed; 2) communicated via telephone conversation with the Customer or his/her authorized representative; 3) given in person or by posting in a conspicuous location at the premises served; 4) transmitted by electronic means including, but not limited to, facsimile (FAX) machine, computer email; or 5) transmitted to a Customer's voice mail box.

1.04 (t) **Distribution lines:** Overhead pole lines and/or underground facilities consisting of conduit and cable which are operated at nominal distribution voltages.

1.04 (u) **Distribution main:** Water pipelines 12" in diameter and smaller.

1.04 (v) **Distribution system:** All electrical wires, equipment, and other facilities owned or provided by BWP other than customer-owned interconnection facilities, by which BWP provides electrical distribution service to its customers, including the Customer, sometimes referred to as the grid.

1.04 (w) **Electric Utility Service Equipment Requirements Committee (EUSERC):** The EUSERC requirements book contains information concerning electric service and metering facilities generally provided and installed by the Customer. Electric service equipment installed in The City of Burbank must comply with EUSERC. For more information: <http://www.euserc.com>.

1.04 (x) **Facilities:** Equipment, in whole or part, owned and operated by BWP for the purposes of providing utility service up to and including the meter.

1.04 (y) **Front Footage:** The entire length of the lot as measured on the side adjacent to the main in the street or the street in which the main will be constructed.

1.04 (z) **General Manager:** General Manager of BWP or a designee.

1.04 (a.a) **Load factor:** The ratio of the average load over a designated period to the peak load occurring in that same period.

1.04 (a.b) **Mail:** Any notice or other communication shall be considered mailed when it is enclosed in a sealed envelope, addressed to the Customer's mailing address, and deposited in a U.S. Postal Service box, postage prepaid by BWP.

1.04 (a.c) **Maximum demand:** The average kilowatts during the specified time interval when the Customer's use is greatest in the billing period as indicated or recorded by the Department's meter.

1.04 (a.d) **Meter:** The instrument installed and owned by BWP, used for measuring utility service delivered to the Customer.

1.04 (a.e) **Multi-family accommodation:** An apartment building, duplex, court group, or any other group of residential units located upon a single premise, providing the residential units therein meet the requirements for a single-family accommodation. Hotels, guest or resort ranches, tourist camps, motels, auto courts and trailer courts, consisting primarily of guest rooms and/or transient accommodations, are not classed as multi-family accommodations.

1.04 (a.f) **Nominal voltage:** The nominal voltage of a circuit is the approximate voltage between conductors in a circuit or system of a given class, assigned for the purpose of convenient designation. For any specific nominal voltage, the operating voltage actually existing at various points and at various times on the system is subject to normal distribution variation.

1.04 (a.g) **Payment:** Any recognized tender provided in exchange for service: cash, check, credit card, debit card, whether in person, by mail or in electronic form.

1.04 (a.h) **Payment arrangement:** An agreed upon plan for paying an account balance on or before a specified date, which may include a payment schedule.

1.04 (a.i) **Permanent service:** Service, which in the opinion of BWP, is of a permanent and established character and is not classified as temporary service. This may be continuous or intermittent.

1.04 (a.j) **Person:** Any individual, partnership, corporation, public agency, or other organization operating as a single entity.

1.04 (a.k) **Point of connection (water):** The point of delineation between BWP's installed pipeline, valves, meter, fittings, and appurtenances and Customer's installed pipeline, valves, meter, fittings, and appurtenances. The limits of BWP ownership and maintenance responsibility are defined in Part 4, Section 4.15 (b), 4.30 (c), and 4.30 (d).

1.04 (a.l) **Point of delivery (electric):** The point where BWP's conductors are connected to the conductors of the Customer, regardless of the location of BWP's meters or transformers. BWP's conductors may be owned, leased or under license by BWP, and the conductors of the Customer may be owned, leased or under license by the Customer.

1.04 (a.m) **Point of demarcation (fiber optics):** The point where BWP's fiber optic service cable is terminated in a patch panel. Demarcation will generally occur in the utility's transformer vault room or the electric meter room. The Customer is required to extend their fiber optic cable to this same location, where BWP personnel will make the final connections in the patch panel.

1.04 (a.n) **Power Factor:** The ratio of real power (kW) to apparent power (kVA) for any given load and time and generally expressed as a percentage. For the purposes of these rate schedules, average load power factor will be used. It will be computed as follows:

$$\% \text{Power Factor} = \frac{\text{kWh} \times 100}{(\text{kWh}^2 + \text{kVARh}^2)^{1/2}}$$

kVARh: Reactive kilovolt-ampere-hours (kilovar-hours)

1.04 (a.o) **Power service:** Service to apparatus or equipment used for purposes other than lighting shall be considered as power service. Lamps or lights used for purposes which, in the opinion of the utility, are not general illumination purposes are classed as power service, such as the following: motion picture projection, motion picture and television production, production of chemical reactions, sterilizing, drying, radiant heating, therapeutic, photographic processing, stimulating the growth or yield of agricultural products, pilot or indicating lights on power control equipment, and lighting used as an aid in the operation of a motor-driven production machine for the purpose of checking tool settings or dial readings, measuring or inspecting the product while on the machine, when the lamps are installed as an integral part of the machine and energized from its power supply.

1.04 (a.p) **Premises:** All of the real property and apparatus employed in a single enterprise on a contiguous parcel of land undivided by a dedicated street, highway, or other public thoroughfare, or a railway. A parcel shall refer to a single lot bound by one continuous property line. Automobile parking lots separated by an alley are considered to be part of a Customer's premises.

1.04 (a.q) **Presentation:** The date which BWP mails, sends, or delivers a bill to a Customer.

1.04 (a.r) **Primary distribution:** Service supplied at 2.4 kV and above with only one level of transformation. (i.e.: 34.5 kV to 2,400 or 4,160 volt, 12.47 kV to 4,160 volts).

1.04 (a.s) **Pullbox:** An enclosure for joining conductors which also provides by its size, arrangement, and location the necessary facilities for pulling the conductors into place. This term as used here includes structures also known as "manhole", "hand hole" and "switchboard pull section."

1.04 (a.t) **Quasi-public institutions:** Public utilities, educational institutions, and hospitals, whether publicly or privately owned.

1.04 (a.u) **Rate resolution:** The current resolution or resolutions adopted by Council which establish rates and charges for utility service.

1.04 (a.v) **Rate schedule:** May be one or more tariff pages setting forth the charges and conditions for a particular class or type of service at a given location. A rate schedule, as referred to herein, shall include all the wording on the applicable tariff page or pages, such as, but not limited to, the following: Schedule number, class of service, character or applicability territory, rates, conditions, and reference to rules.

1.04 (a.w) **Real user:** Any party or parties who benefit from utility services at a given address.

1.04 (a.x) **Rules and Regulations:** These Rules and Regulations.

1.04 (a.y) **Secondary distribution:** Service supplied at two or more levels of transformation below 34,500 volts.

1.04 (a.z) **Service connection (water):** The pipeline extending from BWP's water main, whether located in a public thoroughfare or private right of way, to the curb line or property line of the Customer's premises, together with the valves, meter, fittings and enclosure necessary to connect to the Customer's private pipeline.

1.04 (b.a) **Service extension:** Consists of the service wires or connections as defined herein.

1.04 (b.b) **Service wires or connection:** The group of conductors, whether overhead or underground, necessary to connect the service entrance conductors of the Customer to the utility's supply line. An overhead service connection, sometimes referred to as a "service drop", is the group of conductors between the Customer's building or other permanent support and the utility's adjacent pole.

1.04 (b.c) **Single-family dwelling or accommodation:** A house, an apartment within a multi-family accommodation, or any other residential unit which contains cooking facilities (not necessarily electric) and which is used as a residence by a single family.

1.04 (b.d) **Solar Electric Generating Facility (SEG):** The facility shall consist of solar photovoltaic electricity generating modules, electrical controls, an inverter, automatic disconnect(s), manual disconnect(s), and wiring to connect all of the above to BWP's distribution system at BWP's meter.

1.04 (b.e) **Staff:** Personnel employed by BWP.

1.04 (b.f) **Swimming pool:** A permanently installed swimming pool, above or below ground, with permanently installed pump, motor, filtering equipment and automatic timer to control the operation of the pumping equipment. The pump motor must be rated at a minimum of $\frac{3}{4}$ horsepower.

1.04 (b.g) **Tract or subdivision:** An area for dwellings which may be identified by filed subdivision plans or as an area in which a group of dwellings may be constructed about the same time, either by a large scale builder or by several builders working on a coordinated basis.

1.04 (b.h) **Transmission main:** Water pipelines larger than 12" in diameter.

1.04 (b.i) **Utility:** The City of Burbank, Burbank Water and Power.

1.04 (b.j) **Utility service:** Services provided by the City via BWP installed and owned equipment up to and including the meter and governed by these Rules and Regulations.

1.04 (b.k) **X-ray service:** Service to any apparatus transforming electric energy into radiations similar to light but having wave lengths from .0006 to 2 angstroms.

1.05 COMMUNICATION

1.05 (a) Staff is available to Customers for consultation and guidance regarding interpretation of these Rules and Regulations. Oral consultation by Staff shall not be considered binding.

1.05 (b) Any notice or bill or other communication from BWP to a Customer shall be made in writing or electronic format, and shall be given in person at the BWP's offices, delivered, sent through the mail, or sent electronically.

1.05 (c) Any notice from a Customer may be given to BWP in person at BWP's offices by the Customer, telephone, fax, email, by the Customer's authorized agent, or mailed postage prepaid by the Customer.

1.10 PROVISION OF SERVICE

1.10 (a) BWP shall furnish service only to the premises specified in the application. A service connection shall not be used to supply utility services to any parcel of land other than the parcel for which the service connection is assigned.

1.10 (b) When property provided with a service connection is subdivided, the service connection shall be considered as belonging to the lot or parcel of land which it directly enters. Each new subdivided lot will be required to have its own water service.

1.10 (c) BWP shall have the right to refuse to provide service to any premises and at any time to discontinue service if found necessary to do so in order to protect the City against abuse, fraud, property damage or to ensure the safety of any and all persons.

1.10 (d) Any unauthorized person found taking utility service from or through any of BWP's facilities will be assessed charges and/or prosecuted under the full extent of the law. Any unauthorized equipment or apparatus found connected to BWP's facilities will be removed by BWP personnel and stored at BWP. The equipment or apparatus may be redeemed upon full payment of all penalties, fees or charges due. After 30 days, unclaimed equipment or apparatus will be disposed of at BWP's discretion.

1.10 (e) If BWP has knowledge that a Customer failed to comply with any of the Rules and Regulations, BWP will notify Customer of such failure. If the Customer does not remedy same within a stated time, BWP shall have the right to discontinue service to the Customer. In the event of discovery of a dangerous condition on a Customer's premises or in the case of a Customer utilizing the service in such a manner as to make it dangerous for occupants of the premises, thus rendering the immediate discontinuance of service to the premises imperative, no notice shall be required.

1.10 (f) BWP will not furnish service to any premises where the use thereof may be detrimental to the BWP's facilities or to the service rendered by BWP to other Customers.

1.10 (g) BWP will furnish temporary service under the following conditions:

- (1) Furnishing of temporary service will not result in undue hardship upon BWP or its then existing Customer;
- (2) The Applicant shall be required to pay to BWP the cost of installing and removing any facilities necessary in connection with the furnishing of such service by BWP;
- (3) The Applicant for such temporary service may be required to make a deposit with BWP;
- (4) The Customer is responsible for the temporary power pole and related accessories, excluding the meter and service drop; or
- (5) The Customer is responsible for fire hydrant rental meter pick-up and return to BWP.

1.10 (h) A Customer making any material change in the size, character or extent of the equipment, operations, or nature of land use at the Customer's premises shall immediately give BWP written notice of the nature and extent of the change.

1.10 (i) Utility service within the City shall only be provided via BWP owned and operated equipment up to and including the meter.

1.10 (j) All lots must front the public right of way with an existing potable water main.

1.11 CONTINUITY OF SERVICE

1.11 (a) BWP will exercise diligence and make all reasonable efforts to furnish and deliver a continuous and sufficient supply of utility service to avoid any shortage and prevent interruptions to service. When such interruptions occur, BWP will endeavor to re-establish service with the shortest possible delay consistent with the safety of its Staff, its Customers and the general public.

1.11 (b) Whenever BWP finds it necessary to schedule an interruption of service, it will, where feasible, notify all Customers to be affected by the interruption, stating the approximate time and anticipated duration of the interruption. Scheduled interruptions will impose the least inconvenience to Customers, consistent with reasonable utility operations. A charge may be required for Customers requesting the interruption to be scheduled outside of BWP working hours.

1.11 (c) During times of threatened or actual water or electricity shortages due to a natural disaster or circumstances out of BWP's control, BWP will apportion its available supplies among its Customers. The BWP General Manager will make that final decision after consulting with the appropriate authorities. BWP will apportion the supply in the manner that appears to be most equitable under circumstances then prevailing and with due regard to public health and safety.

1.12 FACILITIES AND ACCESS

1.12 (a) In order to serve Customers, BWP owns and operates facilities. Service within the City may only be provided through these facilities. BWP facilities may be located in the public right of way or on private property.

1.12 (b) Any part of the service connection that is located wholly or partially upon a Customer's premises is the property of BWP. No rent or other charge will be paid by BWP where BWP-owned service facilities are located on a Customer's premises.

1.12 (c) For routine work, BWP shall, at all reasonable hours, have access to meters, service connections, poles, overhead and underground wires and facilities, and other property owned by it which may be located on Customer's premises for purposes of installation, maintenance, meter readings, vegetation management, operation or removal of the property at the time service is to be terminated. During an emergency BWP shall, at any time and with minimal notice, have access to meters, service connections, poles, overhead and underground wires and facilities, and other property owned by it which may be located on Customers' premises for purposes of installation, maintenance, meter readings, vegetation management, operation or removal of BWP property at the time service is to be terminated.

1.12 (d) The Customer's utility system shall be open for inspection at all reasonable times to authorized representatives of BWP. The Customer's failure to do so within a reasonable period of time may result in disconnection.

1.12 (e) Customers must provide access to all water and electric meters upon request for billing purposes. If a premise is unoccupied, an estimate will suffice for a maximum period of three (3) months. At that time, an appointment will be required to update the readings.

1.12 (f) BWP requires the following safety clearances around overhead electrical facilities:

High Fire Threat District (<https://ia.cpuc.ca.gov/firemap/>) – 12 feet

All other areas – 4 feet

Customers are responsible for maintaining vegetation on their property to keep them from growing into the required safety clearances around BWP overhead electrical facilities.

Customers must ensure that any vegetation maintenance work is performed by certified arborists who are trained to work around energized power lines.

1.12 (g) Customers must not cover, obstruct, obscure or otherwise, prevent BWP from accessing any water or electric meter in any way.

1.14 PROPERTY DAMAGE

1.14 (a) BWP shall not be responsible for any loss or damage caused by any negligence or wrongful act of a Customer or of a Customer's authorized representatives in installing, maintaining, operating or using any or all appliances, facilities or equipment.

1.14 (b) The Customer will be held responsible for damage to BWP meters and other property or facilities resulting from the use, operation, or lack of maintenance of appliances and facilities on Customer's premises, including but not limited to damage caused by electricity, vegetation, steam, hot water or chemicals.

1.14 (c) If a Customer, new Applicant, developer or other person is found to be responsible for any damage done to BWP property, such damages shall be reimbursed to BWP. If responsibility is not known, charges may be made to the current Customer or property owner and either billed separately or added to the monthly billing for collection.

1.14 (d) If a Customer's panel, service, or other property is damaged by BWP personnel and it is determined that BWP was in fact responsible for the damage, it may be necessary for safety, health and or economic necessity to restore damaged panel or property. Under those circumstances, the General Manager may proceed without waiting for the required claim process to be completed.

1.15 CONNECTION

1.15 (a) BWP's operating convenience or necessity may require the use of more than one meter to serve a premise.

1.15 (b) BWP's operating convenience or necessity may require the construction of facilities in order to make connection to an Applicant's premises. BWP may require that a portion or all of the costs of such construction be paid or contracted for by the Applicant prior to connection.

1.15 (c) Each utility service and meter which has been disconnected and unused may be evaluated for its continuing integrity. From time to time BWP may find a service, meter, vault or other appurtenance to be substandard and no longer suitable for continued use. In such a case, construction of new facilities may be required by BWP. BWP may require that a portion or all of the costs of such construction be paid or contracted for by the Applicant prior to construction.

1.15 (d) BWP's accommodation of same day service requests may be subject to additional fees or charges.

1.20 APPLICATION FOR SERVICE

1.20 (a) Each Applicant shall furnish and maintain satisfactory credit for payment of bills or charges in connection with BWP service.

1.20 (b) BWP may require each Applicant to complete and sign an application for service and also to establish credit. Such application may include:

1.20 (b.1) Location of premises to be served.

1.20 (b.2) Name of Applicant.

1.20 (b.3) Customer's mailing address.

1.20 (b.4) Date Applicant will be ready for service.

1.20 (b.5) Whether the premises has been previously supplied, if known.

1.20 (b.6) Rate schedule desired if optional rates are available.

1.20 (b.7) Date of application.

1.20 (b.8) Whether Applicant is owner, tenant, or agent for the premises.

1.20 (b.9) Information to establish credit of Applicant and/or deposit.

1.20 (b.10) Signature of Applicant.

1.20 (b.11) Such other information as BWP may reasonably require.

1.20 (b.12) Current telephone number.

1.20 (b.13) Email address.

1.20 (b.14) Names of all adults or tenants.

1.20 (c) Individual Liability for Joint Service

1.20 (c.1) Where two or more persons join in one application or contract for utility services, they shall be jointly and severally liable there under and shall be billed by means of a single monthly bill mailed to the person designated on the application to receive the bill.

1.20 (c.2) Whether or not BWP obtains a joint application for service, all adults who occupy a premise and receive the benefit of service are responsible jointly and severally for the payment of the bills for utility services used, unless BWP, in writing, acknowledges that one or more of the adult occupants is not responsible.

1.20 (c.3) Those receiving benefit of service at a premise may include the Applicant, i.e., the Customer, and/or a number of other adults, such as in the case with multiple roommates. When the Applicant, i.e., the Customer vacates the premises, the remaining adults, who benefited from the utility services, can be held liable for the utility billings incurred during the period they resided at the premises.

1.20 (c.4) BWP may deny or discontinue service for non-payment of a delinquent bill when determined that the Applicant or one or more of the adults, or roommates continues to occupy the premises.

1.20 (c.5) BWP may deny or discontinue service to an Applicant at a new address, if a delinquent utility billing remains unpaid from a prior service address, in which BWP has determined that the Applicant was a roommate.

1.20 (d) Fire Service: The owner must sign the application for Fire Service and will remain as an “undersign” for the service even when a tenant assumes responsibility for the current monthly billing. The owner will remain on the account and pay the monthly billings when the tenant vacates and drops responsibility for the service. The owner cannot terminate responsibility for the service through a shutdown or disconnect without Fire Department approval.

1.21 DEPOSIT

1.21 (a) A deposit may be required of the Applicant before BWP establishes or reconnects service. The deposit amount may be required to accompany the application for service or request for reconnection. If a deposit is required for reconnection under subsection 1.21(a), the Customer may be required to tender cash or other guaranteed funds. The deposit amount required may be equal to double the estimated average billing for a one-month period, for service to the subject service address.

1.21 (b) If a deposit is required to activate an existing service, payment may be made (cash, check or credit card) or, in lieu thereof, BWP may accept a Letter of Credit from another Electric/Water Utility. Deposits required for construction of new facilities and/or services shall be paid by cash, check, credit card or electronic fund transfer.

1.21 (c) The deposit is received as a guarantee that all utility service bills contracted at the Customer's premises set forth in the application or at any other Burbank address of the Customer will be paid in the time and manner as provided in the Rules and Regulations.

1.21 (d) BWP shall charge a fee if an Applicant tenders a payment for deposit which is returned to BWP by its financial institution due to Applicant's insufficient funds. Cash, cashier's check, or credit card shall be required to clear the originally tendered check, and associated fees.

1.21 (e) If at any time BWP determines that the amount of an existing deposit, or the lack of a deposit, no longer equals the amount of deposit required, it may require the Customer to provide a deposit.

1.21 (f) The deposit may be refunded to the Customer, by crediting the Customer's bill, after a period of twelve (12) months if credit, satisfactory to BWP, has been established and maintained for that period.

1.21 (g) When service is ordered discontinued by the Customer, the deposit may be refunded to the Customer or it may be transferred to other accounts under the same Customer's name. When there are charges due BWP from the Customer and there are no other accounts in the same Customer's name, the deposit may be first applied to outstanding charges and the balance returned.

1.21 (h) A deposit or credit balance due will be refunded only to the billing name as it appears on the account. It will be paid by City warrant.

1.21 (i) Customer shall not be entitled to any interest earnings on funds deposited with BWP.

1.22 ESTABLISHMENT OF CREDIT

1.22 (a) Initial credit satisfactory to BWP shall be considered as established by the payment of deposit upon application. Subsequent credit satisfactory to BWP shall be considered as established when an account has not been delinquent within a period of twelve (12) consecutive billings immediately prior to the date of eligibility for deposit refund.

1.22 (b) If the Customer maintains a deposit with BWP, or where a deposit has been refunded and the Customer has not been delinquent in payment of bills for a period of one year, it shall be deemed that established credit has been maintained.

1.22 (c) The requirement for establishing and maintaining credit may not be waived except by the General Manager.

1.22 (d) Any Customer may be required to re-establish credit for any of the following reasons:

- (1) If the Customer's deposit has been applied by BWP in whole or in part to the payment of any bills or charges demanded by BWP;
- (2) If the Applicant has been a Customer of BWP and its service to the Customer has been discontinued for cause;
- (3) If the Customer's credit has not been maintained; or
- (4) If the billing name used by a commercial or industrial Customer changes.

1.23 CONTRACTS

1.23 (a) Contracts will not be required as a condition precedent to service, except:

- (1) As may be required by conditions set forth in the rate schedule;
- (2) In the case of utility infrastructure, and/or extensions, increase in capacity of existing facilities made specifically for benefit of the Customer, or temporary service where significant expenditures are required to serve the Applicant; or
- (3) As determined to be beneficial by the General Manager.

1.23 (b) BWP may enter other contracts as it deems necessary.

1.40 BILLING AND COLLECTION

1.40 (a) The charges billed by and payable to BWP for utility service will be according to rates legally adopted by the Council. Complete sets of rates will be kept in BWP's offices where they will be available for public inspection and on the City's and utility's websites.

1.40 (b) Upon adoption by the Council of new schedules of rates, BWP will publish them once on a bill insert included with Customer's monthly bill, on BWP's website, or in a daily newspaper of general circulation published in the City of Burbank. The City shall not be liable in any manner for not giving any additional or further notice to any Customer of such new rates.

1.40 (c) The General Manager may establish and enforce charges for furnishing and supplying utility service to any installation of a character not adequately provided for in these Rules and Regulations, provided that such charges shall be consistent with rates and charges prescribed herein.

1.40 (d) Bills for utility service will be rendered according to registration of the meter as stipulated by rate schedules. Meters will be read as nearly as possible at regular intervals. Such regular meter readings will normally be at monthly intervals but may be at other intervals as established at the discretion of BWP.

1.40 (e) BWP shall mail, deliver, fax, or send via email or internet, bills for service to the Customer.

1.40 (f) Bills are due and payable upon presentation.

1.40 (g) If a bill is not received by a Customer at the anticipated monthly interval, it shall be incumbent upon the Customer to inquire as to the whereabouts of the bill. Not receiving a bill does not alleviate a Customer's responsibility for prompt payment.

1.40 (h) Removal bills, special bills, bills rendered on vacation of premises, closing or final bills, or bills rendered to Customers discontinuing service are payable upon presentation.

1.40 (i) Payment shall be made by mail, electronically, at BWP's offices, or at depositories located at other City facilities.

1.40 (j) Upon receipt of a returned payment taken as remittance of utility billings or other charges, BWP will consider the account not paid.

1.40 (k) BWP may charge a fee if an Applicant tenders a check which is returned to BWP by its financial institution due to Applicant's insufficient funds. This fee may be waived if the returned check has been verified as a bank error.

1.40 (l) Rate schedules stated on a monthly basis are related to a 30-day consumption interval as a standard month. However, in computing and rendering regular bills, BWP, at its discretion, need not consider minor variances between actual read intervals and any established regular read interval, in accordance with the following:

- (1) Where bills are regularly rendered monthly, computation from monthly rate schedules may be made directly whenever actual read intervals do not vary outside of a 28 to 34-day range.
- (2) On opening accounts, BWP may omit the initial billing when such billing period is less than four days on monthly accounts.

1.40 (m) Where proration of bills on a monthly basis is provided for in the schedules, any prorating adjustment shall be made on the basis of a standard 30-day interval on initial and closing bills as well as for any other meter read interval varying from a 30-day period.

1.40 (n) In the event a Customer requests one service account be closed, and another be opened at a different location in Burbank, the Customer may request, or BWP may authorize, that unpaid billings at one account be transferred to the other account of the same Customer.

1.41 DISPUTED BILLS

1.41 (a) Whenever the accuracy of any bill for service is questioned by the Customer within seven days of presentation, BWP will cause an investigation to be made. If this procedure does not result in a resolution deemed acceptable to the Customer, the Customer shall have the right to seek review by the General Manager's office. After such review, the Customer may request an appeal to the City Manager's office. The Customer complaint should be in writing and should be addressed to the City Manager. The City Manager's office will review the complaint and set-up an appropriate committee to resolve the complaint. The Customer or their representative may be invited to attend that committee's meeting if needed.

1.41 (b) Inaccuracies of meter readings or bills reflecting clerical or meter errors shall be adjusted to a correct basis as determined by BWP's investigation. BWP may bill or credit the Customer, at its option, for the amount overbilled or undercharged based on corrected meter readings or clerical data for the period the meter was in use and determined to be incorrect, but not to exceed a period of one year.

1.41 (c) If the meter is found to be non-registering, BWP may bill the Customer according to an estimate of consumption while the meter was not registering, but not to exceed a period of one year.

The estimate will be based on the Customer's prior use during the same season of the previous year if conditions were unchanged during the year, or on a reasonable comparison of consumption of other similar Customers during the same period.

1.41 (d) In cases where meter readings, dates, or other required factors cannot be determined, BWP shall establish such factors by tests, analyses, and investigations to determine the proper basis for making an adjustment, if any.

1.41 (e) In the event that an error is discovered in connection with any charges for services made on behalf of other City Departments, BWP shall have the authority to adjust future bills to account for the overcharges or undercharges in order to correct such error; provided, however, that such authority to make such corrections shall not extend beyond one year from a bill that had such error.

1.41 (f) Adjustments to bills may be authorized by the General Manager.

1.42 DELINQUENCY

1.42 (a) In the event any bill for service is not paid in accordance with the provisions of these Rules and Regulations, the amount of such unpaid bill may become a lien upon the property and be collected at the same time and in the same manner as all taxes on real property in the City.

1.42 (b) If payment for a billing period is not made on or before the twenty-first day after presentation, the account is subject to collection activity, and payment is considered delinquent.

1.42 (c) Minimum arrears must be paid on or before 5:00 p.m. on notice expiration date to avoid further collection action.

1.42 (d) BWP will notify the Customer in person, by telephone, email, or mail of discontinuation of service due to a returned check or electronic payment. Service may be disconnected if the amount of the returned payment and returned payment charge are not paid by the expiration date, as indicated on the notice. BWP may require all amounts paid to redeem a returned item be made in cash or certified funds.

1.42 (e) For each notice made to a Customer for the purpose of collecting a delinquent account, whether in person, by telephone, email, or mail, BWP may charge and collect a collection fee. BWP may require payment of delinquent account be made in cash or certified funds.

1.42 (f) In the event a Customer's account becomes delinquent, BWP reserves the right to transfer all the charges to any other open account of the same Customer. The account to which charges were transferred shall be subject to all collection actions provided for in these Rules and Regulations.

1.43 LIFELINE PROGRAM

1.43 (a) BWP offers a discounted rate for low-income Customers who are either (1) seniors over 62; (2) persons with a permanent disability or (3) persons that require the use of life support equipment in their home. Income eligible Customers are exempt from the monthly Customer Service Charge, Utility

User's Tax, and receive reduced rates on their electric service. Life Support Customers who do not meet the income qualifications shall be exempt from the Utility User's Tax.

1.43 (b) All required information and paperwork must be submitted with the Lifeline application in order for the application to be reviewed. Additional efficiency program participation may be required prior to application approval.

1.43 (c) In the event there is an interruption of service due to an outage or disconnection for non-payment, it is the Customer's responsibility to have battery back-up for any Life Support equipment required by the Customer.

1.43 (d) In the event BWP becomes aware of any false or fraudulent statements or information submitted in writing or verbally, BWP reserves the right to back bill the Customer (s) for services rendered under the Lifeline Rate.

1.50 DISCONNECTION/RECONNECTION

1.50 (a) A Customer's utility service may be discontinued by the Department, and notice of such disconnection will be made in accordance with all statutory requirements. If notice is required, the Customer will be notified of disconnection by mail, phone, fax, internet, or by placement of a disconnection notice on the premises served by the meter to be disconnected. Fire Services will not be disconnected without notice from the Burbank Fire Department.

1.50 (b) A Customer's utility service may be discontinued by BWP for various reasons which follow. Such involuntary disconnections are performed by turning off and locking out the meter.

- (1) A Customer's utility service may be discontinued for non-payment of a bill for service rendered by BWP twenty-one days after presentation. Before service is disconnected, the Customer will be notified. A service may be disconnected for non-payment of bills of a Customer whether or not the payment delinquency is associated with service at that service connection or at any other service connection in Burbank of that same Customer.
- (2) In the event a returned check is tendered as payment for utility service disconnected for non-payment, and as a result, BWP restores service, BWP may again promptly disconnect service without providing further notice. No 48-hour notice of discontinuance need be made in the case of a returned check tendered for payment of charges that were subject to discontinuance.
- (3) A Customer's utility service may be discontinued for non-compliance with BWP's Rules and Regulations. BWP may discontinue service to any Customer for violation of the Rules and Regulations after it has given the Customer at least one working day written notice of such intention.
- (4) BWP may disconnect a service without notice if unsafe; nuisance or hazardous conditions are found to exist on the Customer's premises. BWP will immediately notify the Customer of the reasons and the necessary corrections required before reconnection. Such unsafe, nuisance or hazardous conditions may exist due to defective appliances or equipment that may be detrimental to either the Customer, BWP, or to

BWP's other Customers.

- (5) A Customer's utility service may be discontinued for fraudulent use of service. When BWP determines that a Customer has obtained service by fraudulent means or has diverted utility service from another Customer without authorization from BWP, the service may be discontinued without notice. BWP will not restore service to such Customer until that Customer has complied with all Rules and Regulations and BWP has been reimbursed for the full amount of the service rendered and the actual cost to BWP, including administrative and overhead, incurred by reason of the fraudulent use.
- (6) A Customer may request that service be discontinued either temporarily or permanently. The request must allow at least one working day's advance notice to BWP. If such notice is not given, the Customer will be billed for service until one working day after BWP acquires knowledge that the Customer has vacated premises or otherwise has discontinued service. BWP shall require payment for services rendered, intended or not, based on received benefit of service.

1.50 (c) BWP will not discontinue utility service to enable a Customer to avoid payment of minimum charges for any period less than six consecutive months for residential services or twelve consecutive months for non-residential services, except where the Customer is affected by fire, strikes, riots, or any similar cause beyond his control.

1.50 (d) If an adult at a residence appeals a water bill to the City of Burbank or any other administrative or legal body to which such an appeal may be lawfully taken, BWP will not discontinue residential water service while the appeal is pending.

1.50 (e) In the event BWP has discontinued utility service with the understanding that the service is to be off permanently for not less than six consecutive months for residential services or twelve consecutive months for non-residential services, and the same Customer resumes the use of the service in whole or in part in less than the aforementioned periods of time after the discontinuance, then BWP shall consider the service active for the full period of discontinuance and shall bill the Customer accordingly, inclusive of all minimum charges.

1.50 (f) If a person, or legal entity, takes possession of a premises in Burbank and finds water or electric service on, he/she shall notify BWP within 24 hours to have the service disconnected or transferred into his/her name. BWP shall require payment for services rendered, intended or not, based on received benefit of service.

1.50 (g) Each Customer about to vacate any premises supplied with service by BWP shall give notice of his intended vacation, specifying the date service is desired discontinued; otherwise, the Customer will be held responsible for utility service furnished to such premises until BWP shall have notice of such vacation.

1.50 (h) Connection or disconnection of utility services which result in BWP incurring costs in excess of typical operating costs may be subject to additional charges or fees. For residential customers that demonstrate a household income of 200 percent below the federal poverty line, BWP may charge no more than \$50 during normal business hours and no more than \$150 outside of business hours for the reconnection of water service.

1.50 (i) Charges for reconnection of service and payments for deposits or to reinstate deposits shall be paid before service will be reconnected. BWP reserves the right to make exceptions and arrangements as appropriate.

1.50 (j) Pursuant to the Bankruptcy Act (P.L. 95-598), BWP will not alter, refuse or discontinue service to, or discriminate against, a Customer or a trustee of a Customer, solely on the basis that a debt owed by the Customer to BWP for service rendered, before an order for relief, was not paid when due. It shall be the responsibility of the Customer to supply BWP with a copy of any applicable order for relief. BWP shall discontinue service if neither the Customer nor the trustee within twenty (20) days after the date of the order for relief furnishes adequate assurance of payment in the form of an advance payment for service after such date and submits a new application for service, to cover services provided after initial filing. As used herein, "adequate assurance of payment" shall mean an advance payment in an amount equal to twice the average monthly bill for the prior twelve months. As used herein, "order for relief" shall have the same meaning as given to it in the Bankruptcy Act. The commencement of a voluntary case under the Bankruptcy Act shall constitute an order for relief. Service may be discontinued in accordance with the Rules and Regulations of BWP upon non-payment for service rendered after the order of relief unless other orders are issued by the court and presented to BWP.

1.50 (k) Fire Services shall not be disconnected without prior approval from the City's Fire Department.

1.50 (l) Reconnection of a meter will be available based on open time slots. A customer may request to expedite the reconnection of a meter subject to personnel availability, and after paying the appropriate fees for expediting such request.

1.51 DISCONTINUATION OF RESIDENTIAL WATER SERVICE

1.51 (a) Pursuant to the Water Shutoff Protection Act, Part 12, Chapter 6 of Division 104 of the California Health and Safety Code, Burbank Water and Power will not discontinue residential water service for non-payment until a payment by the Customer has been delinquent for at least 60 days.

1.51 (b) BWP will contact the Customer, either by telephone or written notice, no less than seven (7) days before discontinuation of residential water service.

1.51 (c) BWP will not discontinue residential water service for non-payment if all of the following conditions are met:

- (1) The Customer, or a tenant of the Customer, submits to the urban and community water system the certification of a primary care provider, as that term is defined in subparagraph (A) of paragraph (1) of subdivision (b) of Section 14088 of the Welfare and Institutions Code, that discontinuation of residential service will be life-threatening to, or pose a serious threat to the health and safety of, a resident of the premises where residential service is provided.
- (2) Any member of the Customer's household is a current recipient of CalWORKs, CalFresh,

general assistance, Medi-Cal, Supplemental Security Income/State Supplementary Payment Program, or California Special Supplemental Nutrition Program for Women, Infants, and Children, or the Customer declares that the household's annual income is less than 200 percent of the federal poverty level.

(3) The Customer is willing to enter into a payment arrangement.

1.51 (d) BWP may discontinue residential water service no sooner than 5 business days after posting a final notice of intent to disconnect service at the property being served under either of the following circumstances:

- (1) The Customer fails to comply with payment arrangement delinquent charges for 60 days or more.
- (2) While enrolled in payment arrangement for delinquent charges, the Customer does not pay his or her current residential water service charges for 60 days or more.

1.51 (e) This section applies if there is a landlord-tenant relationship between the residential occupants and the owner, manager, or operator of the dwelling.

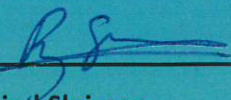
- (1) If the residential water service is individually metered and the landlord is the account holder of record, BWP shall make every good faith effort to inform the residential occupants, by means of written notice no sooner than 10 days prior to termination.
- (2) The occupants may assume the account, to whom the service will then be billed, without being required to pay any amount which may be due on the delinquent account.
 - a. The occupant must qualify as per the requirements stated in these Rules and Regulations.



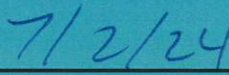
**WATER AND
POWER**

**PART 2
RULES AND REGULATIONS
GOVERNING ELECTRIC SERVICE**

APPROVED:



Riad Sleiman
Assistant General Manager
Electric Service
Burbank Water and Power



Date

PART 2 RULES AND REGULATIONS GOVERNING ELECTRIC SERVICE

2.01 GENERAL SERVICE CONDITIONS

2.01 (a) BWP shall maintain the service conductors from the pole or pullbox to the Customer's point of attachment.

2.01 (b) The service provided will be alternating current at a regulated frequency of 60 Hertz.

2.01 (c) The Customer shall contact Staff well in advance of all new, upgraded, or relocated electrical installations. The Customer will contact Customer Engineering Section at (818) 238-3575.

2.01 (d) The Customer shall make an appointment to meet with Staff to determine the type of service, point of termination, and meter location prior to any work being performed. The Customer shall furnish a single line diagram and an electrical load schedule showing the proposed size of the main service at the time of appointment.

2.01 (e) The Customer has the responsibility to determine if the proposed building construction will place BWP's existing electrical facilities in conflict with any federal, state, or local codes. The Customer will bear the cost of any temporary or permanent relocation of BWP facilities to accommodate the building construction.

2.01 (f) BWP must review its commitments to the Customer for any service installation if more than 12 months have elapsed between the initial meeting [Ref. Section 2.01(d)] and the start of construction.

2.01 (g) If a service is disconnected, BWP will not re-energize it if the Customer's service entrance equipment appears unsafe or is in violation of applicable electrical codes.

2.01 (h) If a service attachment or equipment is deemed unsafe or hazardous if energized, BWP will de-energize until appropriate repairs are made.

2.01 (i) Existing service will be disconnected concurrently with energizing the new service. Any special arrangements have to be approved by BWP prior to energizing the new service.

2.01 (j) BWP uses the following thresholds for determining a development's required electrical facilities based on BWP's estimate of that development's peak electrical demand:

Below 750 kVA	Radial service from 4.16 kV or 12.47 kV system from a pole, riser pole, or pullbox. BWP requires onsite transformation for all new three-phase services above 200A and single-phase services above 400A.
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750 kVA - 3MVA	One looped 12.47 kV feeder or service with primary feeder and a back-up. The Customer can request an alternate source if available. Any service 750 kVA and above requires a padmount switch. BWP requires two padmount transformers and a bus tie at the low side (277/480) voltage for load higher than 1500 kVA.
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3 MVA - 5 MVA	One looped 12.47 kV or 34.5 kV feeder plus a back-up 12.47 kV feeder. BWP requires at least two padmount transformers, a padmount switch, and a bus tie at the low side.
5 MVA and above	A dedicated 69 kV to 12.47 kV substation, with at least two power transformers and two high side lines. (A special contract between the Customer and BWP may be required to recover the cost of power supply depending upon the nature and magnitude of the load.)

2.01 (k) It shall be unlawful for any person or organization other than the City to conduct, transmit, generate, or produce any electrical energy or power in the City or outside the City for distribution or sale within the City. However, the City Manager may, in the public interest, permit any building or structure adjacent to the City’s boundaries to be served with electrical energy or power from a source located inside or outside the City provided such permission is given in writing and is subject to revocation upon reasonable notice, and provided further that the electrical energy or power enters the City’s boundaries at a point approximately adjacent to the building or structure to be served.

2.10 PHASE, VOLTAGE AND FREQUENCY SPECIFICATIONS

2.10 (a) BWP offers single-phase, 120/240 volt, three-wire service. BWP also provides power at 240V and 480V, three-phase, three-wire (delta) only for existing services with condition that 120V load cannot be connected to 240V or 480V delta services. For new three-phase services, BWP offers:

120/208V	Three-phase, four-wire (wye)
277/480V	Three-phase, four-wire (wye)
2,400/4,160V	Three-phase, four-wire (grounded wye)
7,200/12,470V	Three-phase, four-wire (grounded wye)
34,500V	Three-phase, three-wire
69,000V	Three-phase, three-wire

BWP may modify these voltage and phase specifications at specific locations because of service conditions.

2.10 (b) BWP’s system is designed and maintained to provide proper service voltage levels at the Customer's main switch as specified by the American National Standard Institute (ANSI) C84.1. BWP has no control over the Customer's utilization voltage that results from a voltage drop in Customer's wiring or improperly rated Customer-owned equipment.

2.10 (c) BWP will normally hold actual voltages within plus-or-minus 5% of their nominal values at the Customer's main switch. The total variation of actual voltages will normally be no greater than 5% of the nominal voltage. Voltages may be outside these limits for the following reasons:

- (1) Service interruption caused by, but not limited to, switching, system disturbances, weather, or earthquakes.
- (2) Infrequent momentary fluctuations of short duration.
- (3) Customers located close to distribution substations may experience voltages up to 5%

above nominal in the light load off-peak months; Customers located at the end of distribution lines may experience voltages up to 5% below the nominal in the summer due to heavy air-conditioning load in peak months.

- (4) Other conditions beyond the control of BWP.

2.10 (d) All Customer-owned equipment must be designed and rated in accordance with the utilization voltages specified by the American National Standard Institute (ANSI) C84.1 in order to perform satisfactorily.

2.10 (e) BWP will make a reasonable effort to provide reliable service without interruptions, but will not guarantee power with 100% reliability. Critical loads and Customers on life support equipment should have battery back-up, take appropriate precautions, and make appropriate arrangements to ensure their continued comfort should service be interrupted. In the event of a major earthquake or a natural disaster, BWP cannot guarantee restored power in time to meet the needs of Customers on respirators and with critical loads.

2.10 (f) Although BWP will make every effort to provide Customers with quality power, BWP makes no guarantees that its quality of service will not affect equipment especially sensitive to voltage fluctuations, such as computers and computer-controlled devices. Customers who do not choose to provide their own surge suppression and power filtering for sensitive equipment do so at their own risk. BWP personnel will work with Customers to resolve any power quality problems brought to their attention.

2.10 (g) BWP normally holds its system frequency very close to 60 Hertz (within 59.95 and 60.05), but it could go out of these limits for the following reasons:

- (1) A sudden loss of onsite or offsite generation causing a frequency deviation.
- (2) Any large disturbance on the Western Electric Coordinating Council (WECC) system which may cause a momentary frequency dip.
- (3) Conditions beyond the control of BWP.

2.11 SINGLE-PHASE SERVICE

2.11 (a) BWP supplies single-phase service 120/240 volts through three wires. Single-phase loads shall be balanced between the two-phase legs of the service with respect to the neutral wire.

2.11 (b) Single-phase loads with a service switch capacity of 400 amperes or less, and a voltage of 240 volts or less, normally will be supplied through one main meter. Where such switch is in excess of 400 amperes, Staff shall be consulted regarding metering requirements and related facilities, including switches and circuits.

2.11 (c) Each main switch must have its own individual service termination or pullbox.

2.11 (d) City-approved Accessory Dwelling Units (ADUs) are to be served from the existing meter panel at the premise.

2.11 (e) Customers may request an additional electric meter for a City-approved Accessory Dwelling Unit (ADU) through a service panel upgrade. The service to the premise will be considered a multiple meter installation, and the Customer is responsible for any cost associated with such an installation, including but not limited to the service drop replacement, meter installation, and inspection.

2.11 (f) For overhead service drop standards, refer to Section 2.31.

2.12 THREE-PHASE SERVICE

2.12 (a) BWP shall not be required to supply three-phase service in any residential district. However, BWP will make every effort to provide three-phase service at Customer's expense provided it is practical and economical for the Customer to pay for it.

2.12 (b) BWP may supply three-phase service in residential areas if field conditions warrant. Conditions of such service will be reviewed on a case-by-case basis. Loads supplied from such service shall be reasonably balanced across all phases.

2.12 (c) For services of 400 amperes or more, BWP supplies the following voltages where the type, size of load, and area so warrant:

- (1) Three-phase, four-wire 120/208 volt service
- (2) Three-phase, four-wire 277/480 volt service

Loads supplied from such services shall be balanced across all phases.

2.12 (d) Customers requesting three-phase service in areas where it is not normally available may have to pay the cost of providing the two additional phases, as determined by BWP.

2.12 (e) All elevators should be serviced from three-phase service. In the areas where three-phases are not available, Customer will pay for bringing the additional two phases to the project site.

2.13 PRIMARY SERVICE

2.13 (a) BWP may supply service at primary voltages of 2,400/4,160Y, 7,200/12,470Y, or 34,500 deltas only if Staff determines that the size and character of loads so warrant and meet the following requirements:

- (1) The Customer has qualified Staff on board to properly operate and maintain high voltage equipment.
- (2) BWP will not be obligated to repair or replace Customer-owned equipment or to supply spare parts of equipment owned, operated, and maintained by the Customer. BWP will make every effort to provide assistance, but will not be responsible for any delays in the restoration of a Customer's service caused by Customer-owned equipment.

2.13 (b) In areas served by a primary voltage of 7,200/12,470Y, 2,400/4,160Y shall not be available as a primary voltage for new or relocating services. For existing services, 2,400/4,160Y may be available if the following requirements are met:

- (1) BWP desires to convert the existing service from a 2,400/4,160Y primary service to a 7,200/12, 470Y primary service for BWP's own benefit,
- (2) Rather than replace Customer's existing switchgear with 7,200/12,470Y switchgear, the Customer is willing to devote land for a padmounted air-break switch and at least one 12,470/4,160V-padmount transformer per service.

Under these conditions, the installation of the switches and transformers shall be at BWP's own expense.

2.13 (c) Customers applying for primary service must have on file with BWP a schedule for maintenance of all high voltage equipment. Customers shall include the name and phone number of the person in charge of electrical facilities for the property, the company contracted to perform the periodic maintenance, and the frequency that the high voltage circuit breakers and oil-filled transformers are checked and maintained.

2.13 (d) Metering for primary service Customers shall be installed on the primary side of the Customer's transformer using EUSERC drawing 401 or the latest related drawing and be hot sequence. There shall be a minimum of 8 feet of clear working space in front of the utility sections (i.e., metering, CT, VT, terminating, etc.).

2.13 (e) Metering for 34,500 Volt services shall be installed on the secondary side. The Customer will be required to provide BWP with the certified transformer loss report so that the meter can be programmed to register the losses.

2.14 LIGHTING LOADS

2.14 (a) Lighting loads shall normally be supplied through three wires at 120/240 volts or four wires at 120/208 volts.

2.14 (b) Neon lamps, mercury vapor, gaseous tube, and similar lighting units shall have a power factor of at least 90%.

2.15 SINGLE-PHASE MOTOR LOADS

2.15 (a) Motor loads of 1 hp or less shall be connected to a single-phase service and may be served at 120 volts.

2.15 (b) Aggregate motor loads between 1 hp and 5 hp shall be connected to a single-phase 240-volt service.

2.15 (c) Aggregate loads between 5 hp and 10 hp shall be connected to either single-phase 240 volt or three-phase service.

2.15 (d) In areas where BWP does not maintain three-phase secondary mains, BWP will supply only single-phase service unless the Applicant's load includes at least one motor rated in excess of 10 hp. The Customer shall bear the entire cost of bringing three-phase power to Customer's facility.

2.15 (e) The starting current drawn from BWP's lines shall be considered the nameplate locked rotor current or that guaranteed by the manufacturer.

2.15 (f) If the starting current for a single-phase motor exceeds the value stated in Table 1, reduced voltage starting or other suitable means must be employed at the Customer's expense to limit the current to the value specified. Specific exceptions are provided in Sections 2.15(g) and (h).

Table 1 - Alternating Current, Single-Phase Motors Allowable Locked Rotor Currents		
Rated Size	At 120 Volts	At 240 Volts
1 hp or less	50 amperes	36 amperes
1.5 hp	-	48 amperes
2 hp	-	60 amperes
3 hp	-	80 amperes
5 hp	-	120 amperes
7.5 hp	-	170 amperes
10 hp	-	220 amperes

Motors connected to a single-phase service should not have a locked rotor current of more than 220 amperes.

2.15 (g) BWP may at any time require starting current values lower than set forth in Table 1 where conditions at any point on its system require such reduction to avoid interference with service.

2.15 (h) Reduced voltage starters may be omitted on any motor of a group installation provided that its starting current does not exceed the allowable starting current of the largest motor of the group.

2.16 THREE-PHASE MOTOR LOADS

2.16 (a) Individual motors exceeding 10 hp and aggregate motor loads exceeding 10 hp shall be connected to a three-phase service.

2.16 (b) Three-phase service at 277/480 volts may be supplied for motor installation where aggregate load, including other power is 65 hp or greater. In general, such service will be furnished only in localities zoned for major industries, and BWP may not be required to continue service at such voltage if the load is reduced below 25 hp.

2.16 (c) The starting current drawn from the utility's lines shall be considered the nameplate locked rotor current or that guaranteed by the manufacturer.

2.16 (d) If the starting current for a three-phase motor exceeds the value stated in Table 2, reduced voltage starting or other suitable means must be employed at the Customer's expense. This will limit the current to the value specified, except where specific exemptions are provided in Section 2.16 (f) and (g).

Table 2 - Alternating Current, Three-Phase Motors Allowable Locked Rotor Currents			
Rated Size	240 Volts	480 Volts	2400 Volts
3 hp	64 Amps	32 Amps	
5 hp	92 Amps	46 Amps	
7.5 hp	127 Amps	63 Amps	
10 hp	162 Amps	81 Amps	
15 hp	232 Amps	116 Amps	
20 hp	290 Amps	145 Amps	
25 hp	365 Amps	183 Amps	
30 hp	435 Amps	218 Amps	
40 hp	580 Amps	290 Amps	
50 hp	725 Amps	363 Amps	79 Amps
60 hp		435 Amps	87 Amps
75 hp		535 Amps	107 Amps
100 hp		725 Amps	142 Amps

For ratings of over 100 hp, BWP shall be consulted for allowable locked rotor currents.

2.16 (e) BWP shall require in rush, flicker, and voltage calculations or volt-drop calculation to verify that Customer’s motors will meet ANSI/IEEE Std. 141-1993, or latest revision, when starting. (See Appendix “B”)

2.16 (f) BWP may at any time require starting current values lower than set forth in Table 2 where conditions at any point on its system require such reduction to avoid interference with service.

2.16 (g) Reduced voltage starters may be omitted on any motor of a group installation provided that its starting current does not exceed the allowable starting current of the largest motor of the group.

2.16 (h) Consistent with ANSI C.84.1, BWP will limit the maximum voltage phase unbalance to three percent when measured at the BWP meter under no-load conditions. (See Appendix “C”)

2.16 (i) BWP recommends that customers with multiple motor loads stagger the motor starts at sufficient intervals so as to limit in-rush current.

2.17 MOTOR PROTECTION

2.17 (a) Motors that cannot be safely subjected to full rated voltage on starting, or that drive machinery of such a nature that the machinery itself or the product it handles will not permit the motor to resume normal speed upon the restoration of normal supply voltage, shall be equipped with devices that will disconnect them from the line upon failure of supply voltage, and that will prevent the automatic reconnection of the motors upon restoration of normal supply voltage.

2.17 (b) All motors of 1 hp or larger shall be equipped with thermal relays, fuses, or other automatic overcurrent interrupting devices.

2.17 (c) Three-phase motors driving elevators, hoists, tramways, cranes, conveyors, or other equipment that would be unsafe under an uncontrolled reversal of motor rotation, shall be provided with reverse-phase and open-phase protection to disconnect the motors completely from the line in the event of phase reversal or loss of one phase.

2.17 (d) The Customer is responsible for providing inrush calculations and voltage drop flicker calculations for large motors (100 hp and above for 277/480 volt and 150 hp and above for 4,160 volt) to prevent any interference with the service.

2.17 (e) In the areas where BWP utilizes automatic reclosing, BWP will not be liable and responsible for any damages caused by automatic reclosing.

2.20 INTERFERENCE WITH SERVICE

2.20 (a) Customers who operate equipment which causes detrimental voltage fluctuations including, but not limited to, hoists, welders, x-ray apparatus, radio transmitters, elevator motors, compressors, and furnaces must reasonably limit such fluctuations upon request by BWP. The Customer will be required to comply with the necessary corrective measures.

2.20 (b) Separate services may be required for x-ray units over 5 kVA, welder units over 3 kVA, radio transmitters, and resistance welders.

2.20 (c) The normal time interval of 15 minutes used for measured billing may be shortened and billed at a flat rate for meters serving x-rays or other intermittent loads.

2.20 (d) For arc furnace installations less than 100 kVA single-phase or 300 kVA three-phase, BWP may furnish energy at 240 or 480 volts, providing the Customer permanently installs suitable equipment that limits secondary short circuit current values to 300% of full load value.

2.20 (e) For arc furnace installations in excess of 100 kVA single-phase or 300 kVA three-phase, BWP may require the Customers to provide, at their own expense, special furnace-type transformers and reactors that limit secondary short-circuit current values to 300% of full load value. In these cases, BWP shall furnish service at 12,470 volts or 34,500 volts.

2.21 POWER FACTOR

BWP encourages Customers to maintain a power factor of at least 90%. (Refer to Part 3, Section 3.18(g) for specific power factor rate penalties and credits.) For loads larger than 250 kW, BWP may require a power factor correction higher than 90%.

2.22 WAVEFORM AND POWER QUALITY

BWP may require that the waveform of the current drawn by Customer's equipment conform to the latest IEEE Standard 519. The magnitude of the harmonics, both voltage, and current, shall also be limited as specified by this standard. BWP may require Customers to improve their power quality if it affects other Customers served from the same distribution line or service panel. (See Appendix "A")

2.23 ELECTROMAGNETIC FIELDS (EMF'S)

BWP will take EMF reads as requested by the Customer and will follow the latest California Public Utilities Commission (CPUC), State, Local, and Federal rules and regulations regarding this issue.

2.24 STANDBY SERVICE

BWP will allow standby service or the use of an automatic transfer system for critical loads at the Customer's expense. BWP must review and approve the proposed standby service before installation.

2.24 (a) Customers with an Interconnection Agreement (Appendix D or E) are deemed to have standby service.

2.24 (b) A disconnect is required between the standby service and the utility service for maintenance and emergency purposes.

2.24 (c) A submitted single-line diagram must show a break-before-make of the standby service. BWP will review the submitted single-line diagram for compliance.

2.26 TEMPORARY POWER SERVICE

2.26 (a) BWP may remove temporary power installations after two years of service unless special arrangements are made with BWP at the time the Customer applies for service. Customers shall ensure the structural integrity and stability of the temporary pole installation. Temporary power poles that have been in service for more than two years may be inspected for stability by BWP.

2.26 (b) The Customer shall be required to furnish and install, at their own expense, a suitable pole or other adequate supporting structure to which BWP can make its service attachment and maintain the required overhead or underground clearances. The Customer shall also be required to furnish and install an associated temporary service panel to accommodate BWP meter.

2.26 (c) The maximum span of overhead service drop wires shall be 75 feet, except as permitted by BWP.

2.26 (d) The Customer shall not use step-up or boost transformers without BWP's approval.

2.26 (e) BWP reserves the right to discontinue service without notice whenever in its opinion:

- (1) Service is no longer temporary in character.
- (2) Service is used without the protection of approved current-limiting devices.
- (3) Service is used for unauthorized purposes.
- (4) It is not safe to operate.
- (5) Service is no longer needed.
- (6) Service is relocated or modified without BWP approval.

2.26 (f) BWP will not energize any panel, nor set any permanent meters in any meter group until the Contractor has removed all temporary power backfeeds, if any, from the building(s) to be energized.

2.26 (g) A flat charge will apply as an Aid-In-Construction fee for straight overhead services where transformer capacity is available.

2.26 (h) Where temporary facilities need to be installed and removed, up and down charges will apply. Contact BWP for an estimate.

2.26 (i) Temporary power at 120/208 or 277/480 volts shall require an onsite padmount transformer. Aid-In-Construction charges will apply, similar to a permanent service. Upon completion of the project, the transformer charges will be prorated, and the remaining money will be refunded to the Customer. Contact BWP for an estimate.

2.26 (j) Other conditions of service shall be in accordance with these Rules and Regulations.

2.26 (k) Customer/contractor shall not transfer the utility service drop from the building's electrical service to the temporary power pole and vice versa. This transfer is solely done by the utility following the Building Division's approval of the new service and any other utility requirements.

2.27 PRIVATE AREA LIGHTING SERVICE

2.27 (a) BWP will not provide permanent or temporary lighting to private properties. Customers are responsible for providing area lighting service to private properties.

2.30 GENERAL OVERHEAD SERVICE REQUIREMENTS

2.30 (a) New service locations shall be obtained by contacting Staff and obtaining a Confirmation of Electric Service form before any work is started. Any change in service location also requires BWP's prior approval.

2.30 (b) Overhead service shall not be supplied to any building or premises, regardless of panel size, if the field conditions are such that it is not feasible or practical.

2.30 (c) Overhead service will not be provided to any Customer:

- (1) Having a single-phase panel of more than 400 amps.
- (2) Having a three-phase panel of more than 200 amps.
- (3) Having a combined single-phase and three-phase panel capacity of more than 600 amps.
- (4) Having a multi-dwelling building of ten units or more.
- (5) Having commercial/industrial space of 10,000-sq. ft. or above.
- (6) With a service attachment higher than 23 feet above the final exterior building grade.
- (7) With a service attachment point location that does not provide safe ladder access.
- (8) If it results in a pole having more than four service drops.
- (9) If BWP engineering determines underground service is necessary for operation or maintenance purposes.

Any service for 120/208 or 277/480 volt shall require onsite transformation, depending on the field conditions.

2.30 (d) All multiple meter installations with more than six meters fed from overhead facilities are required to have a fused main disconnect or main circuit breaker ahead of all meters.

2.30 (e) Aid-In-Construction charges will apply to all Customers irrespective of the size of the panel.

2.31 OVERHEAD SERVICE DROPS

2.31 (a) BWP will furnish and install service drop wires from a pole to an approved Customer-provided and installed permanent support (service head/or rack) on the Customer's premises. Support must meet BWP requirements. This support shall be of a type and so located that the wires can be installed in compliance with all applicable laws, including the overhead clearances established by General Order (G.O.) 95 of the California Public Utilities Commission. Maintenance or replacement of such support is the responsibility of the Customer.

2.31 (b) BWP will not install more than one service drop having the same voltage and phase classification for any one building or group of buildings on a single premise. Separate services will be installed only where required by law or for BWP's operating convenience.

2.31 (c) The maximum length of the service drop wires shall not exceed 100 feet (75 feet for temporary construction power pole) except as permitted by BWP.

2.31 (d) The Contractor shall provide any additional anchorage adjacent to the service head which will permit installation of the service drops in accordance with G.O. 95 or Title 24 of the State Building Code as determined necessary by BWP.

2.31(e) After upgrading, moving, repairing, or otherwise working on the electric service the Licensed Contractor or Owner Builder may maintain continuity of service until final connection by BWP. Temporary weather head connections should be made with split bolt connectors rated for copper to aluminum connections – no unapproved devices allowed.

2.31(f) Any connections or devices of any kind which prevent metering of electricity consumption constitute diversion of electric energy and are subject to fines per Burbank Municipal Code 8-2-213.

2.31(g) BWP reserves the right to install a limiter or disconnect service when electrical panel conditions are left incomplete or unsafe.

2.32 SERVICE HEAD LOCATION

2.32 (a) Service heads shall be located on or recessed in exterior walls of structures so that only one point of attachment is required for the service drop.

2.32 (b) Service heads for single-phase and three-phase services should be located as close together as possible near the point of attachment.

2.32 (c) Service heads shall be located at the closest and most practical point nearest the utility pole from which service is to be supplied.

2.32 (d) No service head, nor point of attachment shall be located more than 23 feet above the final exterior building grade.

2.32 (e) Service heads shall not be located on any walls or building members which face and are less than three feet from a common property line.

2.32 (f) A minimum three-foot radial clearance shall be maintained from windows, doors, and roof access ladders, to service drops and their point of attachment.

2.32 (g) Service heads shall be safely accessible to BWP personnel for the purposes of installing, maintaining, or removing service drops.

2.32 (h) A radial clearance of 36 inches is required from the service entrance conduit ("periscope" or "riser") on the roof surface. The clearance area shall be unobstructed to BWP personnel for the purposes of installing, maintaining, or removing service drops and service drop connections. Prohibited obstructions include but are not limited to solar panels, skylights, antennas, satellite dishes, vents, or any other roof protrusion, which would inhibit BWP personnel from accessing the service drop connection.

2.33 SERVICE HEADS AND ATTACHMENTS ON BUILDINGS OR STRUCTURES

2.33 (a) All standard service head installations shall be in accordance with Department drawings S-401, S-402, S-709, S-727, S-787, S-788, S-789, and S-790, latest revision.

2.33 (b) Where a service bracket or support structure is necessary to maintain the required service drop clearances, it shall be installed and properly maintained at the expense of the Customer.

2.33 (c) The service entrance conduit or "periscope" between the service section/panel and the service head shall be one continuous conduit with no couplings unless otherwise approved by BWP.

2.33 (d) Minimum periscope size shall be 1½ inches in diameter, where the service conductor attachment is less than 40 inches above the roof flashing or last support. Higher periscopes may require larger conduits or a back brace in accordance with Department drawings S-401, S-788, and S-790, latest revision.

2.33 (e) Periscope materials must be rigid steel conduit (G.S.C. or G.I.P.) and may not be an intermediate conduit. BWP may allow an exception to use EMT or aluminum conduit when the weight of the service drop is attached to a bracket or rack structure on the servicing building, and the wire out of the weather head can reach the attachment point.

2.34 OVERHEAD CLEARANCES

2.34 (a) Electric service terminations on new building construction and existing building modifications shall be located so the service drop will not pass over any part of a swimming pool. Customers installing swimming pools will be required to relocate service terminations in order to comply with these regulations. Pools shall not be installed under a utility pole line and must be outside of any utility easement.

2.34 (b) No open patios or balconies shall be erected underneath any high-voltage overhead conductor regardless of vertical clearance.

2.34 (c) In cases where service drop conductors must be relocated to provide required clearances above or alongside new structures, trees or other objects on a Customer's premises for their sole benefit, the Customer shall provide, at their expense, a new service location satisfactory to BWP, and shall pay all costs incurred by BWP.

2.34 (d) The building envelope clearances shall comply with G.O. 95 standard requirements.

2.35 OVERHEAD SERVICE ENTRANCE CONDUCTORS

2.35 (a) For each overhead service connection, Customers shall furnish at their own expense, a set of service entrance conductors which shall extend from the point of attachment of the BWP's service drop to the main service. Such service entrance conductors shall be of a type, size, and be in an enclosure, which shall be in accordance with the National Electrical Code requirements and shall meet BWP Service Confirmation requirements.

2.35 (b) The minimum size service entrance conductors installed in the service conduit riser shall be in accordance with the National Electrical Code requirements.

2.35 (c) Service entrance conductors shall not pass through condulets because they are not sealable.

2.40 GENERAL LOW VOLTAGE UNDERGROUND SERVICE REQUIREMENTS

2.40 (a) All new service equipment locations must have prior approval of BWP before any work is started. Any change in service location also requires prior approval of BWP.

2.40 (b) BWP will not install more than one service for the same voltage and phase classification for any one building or group of buildings on single premises except where required by law or for the operating convenience of BWP.

2.40 (c) Separate service conduits will be required for single-phase and three-phase services.

2.40 (d) All multiple meter installations with more than six meters fed from underground facilities are required to have a fused main disconnect or main circuit breaker ahead of all meters.

2.40 (e) Aid-In-Construction charges will apply to all Customers irrespective of the size of the panel.

2.40 (f) All substructure installations must be inspected by BWP prior to backfilling. Failure to comply may result in the requirement of re-excavation at the Customer's expense.

2.41 UNDERGROUND SECONDARY INSTALLATION

2.41 (a) A plot plan and a detailed load schedule must be furnished to BWP for conduit design on all but single-family residential services.

2.41 (b) For single-family residential services 400 amps or less, the size of the service conduit shall be 3" minimum.

2.41 (c) The maximum length of an underground run will be determined by BWP on a case-by-case basis considering the distance, conduit, cable size, and voltage drop.

2.41 (d) The Customer will be responsible for installing underground conduits from the pullsection in the panel to a point 10 feet above the coupling on the riser pole, including any pullboxes. Underground service must rise at the location provided by BWP. Any substructure installed prior to BWP completing field work (including installation of stand-offs on the riser pole) may need to be moved at the owner's expense. See BWP drawings S-706, S-707, S-713, and S-733 latest revision.

2.41 (e) BWP will install all conduits on the pole from 10 feet above coupling to the secondary level on the pole.

2.41 (f) Underground service conduit shall be installed with the top of conduit being at least 24" below finished grade.

2.41 (g) The bottom of the trench shall be smooth and level so that the conduits will not be deformed or broken when the trench is backfilled.

2.41 (h) When underground service conduit is on private property, it may be direct buried provided that:

- (1) The conduit is type DB and at least PVC Schedule 40.
- (2) All conduit bends shall be minimum PVC Schedule 80.
- (3) Non-metallic conduit is installed in soil at least 90% compacted.
- (4) For up to 200 amps commercial and residential service and for 400 amps single-family residential service the conduit could be direct buried.

Otherwise, the conduit shall be encased in a 3" concrete envelope consisting of a 3 ½ sack mix (red dye is not required) and shall be secured with spacers to ensure conduits will not float and will maintain 1 ½" spacing between conduits while concrete is poured.

2.41 (i) When underground service conduit is installed in a public right-of-way, it shall be concrete encased.

2.41 (j) All PVC conduits must be labeled and installed so that the label is in clear view of the inspector.

2.41 (k) Joints shall be tightly fitted and butted. No deflection in the conduit run will be permitted by loose fitting or forcing of conduit couplings. PVC conduit joints must be cement-welded.

2.41 (l) The Contractor shall do all grounding work in accordance with the latest revised BWP drawings. Ground rods are required at each end of a metallic conduit run.

2.41 (m) All conduits encased in concrete shall be man drilled in the presence of the BWP inspector.

2.41 (n) A ¼-inch nylon pull cord or its equivalent must be provided in each completed conduit and must be secured at both ends.

2.41 (o) Conduits entering a pullbox shall be smooth at the ends and temporarily covered to prevent the entry of debris. Conduits entering a pad mount transformer vault shall have end bells installed.

2.41 (p) Secondary pull boxes shall have a minimum of 24-inches working clearance of level unobstructed surface in all directions.

2.41 (q) New electrical pull boxes adjacent to swimming pools shall be at a level and location that is not subject to excessive pool water infiltration. The pull box shall also have a minimum of two-feet of flat-level working surface in at least three of its sides.

2.41 (r) Prior to encasement, BWP shall inspect conduit layout. Prior to covering, BWP shall inspect all concrete encasement of conduits.

2.42 SECONDARY POLE RISERS AND BENDS

2.42 (a) Staff shall designate the pole riser quadrant in the field prior to installation.

2.42 (b) One ten-foot length of conduit shall be installed on stand-offs installed by BWP on the pole for each required riser.

2.42 (c) Riser pole bends and conduit extensions, which rise on poles in alleys or areas subject to vehicular traffic, shall be minimum Schedule 80 PVC or rigid steel.

2.42 (d) For conduit not exceeding four inches in diameter, the minimum bend radius shall be three feet. For conduit exceeding four inches in diameter, the minimum radius shall be four feet.

2.42 (e) There shall not be more than the equivalent of three 90-degree bends in any one run of service conduit. BWP may require the installation of pullboxes in any run where the number of bends would otherwise exceed two and will require the installation when the number exceeds three. A pullbox may also be required for runs with less than three 90-degree bends when the length of run, size (weight) of conductor, limited access to adjacent pulling points or any combination of these conditions is deemed by BWP to warrant an additional pullbox.

2.42 (f) An isolated section of steel conduits installed in a non-metallic conduit run is not permitted, except at pole riser terminations, service entrance risers, and areas where conditions prohibit the use of non-metallic conduit.

2.42 (g) Riser and conduit shall be installed per BWP drawings S-706, S-707, and S-733.

2.43 SECONDARY SERVICE CONDUCTORS

Secondary service conductors shall be installed and terminated by BWP, except in case of onsite transformation. The Customer will be charged for the cost of material and installation as Aid-In-Construction.

2.45 TERMINATING PULLSECTIONS AT SERVICE ENTRANCE EQUIPMENT

2.45 (a) BWP will only accept pullboxes, pullsections, and cable terminations that conform to the requirements of the Electric Utility Service Equipment Requirements Committee (EUSERC) as specified in the following EUSERC drawings:

Drawing 301	Single-family residential underground combination metering.
Drawing 302A & 302B	400 Amp residential meter panel.
Drawing 342	Pullbox with cable terminating facilities for residential multiple-occupancy service.
Drawing 343, 343A & 344	Underground pullboxes (for cases not covered by Drawings 301 and 342).
Drawing 345 – 347	Cable terminating facilities in underground pullboxes or pullsections (for cases not covered by Drawings 301 and 342).

2.45 (b) All terminating pullboxes shall be readily and permanently accessible to BWP's employees for installation and maintenance of service conductors. Access must be through walking space acceptable to BWP, at least seven feet high and three feet wide.

2.45 (c) All terminating pullboxes and meter sections shall be located outside the building at a point designated by BWP, or in a meter room accessible from outside the building through one door. (Ref. Section 2.63)

2.45 (d) Minimum clear unobstructed working space directly in front of any terminating pullbox shall be a minimum of three feet wide, three feet deep, and seven feet high measured from the level standing surface.

2.45 (e) Bottoms of terminating pullboxes shall not be less than six inches or more than five feet above standing work surface, and shall not extend over any driveway, walk, or public way.

2.45 (f) Terminating pullboxes in an exposed location shall be weatherproof.

2.45 (g) When the service conduit enters the end of a terminating pullbox, the opposite end shall not be less than two feet from a wall, ceiling, or other obstruction. An obstruction is any projection that extends more than the depth of the box, extending from the surface on which the box is mounted.

2.45 (h) Service entrance conductors shall not pass through or under a building, unless in a conduit encased with a three-inch envelope of concrete.

2.45 (i) When the Customer desires to lock the access to the service entrance equipment, the Customer must provide a key, which will be kept in a lock box installed by BWP.

2.46 TERMINATING PULLBOXES

2.46 (a) All terminating pullboxes shall be sized per EUSERC Drawing 343, have landing lugs per EUSERC Drawing 347, and sealable covers.

2.46 (b) Service conduits shall normally enter a terminating pullbox from the bottom. BWP may require larger pullboxes in installations where conduits enter from the back or side.

2.46 (c) Where multiple meters are grouped at a single location, only one service wiring raceway or bus shall leave the terminating enclosure.

2.46 (d) Where more than one terminating pullsection or group of meters is installed on a premise, each pullbox or service raceway shall be permanently identified to indicate the portion of the premises or building being served.

2.46 (e) If, subsequent to initial installation, additional metering equipment becomes necessary, consult BWP for requirements.

2.46 (f) The main service disconnect switches must be located immediately adjacent to the meter(s), and may not be separated by any walls or other partitions.

2.47 UNDERGROUND SERVICE PEDESTALS

2.47 (a) Underground Service Pedestals may be used only when approved by BWP for a specific location.

2.47 (b) The pedestal shall be of a type pre-approved for use as electric service equipment by BWP as shown on BWP specification S-459. Mobile home type pedestals will not be accepted.

2.47 (c) The base must be mounted on a concrete slab.

2.47 (d) At least 3 feet of clearance must be maintained on all sides of the pedestal. Grading is required such that water shall not pool in front of the pedestal.

2.50 TRANSFORMER FACILITIES ON CUSTOMER'S PREMISES

2.50 (a) BWP will require onsite transformation facilities if a requested single-phase service is more than 400 amperes, a three-phase service is more than 200 amperes, a multi-residential project is 10 units or more, a commercial/industrial project is 10,000 sq. ft. and larger, or a voltage other than 120/240 volt

single-phase or 240 volts three-phase is requested. The facilities will be in the form of a padmount transformer.

2.50 (b) In Burbank Redevelopment Agency areas, underground service and onsite transformation may be required although the load may be less than specified in 2.50 (a).

2.50 (c) Developers/Customers shall meet with BWP early in the design stage of a project in order to determine the type and location of the onsite transformer, pullbox, associated conduits, and terminating facilities.

2.50 (d) BWP will make every effort in the Development Review process, or Environmental Impact Reports (EIR), to provide as much information as possible about the facilities needed to serve a particular development, but BWP comments may be changed due to a change in the magnitude or nature of proposed development.

2.50 (e) After receiving a final set of project drawings, including a detailed electrical load schedule, BWP will issue a drawing that specifies the divisions of responsibility between the Contractor and the City pertaining to the electrical installation.

2.50 (f) BWP may furnish the labor, material, and equipment at the Customer's expense for the following:

- (1) Transformers, including the cost of any spare transformers that BWP needs to keep on-hand for special orders that are non-stock units.
- (2) Primary service cable to the Customer transformer facilities
- (3) New riser pole and remaining conduit up the riser pole*
- (4) Primary protective devices and primary cable support structures within the vault or Customer station
- (5) Secondary service conductors from the transformer secondary terminals to the bus stubs where the Customer provides a bus duct type service in vaults or Customer stations
- (6) Padmount switch where needed
- (7) Metering devices
- (8) Labor and equipment to install the above
- (9) Field services and inspection
- (10) Engineering-Construction drawings

* The cost of the riser pole may be shared if BWP is convinced that replacement benefits the whole area.

2.50 (g) BWP must have unobstructed ingress and egress at all times in order to service transformers. No structures, obstructions, future structural changes, or building modifications are to be placed on, over, adjacent to, or in front of any transformer pad, vault, or enclosure.

2.50 (h) Any onsite transformer facility design that has not been installed within one year of approval must be reviewed by BWP prior to construction to verify that service requirements have not changed.

2.52 PADMOUNTED TRANSFORMER AND SWITCH INSTALLATIONS

2.52 (a) For three-phase transformer installations, the Customer is required to install either a 6-foot x 8-foot 6-inch x 6-inch or 8-foot x 10-foot x 6-inch reinforced concrete pad as dictated by BWP with a 4-foot x 7-foot vault below the pad. A 5-foot minimum working clearance is required directly in front of the pad (8-feet in front of a transformer) and three-foot minimum from both sides and back. Vertical clearance must be 14' minimum from the transformer pad level. Any design that would restrict vertical access clearance to a level below 40' shall be subject to BWP approval. An easement for underground substructures may be required. An exact amount of space for the recorded easement will be determined after the design is complete. The developer/property owner's surveyor will provide a legal description of the easement, which will be reviewed by BWP and then processed by the Community Development Department (contact 818-238-5250 for recording). Details can be found on BWP Drawings S-330, S-723, S-724, and S-725.

2.52 (b) Padmount switches shall rest on a 10-foot 6-inch x 7-foot x 8-inch reinforced concrete pad with an 8-foot 6-inch x 5-foot vault below the pad. An 8-foot minimum working clearance is required directly in the front and the back of the pad and a 4-foot minimum from both sides. Vertical clearance must be 14' minimum from the switch pad level. Any design that would restrict vertical access clearance to a level below 40' shall be subject to BWP approval. See BWP Drawing S-462. A minimum of 1) 26.5-foot x 15-foot easement for each padmount switch and 2) a 10-foot wide easement for the underground duct system from the property line to each switch will be required. An exact amount of space for the recorded easement will be determined after the design is complete. The developer/property owner's surveyor will provide a legal description of the easement, which will be reviewed by BWP and then processed by the Community Development Department (contact 818-238-5250 for recording). For padmount switch/transformer pad required clearances and orientation see BWP drawings S-600 through S-606 and S-732.

2.52 (c) For single-phase transformer installations, the Customer must install a 54-inch x 48-inch x 4-inch reinforced concrete pad with 2-foot x 3-foot pullbox without a base below the pad. The Customer must also install a 3-foot x 4-foot x 4-inch maintenance pad in front of the transformer pad. An 8-foot minimum working clearance is required directly in front of the pad and a 2-foot minimum from both sides and back. Vertical clearance must be 12' minimum from the transformer pad level. Any design that would restrict vertical access clearance to a level below 40' shall be subject to BWP approval. An easement for underground substructures may be required. An exact amount of space for the recorded easement will be determined after the design is complete. The developer/property owner's surveyor will provide a legal description of the easement, which will be reviewed by BWP and then processed by the Community Development Department (contact 818-238-5250 for recording). See BWP Drawing S-464.

2.52 (d) The Customer must install protective barrier posts around any transformer pad or switch installation that is subject to vehicular traffic or as deemed necessary by BWP. See BWP Drawing S-458.

2.52 (e) The Customer must do all grounding work at the transformer pad and/or switchpad as detailed on the drawings referenced above. For riser poles and pullbox grounding requirements, see BWP Drawings S-460, S-461, S-615, S-670, S-726, and S-729.

2.52 (f) All padmount equipment shall be at grade level unless agreed by BWP and easily accessible for BWP personnel for routine maintenance and crane access.

2.52 (g) The Customer will provide screening around the padmount equipment in a manner that does not create a problem for accessibility. It must meet CDD and BWP screening guidelines. All areas adjacent to the padmount equipment within the required clearance space or within the customer's screening/fencing shall be free and clear.

2.52 (h) The Contractor will be responsible for obtaining any necessary permits and inspections from the Building Division and Public Works Department.

2.52 (i) Due to the natural maturation of trees and other landscaping elements, the following landscaping requirements must be followed:

- (1) Existing trees and roots within eight feet of the transformer pads shall be removed.
- (2) New plantings within three feet of the back or sides of the pad and within eight feet of the front shall be of a groundcover type. This is considered the working clearance area.
- (3) Outside of the working clearance area, shrubbery is acceptable within eight feet of the pads, but trees must be beyond an eight foot radius to lessen future root conflicts.
- (4) Landscaping grade shall be a minimum of three inches below the grade level of the top of the 4' x 4'- 6' transformer pads and five inches below the grade level of the top of the 6' x 8' - 6" and 8' x 10' transformer pads or switch pads.
- (5) All irrigation and sprinkler systems shall be constructed so that water will not be directed onto the switch, transformer, or the concrete pads. Surface water must also drain away from the concrete pads.

2.52 (j) BWP may approve painting of the padmount equipment (other than the traditional green or gray) provided it is at the Customer's expense, and BWP's requirements are adhered to.

2.52 (k) If the required safety clearance around a switch or transformer abuts a solid obstruction, the safety clearances shall be increased by 2 feet.

2.53 SECONDARY CONNECTIONS

2.53 (a) The Customer shall install all service cables and conduits from the secondary side of BWP's transformer to the electrical switchgear in accordance with the National Electrical and City Codes. The Customer shall supply all necessary lugs, terminators, and connectors required at the switchgear. The Customer will be responsible for maintenance and replacement of these deteriorated or failed facilities.

2.53 (b) Under normal circumstances, every padmount transformer will serve the maximum of a 3000 amp service to limit the number of conductors per phase. The Customer peak load is expected to be much less than the connected load.

2.53 (c) Service cables from the secondary side of BWP's padmount transformer to the Customer's electrical switchgear shall be copper.

2.54 OWNERSHIP AND MAINTENANCE OF FACILITIES

2.54 (a) All transformers, meters, primary cables, and other related facilities installed by BWP on the Customer's premises for the purpose of delivering and measuring electric energy, whether at the Customer's expense or otherwise, shall continue to be the property of the utility and may be maintained, repaired or replaced at any time, and removed upon termination of service.

2.54 (b) Customer shall be responsible for providing and maintaining unobstructed access for BWP personnel to all BWP owned facilities located on the Customer's premises.

2.54 (c) No rent or other charges whatsoever shall be made against the utility for placing or maintaining such facilities upon the Customer's premises. The Customer shall exercise reasonable care to prevent the facilities from being damaged or destroyed and shall not interfere with them. In case any defect to the installation is discovered, the Customer shall promptly notify BWP.

2.55 REMOVAL OF BWP FACILITIES FOR THE BENEFIT OF THE APPLICANT

BWP shall have sole discretion on the feasibility of removing or relocating BWP electrical facilities in the right of way (ROW). If BWP agrees with the removal or relocation of its facilities in the ROW for the benefit of the Applicant, the Applicant shall be fully responsible for all associated costs. Idle BWP facilities located on private property for the sole purpose of only serving the property (power poles, transformers, switches, high voltage cables, metering equipment, etc.) shall be removed at no expense to the property owner. The removal of the concrete pads, vaults, underground ducts, electric panels, and other related facilities will be the property owner's responsibility.

2.56 CUSTOMER'S RESPONSIBILITY FOR CUSTOMER'S EQUIPMENT

2.56 (a) Customers shall, at their own sole risk and expense, furnish, install and maintain in good and safe condition all electrical wires, lines, machinery, and apparatus of any kind or character which may be required for the following:

- (1) Receiving electrical energy from the lines of the utility regardless of the location of the transformers, meters, or other equipment of the utility.
- (2) Applying and utilizing such energy, including all necessary protective devices and suitable housing.

2.56 (b) Customer shall own and maintain substructure housing and protecting electrical equipment (transformer and switch slab boxes, pull boxes, conduits, barrier posts, customer station doors, and fencing, etc.) in good condition. Customer will replace deteriorated substructure at his/her expense.

2.56 (c) Any grade changes which would expose electrical equipment and substructure to damage are not allowed and have to be corrected immediately at the Customer's expense.

2.56 (d) Refer to Section 2.52(i) for landscaping requirements.

2.56 (e) BWP shall not be held responsible for any loss or damage caused by the negligence, want of proper care, or wrongful act by the Customer or any agent, employee, or licensee acting on the part of the Customer in installing, maintaining, using or operating with any such wire, lines, machinery or apparatus.

2.56 (f) Customer will replace at his/her own cost any deteriorated above-mentioned equipment within a time frame approved by BWP.

2.60 METERING EQUIPMENT AND INSTALLATION REQUIREMENTS

2.60 (a) Meter installations shall comply with all BWP standards, with the regulations of other inspection authorities having jurisdiction (City, State, and NEC) and the Electric Utility Service Equipment Requirements Committee (EUSERC) guidelines.

2.60 (b) BWP shall determine the location and requirements to serve all metering equipment by issuing an Electric Service Confirmation Form. No work shall proceed until this form is obtained. New electrical meter room layouts shall be pre-approved by BWP to ensure proper working clearances, egress, and code compliance.

2.60 (c) All materials, wiring methods, and workmanship shall receive the approval of the Senior Electrical Inspector and BWP before any metering equipment is installed or the electrical service is energized.

2.60 (d) Whenever any electrical wiring is installed or modified, new metering equipment complying with these service requirements shall be used, except when in the opinion of BWP, the existing metering equipment is satisfactory and adequate to register all energy to be supplied.

2.60 (e) For each meter, the Contractor shall furnish and install a switch or other approved disconnecting means capable of being individually locked in the open position. The disconnecting means shall be capable of accepting a BWP padlock with a 5/16-inch hasp. This disconnecting means shall be on the load side of the meter and shall control all the energy registered by that meter. The disconnecting means shall not have an automatic closing feature.

2.60 (f) Where meters register the energy supplied to any occupancy, and the Basic Electrical Regulations of the California Administrative Code (Title 8) apply, it will be considered a commercial installation for the purpose of these requirements.

2.60 (g) The maximum allowable ampere rating of a main service switch or circuit breaker for one single-phase service is 400 amperes. BWP shall be consulted for larger size services.

2.60 (h) Reactive metering is not required on temporary services.

2.60 (i) Provisions for "future metering" positions on switchboards must be fully installed, including test facilities (if required), line side wiring, and meter sockets.

2.60 (j) Line side (unmetered) conductors and load side (metered) conductors are prohibited from occupying the same raceway or enclosure.

2.60 (k) Protective barrier posts are required in front of any meter installation that is subject to vehicular traffic or as deemed necessary by BWP. See BWP Drawing S-458. The posts shall not inhibit access to the meters.

2.60 (l) For Net Energy Metering Service, see Section 3.25.

2.60 (m) Electrical lugs with two-bolt attachment and either a two-set screw or multiple crimp attachment to conductors are required for services rated higher than 200 amps.

2.60 (n) Interconnection of customer generation greater than one MW has additional metering and telemetering requirements. See Appendix E.

2.61 METER TYPE

All meters shall be "S" (socket) base type. Ringless or gasketed type sockets are not acceptable.

2.62 METER HEIGHT

2.62 (a) The centerline of any meter socket shall not be more than 75 inches above the level standing surface in front of the meter.

2.62 (b) The minimum height to the centerline of all meters shall not be less than 48 inches above the standing surface when installed outdoors. If enclosed in a cabinet, installed indoors, or in a meter room, the minimum height may be reduced to 36 inches.

2.63 METER LOCATIONS

2.63 (a) For residences, meter sockets shall be located on, or recessed in, external walls so that meter(s) will be accessible for reading, inspection, or testing without entering the building. Future building modifications or structural changes shall not make meters and associated equipment inaccessible from the same property. A confirmation of service must be obtained from BWP prior to any installation.

2.63 (b) For multi-residential, commercial, and industrial buildings, outdoor meter locations are preferred. Meter socket or service equipment shall not be installed in any location that is not readily accessible from the same property. When adequate exterior wall space is not available, the Customer must provide a separately locked meter room that is accessible through two separate doors, one at each end of the electric gear, both opening outwards and equipped with panic hardware. At least one door to the meter room must lead directly outside the building. BWP must be supplied a key to that room which will be installed in a lock box adjacent to the exterior door. Future building modifications or other structural changes shall not render the meters and associated equipment inaccessible. The Customer shall consult BWP for approved locations and obtain a service confirmation prior to any installation. For multi-story buildings with seven or more floors, meters rooms may be split between ground floor and upper floors near a stairwell or elevator shaft, with unrestricted access to BWP personnel. Any approved multi-level metering must comply with the latest revision of BWP standard S-806 Multi-level Meter Rooms.

2.63 (c) For multi-occupancy buildings, all meters and metering equipment are to be grouped in central locations that are readily accessible 24 hours a day to BWP personnel.

2.63 (d) For reasons of public safety, maintenance of service, and reliability of metering, BWP has determined certain meter locations to be unacceptable. Therefore, no meter socket or service equipment shall be located:

- (1) Inside any building, unless located within an acceptable meter room. [Ref. 2.63(b)]
- (2) In any place where moisture, corrosive fumes, dust, or similar deteriorating agents are present which may interfere with the operation of the meter, materially damage it or present a hazard to BWP personnel occupied in servicing testing or reading of such meter.
- (3) On or recessed in the exterior of any wall or structure located so that less than three feet of clearance is provided in front of all metering equipment and its enclosing cabinets from property lines, public thoroughfares, alleys, driveways, and walks.
- (4) In any location that is not readily accessible 24 hours a day for reading, maintenance, inspection, testing, or replacement of the metering equipment by BWP personnel.
- (5) In any location which is hazardous or unsuitable for entry by meter readers or service personnel (i.e., uncontrolled or unrestrained animals, in any area that is not accessible via a clear stairway of normal tread and rise, etc.).
- (6) In any security area protected by alarm systems, security gates, or doors.
- (7) On buildings, occupancies, or other structures not directly served by BWP service connection.
- (8) In single-family carports or garages.
- (9) On any portion of a building where future landscaping, fencing, structural changes, or modifications will make the meter(s) inaccessible or hinder clearances.
- (10) On poles owned and maintained by BWP.
- (11) In any patio area that could later be enclosed, thus preventing access to the meter and weatherhead.
- (12) In any elevator shaft, hatchway, or room containing elevator equipment.
- (13) In any substation or transformer vault, unless such meter is in an enclosure that is effectively shielded from the high voltage compartment and contains no bare or exposed energized parts.
- (14) Behind a switchboard having bare and exposed live energized parts, unless such meter is located at least five feet from such parts and is effectively shielded there from.
- (15) Directly over any plumbing fixtures.
- (16) Directly over any stairway, ramps, or steps.
- (17) On any balcony or mezzanine floor or in any basement, cellar, or underground room.
- (18) On any surface subject to excessive vibration as determined by BWP.
- (19) In an unlighted enclosed area.
- (20) Directly over or within three feet of any gas meter.
- (21) On any structure or addition that is not permitted by the City's Building Division.

2.63 (e) All metered services require a path for meter communications to BWP communication networks. Installation of meters that fail to continuously communicate with BWP communication networks will require additional infrastructure as approved by BWP at owner's expense to create the appropriate communications path.

2.64 METER SOCKET INSTALLATION

2.64 (a) All meter sockets shall be furnished, installed, and wired by the electrical Contractor in a true vertical position. Sockets mounted in walls exposed to the weather shall be designed for waterproof mounting and shall be installed in a manner that will prevent water from entering the walls of the building.

2.64 (b) Sockets shall not be flush mounted, but shall be semi-flush or surface mounted with not more than two sockets mounted on any one-cover plate.

2.64 (c) New meter installations with more than two-meter sockets must be installed in a factory-assembled unit and wired with factory color-coded conductors at the socket terminals and the switch or circuit breaker.

2.64 (d) Sockets on multiple meter installations must be removable without interrupting main bus continuity.

2.64 (e) Test switches for transformer metering will be furnished and installed by BWP when required.

2.64 (f) The Contractor shall connect conductors to terminals in the socket for self-contained meters.

2.64 (g) For residential self-contained single-phase meter installations, an approved meter socket not exceeding No. 1 AWG wire may be used. Heavy-duty approved meter sockets shall be used where wire size exceeds No. 1 AWG, but is not larger than 3/0 AWG; the meter switch rating is not over 200 amperes, and service conduit is not greater than three inches.

2.64 (h) All residential underground combination pullboxes and meter terminating enclosures when installed semi-flush in any portion of the building shall be capable of accommodating heavy-duty sockets.

2.64 (i) For all commercial self-contained meter installations, a safety socket box with test bypass blocks shall be used. Heavy-duty approved safety socket boxes (EUSERC Drawings 305 and 305A) shall be used when wire size exceeds No. 1 AWG, but is not larger than 250 kcmil, and the meter switch rating is not over 200 amperes.

2.64 (j) Safety socket boxes are not required for the house light service in multi-family residential occupancies provided meter switches do not exceed 200 amperes, and each individual occupancy is separately metered. This includes miscellaneous service for laundry rooms, garages, halls, exits, and similar non-commercial uses on the premises.

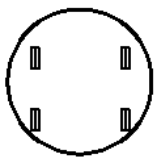
2.64 (k) When service is supplied to a signboard for lighting only, and the meter switch does not exceed 100 amperes, it may be installed as required for a separately metered single occupancy residential installation. Consult BWP when signboards have motor-driven equipment.

2.64 (l) For multi-metered services, all numbering must be completed in a permanent manner at all individual units and meter sockets before service can be energized. Contact Public Works Engineering for unit designations.

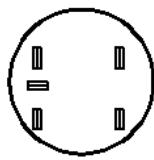
2.65 METER SOCKET CLIP ARRANGEMENTS

2.65 (a) The number of socket clips and their arrangement vary with the type of service supplied to each Customer. The following table lists these requirements:

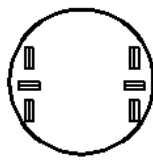
Type of Service	Number of Clips Self-Contained	Number of Clips Transformer Rated Sockets
1 Phase, 3 Wire, 120/240 Volt	4	6
2 Phase, 3 Wire "Network" 120/208 Volt	5	---
3 Phase, 3 Wire, 240 V. Delta	5	8
3 Phase, 3 Wire, 480 V. Delta (Existing only)	Not Allowed	8
3 Phase, 4 Wire, 120/208 V. Wye	7	13
3 Phase, 4 Wire, 277/480 V. Wye	Not Allowed	13
3 Phase, 4 Wire, 2400/4,160 V. Wye	---	13
3 Phase, 4 Wire, 7,200/12,470 V. Wye	---	13



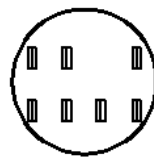
4 clip



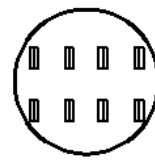
*5 clip



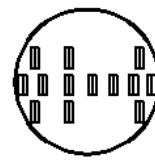
6 clip



7 clip



8 clip



13 clip

*The fifth clip for self-contained meter sockets must be located in the nine o'clock position.

2.65 (b) Meter sockets shall be provided with jaws or clips of beryllium copper and conform to ANSI Standard C-12.7.

2.65 (c) No sockets shall be equipped with circuit-closing devices or bypasses.

2.65 (d) All meter sockets shall be listed by Underwriter's Laboratories (UL) and have a maximum ampere rating which is not less than its service switch or service equipment ampacity.

2.65 (e) All safety socket boxes shall be listed Underwriter's Laboratories (UL) and have a continuous duty rating of 200 amperes.

2.65 (f) Ringless or gasketed type enclosures or sockets are not acceptable.

2.65 (g) Meters with different socket types or forms shall not be installed in the same metering panel or metering section.

2.66 METER ENCLOSURES

2.66 (a) Any meter enclosure installed and located upon a Customer's premises shall be of sufficient size and type to adequately and safely support, accommodate and protect any contained meter(s) installed by BWP. The meter enclosure shall be so located on the premises as to render it easily and readily accessible at all times to BWP. The meter enclosure shall comply with EUSERC Drawings 354 and G6.

2.66 (b) If an enclosure is to be locked, BWP must be supplied a key to that enclosure which will be installed in a lock box mounted adjacent to the door.

2.66 (c) The total inside dimensions for all recessed enclosed meters shall be a minimum of 11 inches from the face of the socket to the door or face of the enclosure.

2.66 (d) All safety socket boxes shall have a minimum clearance of one inch on the sides of the box and three inches below and above the box. All clearances must be measured from a horizontal or vertical plane extending from the front opening to the back of the recess. If a door is to be installed enclosing the recess, the total depth of the recess shall be the depth of the box and socket ring plus a minimum of nine inches.

2.66 (e) If the enclosure is to be covered, it shall be with a side-hinged door. Contact BWP if sliding doors are desired. The cover shall not be fastened shut with nails or screws.

2.67 WORKING SPACE IN FRONT OF METERS

2.67 (a) All installations must comply with the requirements as detailed in the National Electrical Code Articles 110-16, 110-32 through 110-34.

2.67 (b) A clear, unobstructed working space shall be maintained in front of all meter installations for a minimum distance of 3 feet wide, 3 feet deep, and 7 feet high measured vertically from the standing surface in front of the meter face. The standing surface must be level, or if outdoors, must gently slope away from the electrical equipment to promote proper drainage. Areas comprised of soil, grass or shrubbery (i.e., flowerbeds) are considered an unacceptable standing surface and will require the installation of a BWP approved 36 inch x 36 inch x 4 inch work pad in front of panel/meter.

2.67 (c) The working space must be entirely on the property where the service is located.

2.68 MULTIPLE METER INSTALLATIONS

2.68 (a) Where multiple meters are installed, their vertical center shall be a minimum of 8½ inches apart, and their horizontal center shall be a minimum of 7½ inches apart for single-phase meters. Safety socket boxes shall have a minimum space of ½-inch between boxes horizontal and vertical. All meters must be installed to comply with EUSERC Drawings 353, G-2, and G-3.

2.68 (b) Sealable pullboxes and gutters shall be used for all multiple meter installations.

2.68 (c) Multiple meter permanent address/unit labeling must be provided as listed below:

- (1) Weatherproof tags with ¼” minimum engraved numbers and shall be riveted in place. The engraving shall be deep enough to prevent it from being obscured by painting.
- (2) Weatherproof ¾” minimum height number stickers designed for outdoor use.
- (3) Weatherproof paint stenciled numbers ¾” minimum height.
- (4) NOT acceptable: permanent ink markers like Marks-A-Lot or Sharpie.
- (5) If the service equipment serves more than one street address, the labeling shall include the street address.
- (6) If the main breakers are NOT installed directly adjacent to the meters, the meter and the main breaker shall be identified with individual labels.
- (7) Unit numbering must meet Burbank Municipal Code requirements Section 7-614, Residential Building Identification, Section 7-615, Commercial Building Requirements, and Section 15-1-901.4.4, Premises Identification.
- (8) Meters will not be installed until the labeling is complete.

2.69 ADDRESS CHANGING

Changing unit or suite numbers is highly discouraged and not recommended. If a Customer moves to another unit or suite in the same building and wants to keep their old unit number, BWP and Burbank Public Works must be consulted prior to any change. Each meter location and unit must be permanently marked, by the Customer, according to BWP standards, and each unit or suite electric meter must be verified by BWP personnel as to which unit or suite it serves. The verification process will be billed to the Customer to cover technical and administrative costs.

2.70 SWITCHBOARD METER INSTALLATION 0 - 600 VOLTS

2.70 (a) The requirements of this section are in addition to those described in Section 2.60.

2.70 (b) The Contractor will be required to consult BWP regarding all switchboard meter installations and accessory equipment. BWP shall be contacted for any metering changes on existing switchboards.

2.70 (c) Switchboards with instrument transformer compartments are required for all installations rated over 200 amperes.

2.70 (d) Prior to fabrication of any transformer rated switchboard, the consulting engineer, manufacturer, or Contractor shall submit at least five copies of a drawing of the service switchgear to BWP for approval. The drawing must include the following:

- (1) Job name and address, Contractor's name and address, manufacturer's name and address.
- (2) Voltage, current, and short circuit withstand rating.
- (3) Bill of materials, including all switch/breaker ampacities and current rating of components.
- (4) Front view of switchboard including dimensions and location of all components listed on the bill of material and applicable EUSERC drawing numbers.

(5) Statement that construction and labeling is in accordance with Underwriters Laboratories.

2.70 (e) Switchboards must meet all current EUSERC guidelines and City of Burbank requirements in addition to all other requirements of this section.

2.70 (f) A service section is a section of the switchboard for the meter, service switch or breaker, the instrument transformer compartment, a panel for meter and test switch, and for the entrance of the service conductors.

2.70 (g) For underground services, a separate terminating and pulling section (EUSERC Drawing 345/347) will be required.

2.70 (h) Outdoor or rain-tight service sections with enclosed meter panels shall comply with the detailed requirements of applicable EUSERC drawings.

2.70 (i) Where any underground pullsections or switchboard service sections have parts that can be removed and will give access to the service conductors before they leave the instrument transformer compartment, such removable parts shall be made sealable.

2.70 (j) All openings in service wiring raceways shall be sealable and accessible to BWP. Raceways used for meter secondary wiring shall also be sealable.

2.70 (k) All switchboards shall be bussed.

2.70 (l) Service-wiring raceway defined:

- (1) Overhead - Service wiring enclosure from the service head to the meter socket.
- (2) Underground - Where a terminating pullbox is used on an underground service, the wiring enclosure from such box to the meter socket is the service wiring raceway. Where a combination terminating pullbox is used for an underground residential service, the wiring enclosure from such a box to the meter switch or breaker is the service raceway.

2.70 (m) If any service and meter equipment is contained in a meter room, locked cabinet, or other enclosure, BWP must be supplied a key that will be installed in a lock box adjacent to or on the door.

2.70 (n) For service upgrades or new services, new switchgear equipment shall be required. For a temporary service, used switchgear equipment may be allowed with written approval from BWP.

2.71 METERS SELF-CONTAINED

2.71 (a) Self-contained meters on switchboards shall have a sealable removable panel exposing safety test blocks.

2.71 (b) Maximum meter service switch or breaker rating shall not be greater than 200 amperes, and service conductors not greater than 250 kcmil. Exception: EUSERC Drawings 302A and 302B (Class 320A Meter) for residential use.

2.71 (c) Self-contained 3 phase 480 Volt meter services are not allowed.

2.71 (d) Existing Self-contained 3 phase 480 Volt meter services must meet the following requirements to be re-energized.

- (1) The service equipment must meet all applicable EUSERC requirements. EUSERC drawings 304, 305, 305A, 306, and 308.
- (2) The service equipment will meet all applicable BWP Rules and Regulations.
- (3) The meter socket will be “ringed” type and have seven jaws.
- (4) There will be a single main breaker for each meter.
- (5) The main will be lockable in the off position. The locking device must be an integral part of the main breaker and accept a 5/16” lock shank. The locking device shall not be removable by removing cover panel(s).
- (6) “480 Volt” label(s) must be under each meter on the test/bypass compartment cover, centered top to bottom. The label minimum dimension is 1-1/8” x 8” and will be orange with black lettering. The label must be permanent and weatherproof.
- (7) Occasional meter changes will require a short power outage for the affected unit.
- (8) BWP Rules and Regulations for multiple meter installations must be followed.
- (9) Each sub-panel will be labeled with the suite number of the meter/main serving it.
- (10) Four feet minimum of clear working space must be maintained in front of the service panels.
- (11) Meter room doors will be open outward and be equipped with panic bars.
- (12) The meter room shall have sufficient lighting.

2.71 (e) 480 volt commercial rated Performance Meter sockets may be self-contained for appropriately sized 480 volt solar photovoltaic systems only if there are (2) AC disconnects installed, one on each side of the Performance Meter socket to isolate the socket for safe maintenance. The AC disconnects must be lever operated with visible open windows.

2.72 METERS WITH INSTRUMENT TRANSFORMERS

2.72 (a) Meter panels shall be drilled, tapped, and slotted (EUSERC Drawing 332) for the required number of meters and secondary test switches which BWP will furnish and install.

2.72 (b) On all bussed instrument-transformer compartment service sections, the meters, instrument transformers, and test switches will be furnished and installed by BWP.

2.72 (c) Conductors shall not be routed through the instrument transformer compartment.

2.72 (d) Each instrument-transformer compartment shall meet EUSERC requirements.

2.73 HIGH VOLTAGE METERING AND SERVICE EQUIPMENT

2.73 (a) For switchgear for service of 2,400 volts or higher, the Customer shall have a consulting engineer, manufacturer, or Contractor submit at least five copies of a drawing of the service entrance

equipment, main breaker, meter section, and a plot plan of the proposed switchgear to BWP for approval prior to fabrication.

2.73 (b) The design must be in accordance with all of the specifications detailed in the Electric Utility Service Equipment Requirements Committee guidelines, EUSERC Section 400 and Drawing 401.

2.73 (c) Working clearance of minimum 8 feet is required in front of underground pull section or CT compartment.

2.74 CAMPUS BILLING (ELECTRIC METER TOTALIZATION)

2.74 (a) Under Campus Billing, the Customer receives one electric bill for multiple electric service locations, with only the totalized meter data appearing on the bill. Because the totalized kilowatt demand is less than the sum of the individual meter demands, Campus Billing results in a Demand Charge that is less than it would otherwise be. BWP may use a combination of hardwired metering or metering software to accomplish totalized meter reading. The intent of Campus Billing is to better reflect the cost of serving large commercial Customers whose electric services are concentrated within a contiguous site. Section 2.74 (b) notwithstanding, BWP will disallow Campus Billing for Customers whose loads are of such a nature that totalizing them would not accurately reflect the cost of serving them.

2.74 (b) In order for a Customer location with multiple services to be eligible for Campus Billing, the Customer must meet and maintain the following criteria:

- (1) The multiple accounts or electric services are within a common address or, if within a commercial or industrial site, within a contiguous site. To be considered contiguous, the properties making up the campus must share at least one property line or parcel boundary.
- (2) The same legal entity buys and consumes the power at the site.
- (3) The Customer has a single point of Customer contact at the place of business for both billing and service questions.
- (4) BWP will bill all services or accounts at the “P” or applicable Large Commercial electric rate and at the same service voltage, either secondary or primary. The “P” or applicable Large Commercial rate includes a fixed monthly Customer service charge per meter to recover expenses. Additionally, each service totalized together must individually qualify for this electric rate, and all must be served at either primary or secondary voltage, not both.
- (5) For each account to be totalized, BWP will provide interval data recording metering. Customers must maintain at their own expense a dedicated meter communication line of data transmission quality to each BWP electric meter. The Customer must install these dedicated lines per current City of Burbank building codes. BWP will install and maintain communication lines inside sealed compartments; the Customer must not break BWP seals. The Customer shall maintain these dedicated lines at all times. Should these lines be disconnected for any reason, including negligence, BWP will have the option to suspend and/or deny future Campus Billing. On a case-by-case basis, BWP may approve meter communication means other than modem/telephone.
- (6) The Customer’s totalized coincident peak demand of the services, as estimated by BWP upon sign-up, must exceed 750 kW at least three contiguous months out of the year. If Customer’s usage falls below that threshold, BWP may terminate Campus Billing.

- (7) Use of parallel systems for shifting load between different rate offerings is a violation of the terms of this agreement.

2.74 (c) BWP may grant Campus Billing to Customers who are otherwise ineligible if BWP, because of its own limitations, requires that Customers split their electrical services.

2.74 (d) For Customers receiving Campus Billing, BWP provides free of charge an on-line meter data service with individual meter information updated on a monthly basis. The purpose of this service is to encourage Customer energy management and conservation.

2.74 (e) Once the campus load is totalized, it is very difficult to accurately disaggregate a portion of the electric load for electric billing. Therefore, Customer sub-metering to third parties on campus is discouraged and may be cause for BWP to terminate totalization.

2.80 OFFSITE IMPROVEMENTS

2.80 (a) The Customer/Developer will pay up to 100% of the cost of offsite improvements to extend or upgrade overhead/underground distribution lines to the project site if it benefits only that particular Customer/Developer.

2.80 (b) The cost may be shared between the Customer/Developer and BWP if offsite improvements benefit the whole area, including any new Customer/Developer, and offsite charges were as described in Section 3.26(g) under Offsite Facility Charge.

2.80 (c) The Customer/Developer is responsible for undergrounding existing BWP facilities traversing or adjacent to their project, at their cost, per the following criteria:

- (1) Multi-family projects of 10 units or more (regardless of service size) or any project greater than 150 kVA shall convert to underground all overhead facilities less than 34 kV traversing or adjacent to the development at the developer's cost. The scope of this underground conversion includes existing overhead electric services for any customers impacted and includes providing space or obtaining easements for the necessary BWP equipment.
- (2) Projects 750 kVA or greater, shall convert to underground all overhead facilities traversing or adjacent to the development at the developer's cost. The scope of this underground conversion includes existing overhead electric services for any customers impacted and includes providing space or obtaining easements for the necessary BWP equipment.
- (3) Any and all designs must be approved by BWP engineering. Conductors and other necessary material will be supplied and installed by BWP at the customer's expense. If any part of this substructure system is located on-site, a recorded easement will be required. The Developer/Property owner's surveyor will provide a legal description of the easement, which will be reviewed by BWP and then processed by the Community Development Department.

2.80 (d) BWP may require conduits installed for the length of the project in the Public Right-of-Way or in an easement to accommodate future development.

2.80 (e) Any project may request BWP to prepare a feasibility study (at the project's cost) to determine the preliminary extent of the offsite improvements.

2.80 (f) Underground offsite improvements shall be installed in accordance with BWP's latest standards and "Specifications for the Construction of Primary Underground Systems" latest revision.

2.81 PRIMARY UNDERGROUND LINE EXTENSIONS (HIGH VOLTAGE 750V OR MORE)

2.81 (a) Underground line extensions may be made where mutually agreed upon by BWP and the Customer and where BWP maintains or desires to maintain underground distribution facilities.

2.81 (b) Major underground line extensions will be installed, owned, and maintained by BWP unless the line extension benefits one particular Customer. In that event the Customer will pay 100% of the cost of the line extension and dedicate the line extension to BWP for operation and maintenance. The underground line extension cost shall include the primary voltage line (2,400 volts or above) from the nearest primary voltage source to the transformation point. The Customer will pay offsite charges to BWP as required under Section 3.26(g).

2.81 (c) BWP may require Customers to install a primary conduit system where overhead service is not practical or feasible as determined by BWP, or is not compliant with other requirements imposed by these rules or other conditions on a project. In the case of multi-family residential, commercial, and industrial service, Customers will be responsible for the installation of the underground conduit system, including pullboxes or other required structures from the point of service to the source, as determined by BWP. BWP may require conduits installed for the length of the project in the Public Right-of-Way or in an easement to accommodate future development. All the construction shall be according to BWP's design and specifications.

2.81 (d) BWP will provide and install underground cable splices, terminations, and other accessories needed at the Customer's cost.

2.81 (e) BWP shall require the extension or creation of new underground lines to serve residential tracts of five lots or more. The Developer, depending upon the circumstances, may do the design, engineering, and construction.

2.81 (f) Upon acceptance by BWP, the Customer will install and deed to BWP the necessary underground duct system required, all in accordance with BWP's specifications and design. All work by the Developer shall be performed at such times and in such a manner that will permit the utility to perform its work without delay and in an efficient manner.

2.81 (g) BWP will install underground cable, any padmount switches or transformers and other related work. The cost will be recovered by BWP from the Developer as Aid-In-Construction. In addition, a service charge will be assessed to each dwelling unit. Any offsite charges or any development money spent to improve the system in order to service the tract will also be recovered from the Developer.

2.81 (h) Where applicable laws or regulations prevent the use of what otherwise would be the shortest practical route for an underground line extension, BWP would make the final decision regarding the route.

2.81 (i) Extensions for temporary service or loads of questionable permanency will not be made under this rule but will be made in accordance with the rules pertaining to temporary service.

2.81 (j) Any extension or relocation and undergrounding of service conduits for a Customer's convenience shall be at the Customer's expense.

2.81 (k) Primary underground installations shall be in accordance with BWP's latest standards and "Specifications for the Construction of Primary Underground Systems," latest revision.

2.82 OVERHEAD LINE EXTENSION

2.82 (a) Overhead line extensions may be made where mutually agreed upon by BWP and the Customer, or where BWP determines it is needed for operating convenience or serving load.

2.82 (b) Overhead line extensions will be installed, owned, and maintained by BWP.

2.82 (c) In the event that an overhead line extension benefits one particular Customer, that Customer will pay 100% of the cost of the line extension or relocation.

2.82 (d) If BWP determines that a particular line extension benefits the whole area, the cost may be shared between BWP and the Customer.

2.90 69 KV CUSTOMER STATIONS

2.90 (a) A 69 kV Customer station will be required for cases where BWP's estimated peak demand for a development is more than 5 MVA, or the electrical distribution system lacks the capacity to serve such a load and 69 kV circuits are reasonably near the project. The Customer must provide the necessary easement (with a minimum of 125 feet x 80 feet, with two 20-foot access roads on two sides) depending on the magnitude of load and the configuration of the lines that will be extended to the station. A 69 kV line extension will normally be underground and loop-fed to ensure service reliability and system integrity. A radial service may be provided where reliability of service is not critical and does not affect system integrity.

2.90 (b) The Customer will be responsible for applicable Aid-In-Construction charges (Ref. Section 3.26) and a portion of or all costs associated with line extensions as determined by BWP.

2.90 (c) The design of the Customer station should conform to BWP design practices, guidelines, and applicable safety codes. The Customer station may be Gas Insulated Switch (GIS) gear metal-clad type to save space and could be in pre-engineered buildings except for transformers, which have to be in open space with natural air cooling.

2.91 PHOTOVOLTAIC/SOLAR INSTALLATIONS

All installations of Photovoltaic/solar systems shall have an Interconnection Agreement (Appendix D).

2.92 BATTERY ENERGY STORAGE SYSTEMS

2.92 (a) All installations of Battery Energy Storage Systems (BESS) shall have an Interconnection Agreement (Appendix D).

2.92 (b) BESS may be approved for a make-before-break scheme pending review and approval of BWP engineering.

2.93 MICROGRIDS

A microgrid seeking to interconnect to the BWP electric system is required to have each individual generating unit of such microgrid meet all of the requirements set forth in the Rules and Regulations, including, but not limited to, interconnection requirements.



**WATER AND
POWER**

**PART 3
ELECTRIC RATES, FEES, AND CHARGES**

APPROVED:

A handwritten signature in blue ink, appearing to read "RS", written over a horizontal line.

Riad Sleiman
Assistant General Manager
Electric Services
Burbank Water and Power

A handwritten date "7/2/24" in blue ink, written over a horizontal line.

Date

PART 3 ELECTRIC RATES, FEES, AND CHARGES

3.01 RATES, FEES, AND CHARGES

3.01 (a) Authority. Sections 8-2-203, 8-2-212, and 8-2-213 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.01 (b) Charges. Current Electric Rates and Charges are enumerated in the current City of Burbank Fee Resolution, Article X, Rates and Charges and are available on our website at <https://www.burbankwaterandpower.com/electric/residential-electric-rates-and-charges>.

3.02 DEPOSITS

3.02 (a) Authority. Section 8-2-212 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.02 (b) Charges.

- (1) Each Applicant for electric service may be required to guarantee payment of charges for electricity by depositing or otherwise furnishing an amount equal to twice the average monthly bill over the last one-year period at the service address. In any case, no deposit shall be less than the amount stated in the current City of Burbank Fee Resolution.
- (2) Each Applicant for a new service connection shall be required to make a deposit equal to the estimated cost of installation prior to installation.
- (3) Each Applicant for temporary service shall be required to deposit an amount equal to the estimated bill for electric service to be rendered, including installation and removal of service facilities and the costs of any equipment furnished by City. Such amount shall not be less than that established in the current City of Burbank Fee Resolution.
- (4) A deposit amount established in the current City of Burbank Fee Resolution shall be required for Customer requests to test the Customer's meter if such test has been performed on that service in the preceding 12 months. If the meter is inaccurate, the deposit will be refunded, and a billing adjustment made. If the meter is accurate, the deposit shall be forfeited.

3.11 PUBLIC BENEFITS CHARGE

3.11 (a) Authority. California Public Utilities Code - Section 385 and the current City of Burbank Fee Resolution.

3.11 (b) Applicability. This fee is included within the retail rates for electricity supplied to a Customer.

3.13 ENERGY COST ADJUSTMENT CHARGE (ECAC)

3.13 (a) Authority. Sections 8-2-210 and 8-2-211 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.13 (b) Applicability. Energy supplied at rates specified in the City of Burbank Fee Schedule shall be subject to an Energy Cost Adjustment Charge (ECAC). The computation and method of collection of such charge shall be established by the General Manager pursuant to the provisions of Section 8-2-203 of this Code, consistent with the provisions of this section.

3.13 (c) Computation of ECAC. The General Manager shall establish an ECAC each month based on estimated energy sales sufficient to recover the cost of energy with consideration of any over or under collections. The cost shall include:

- (1) The cost of all fuel used for the generation of electricity, including expenses in the handling and transportation of fuel up to the point where the fuel enters the boiler or turbine.
- (2) The cost at the point of receipt by the utility of electricity purchased for resale. It shall also include net settlements for exchange of electricity or power such as economy energy, off-peak energy for on-peak energy, spinning reserves capacity, etc.
- (3) The cost payable to others for transmission of the utility's electricity over transmission facilities owned by others.
- (4) The cost payable to others for power system operation and dispatching the utility's electricity.
- (5) The cost of water required for electrical generation.
- (6) Taxes and other fees for transmission of the utility's electricity.
- (7) The costs payable to others for the operation and maintenance for the utility's transmission facilities located outside Burbank.
- (8) The costs of payments made to the City for the ECAC portion of gross sales of electrical energy under Article 6, sections 610 and 610A of the Charter.
- (9) Costs of funding for competitiveness.

3.13 (d) Limitation. The monthly ECAC shall not increase or decrease by more than ten (10) percent from the prior month's ECAC without City Council approval.

3.14 RESIDENTIAL SERVICE

3.14 (a) Authority. Sections 8-2-202 and 8-2-206 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.14 (b) Applicability. This schedule shall apply only to domestic Customers in individual family accommodations devoted primarily to residential, household, and related purposes, where the service is used for lighting, cooking, heating, and power-consuming appliances, as distinguished from commercial and industrial purposes. This schedule shall not apply to temporary, standby or auxiliary service.

3.14 (c) Character of Service. Alternating current, regulated frequency of 60 hertz: service supplied will be single-phase; delivery at 120/240 volts, or as may be specified by BWP. These and other conditions of service shall be in accordance with the Rules and Regulations of BWP.

3.14 (d) Determination of Billing. The total monthly bill shall be the sum of the Customer Service Charge, Service Size Charge, Energy Charge, ECAC (Ref. 3.13), and all applicable taxes and fees. The Customer Service Charge shall not be prorated.

3.14 (e) Minimum Charge. The monthly Minimum Charge per Customer shall be the Customer Service Charge plus the Service Size Charge. Except for Residential Lifeline Service, no bill shall be rendered for less than the Minimum Charge.

3.14 (f) Residential Lifeline Service. Any residential Customer certified eligible under the provisions of Sections 2-4-1106, 2-4-1114, and 8-2-206 of the Burbank Municipal Code shall be covered under Residential Lifeline Service. Lifeline recipients do not pay the Utility User's Tax.

3.14 (g) Common or House Services. Common or House Services for miscellaneous loads such as lighting, laundry rooms, maintenance, elevators, swimming pools, etc. will be assigned to the appropriate General Service rate classification.

3.16 SOLAR PHOTOVOLTAIC (PV) SERVICE Reference Section 3.25 - Net Energy Metering Service. Also, reference Appendix D Electrical Interconnection and Net Metering Agreement for Solar Electric Generating Facilities. The current version of this agreement can also be downloaded on our website at BurbankWaterAndPower.com.

3.17 GENERAL SERVICE

3.17 (a) Authority. Sections 8-2-202 and 8-2-207 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.17 (b) Applicability. This schedule shall apply to any non-residential Customer using power or lighting for purposes of a commercial, industrial, or other non-residential nature. This schedule shall not apply to temporary, standby or auxiliary service.

Each General Service Customer will fall into one of four (4) rate classifications based on billing demand: Small General Service, below 20 kVA Medium General Service, between 20 kVA and 250 kVA; Large General Service, between 250 kVA and 1,000 kVA; and Extra Large General Service, over 1,000 kVA. BWP will determine each Customer's rate classification so as to provide the lowest possible rate for which that Customer is eligible. BWP reserves the right to review and determine the eligibility of Customers for compliance, and these reviews will be completed at approximately six-month intervals with no more than one transfer of rate classification per year. A Customer may be transferred from one rate classification to another based on past usage characteristics as indicated below:

- (1) Small General Service to Medium General Service – energy use greater than an average of 262 kWh/day for three consecutive months, or peak demand greater than 20 kVA for three consecutive months.
- (2) Medium General Service to Small General Service – energy use less than an average of 262 kWh/day for 12 consecutive months and peak demand less than 20 kVA for 12 consecutive months.

- (3) Medium General Service to Large General Service – peak demand greater than 750 kVA totaled in any 3 consecutive months.
- (4) Large General Service to Medium General Service – peak demand less than 250 kVA for 12 consecutive months.
- (5) Large General Service to Extra Large General Service – peak demand greater than 3,000 kVA totaled in any 3 consecutive months.
- (6) Extra Large General Service to Large General Service – peak demand less than 1,000 kVA for 12 consecutive months.

Once transferred, a Customer must remain in the new rate classification for at least one year.

3.17 (c) Character of Service. Alternating current, regulated frequency of sixty (60) cycles (hertz), single or three-phase, 120/240, 240, 120/208, 277/480, 2,400/4,160, 7,200/12,470, or 34,500 volts as approved by BWP. These and other conditions of service shall be in accordance with the Rules and Regulations of BWP.

3.17 (d) Determination of Billing. The monthly bill shall be the sum of the Customer Service Charge, Energy Charge, ECAC (Ref. 3.13), Demand Charge(s) when applicable, the Special Demand Load Charge when applicable, and all applicable taxes and fees.

3.17 (e) Minimum Charge. The monthly Minimum Charge shall be the Customer Service Charge if the Billing Demand is 20 kVA or less. If the Billing Demand is greater than 20 kVA, the Minimum Charge shall be the sum of the Customer Service Charge and the Demand Charge(s).

3.17 (f) Billing Demand. Medium General Service Customers may incur a demand charge. Billing Demand shall be either the kVA of measured maximum demand or the kW of measured Maximum Demand, but not less than 70% of the Maximum Demand established in billings for the preceding months of July, August, September, and October, beginning with meters read on or after July 1. For Large and Extra Large General Service Customers, the Billing Demand shall be the kVA of measured maximum demand.

Maximum Demand shall signify the average demand in the 15-minute interval in which the average demand is greater than in any other 15-minute interval in the billing period. BWP shall determine Maximum Demand, at its discretion, by tests from time to time or monthly by means of proper recording meters furnished and installed by BWP. In cases where the demand is intermittent or subject to violent fluctuation, BWP may apply a shorter interval of measurement for Maximum Demand.

3.17 (g) Billing Demand for Special Demand Loads. The Billing Demand for Special Demand Loads shall be the sum of the kW ratings of all of the Customer's Special Demand Loads. Conversion between horse power (hp), kW, and kVA ratings will be made on a one-to-one basis.

Special Demand Loads shall include, but not be limited to the following:

- (1) Resistance welding equipment (except the three-phase stored energy type and arc welding equipment).
- (2) X-ray machines.

- (3) Bombarding transformers.
- (4) Other highly intermittent, short-duration demand devices and equipment.

3.19 STREET LIGHTING SERVICE

3.19 (a) Authority. Sections 8-2-202 and 8-2-209 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.19 (b) Applicability. This schedule shall apply only to service where the entire cost of the original installation was paid for by the street lighting account, Customer, or other outside source of funds for City-owned streetlights.

3.19 (c) Character of Service.

- (1) Alternating current: regulated frequency of 60 hertz.
- (2) Energy will be furnished at service points mutually agreed upon between the Customer and BWP for multiple systems at 120 volts.
- (3) All plans and specifications for the installation of street lighting systems shall be subject to the approval of BWP, which shall have the right to approve the construction, inspection, and testing of such systems before accepting their service. Testing of the original installation will be made without additional charge where it may be done without involving unreasonable time or expense due to faulty construction.
- (4) For all new projects and on those projects where existing properties are undergoing extensive renovation, the developer/property Owner is responsible for installation of an underground streetlight system traversing or adjacent to the project. In cases where the existing streetlights are supplied overhead or the existing old underground system needs to be upgraded, the Developer/Property Owner will be required to design and install the complete underground streetlight infrastructure pursuant to BWP requirements and specifications. The design will be approved by BWP Engineering. Standards, luminaires, conductors, and other necessary material will be supplied and installed by BWP at the Customer's expense. The Customer will reimburse BWP for any other costs incurred by BWP due to such installation. If the source of feed or any other part of the streetlight system is located on-site, a recorded easement will be required. An exact amount of space for the recorded easement will be determined after the design is complete. The Developer/Property Owner's surveyor will provide a legal description of the easement, which will be reviewed by BWP and then processed by the Community Development Department (contact 818-238-5250 for recording).
- (5) These and other conditions of service shall be in accordance with Rules and Regulations of BWP.

3.19 (d) Determination of Billing. The total monthly bill per lamp shall be the sum of the Monthly Charge and the ECAC (Ref. 3.13), and all applicable taxes and fees. Rates for lights operated continuously shall be computed at twice the monthly rate.

3.19 (e) Minimum Charge. The monthly Minimum Charge per lamp shall be the sum of the Monthly Charge and the ECAC (Ref. 3.13).

The ECAC (Ref. 3.13) per lamp is determined by multiplying the kWh/month by the ECAC rate established in the current City of Burbank Fee Resolution.

Besides the lamp energy, the kWh/month shall include wiring losses, ballast losses, and control losses. The kWh/month for each type of lamp is listed in the current City of Burbank Fee Resolution.

3.19 (f) Standard Schedule of Operation. Lights served under this schedule shall be controlled by a photoelectric cell so arranged as to ensure that lamps will be energized during periods whenever natural daylight values are less than approximately 1.0 foot-candles on a horizontal plane in open areas. This occurs approximately 4,140 hours per year.

3.19 (g) Special Conditions. Where conditions warrant the earlier or later extinguishing of lights than as provided under the Standard Schedule of Operation, BWP may supply service under a suitable Schedule of Operation if the Customer agrees to pay for an extra cost involved in furnishing special switching and other service in connection therewith, as well as an additional monthly charge.

3.19 (h) Request for Streetlight Installation. Property owners may request the installation of a streetlight through BWP Electrical Engineering. A notice will be sent out to properties within 100 feet of the proposed installation.

3.20 TRAFFIC SIGNAL AND FREEWAY LIGHTING SERVICE

3.20 (a) Authority. Sections 8-2-202 and 8-2-209 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.20 (b) Applicability. This schedule shall apply to unmetered service for Customer-owned and maintained traffic signals, freeway lighting equipment, and bus shelters.

3.20 (c) Character of Service.

- (1) Alternating current” regulated frequency of 60 hertz.
- (2) Energy will be furnished at service points mutually agreed upon between the Customer and BWP, for multiple systems at either 120 or 240 volts.
- (3) All plans and specifications for the installation of lighting systems shall be subject to the approval of BWP which shall have the right to approve the construction of, to inspect, and to test such systems before accepting their service. Testing of the original installation will be made without additional charge where it may be done without involving unreasonable time or expense due to faulty construction.
- (4) These and other conditions of service shall be in accordance with Rules and Regulations of BWP.

3.20 (d) Determination of Billing. The total monthly bill shall be the sum of the Customer Service Charge, Energy Charge, and ECAC (Ref. 3.13). Monthly kWh consumption shall be determined by BWP by test metering or other means and shall include the total kWh consumed, including line losses from the point of service, and including any additional losses caused by the Customer's use of series lighting

equipment. Where the service is time controlled for street lighting, the kWh consumption shall include losses and operation of the timing equipment.

3.20 (e) Minimum Charge. The monthly Minimum Charge per signal or freeway light shall be the Customer Service Charge established in the current City of Burbank Fee Resolution.

3.21 TEMPORARY POWER AND LIGHT SERVICE

3.21 (a) Authority. Sections 8-2-202 and 8-2-204 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.21 (b) Applicability. This schedule shall apply only for service as may be available at the discretion of BWP to any Customer for limited power or light service of a temporary nature (Sec. 2.26), including service to floor finishers, saws, pipe cutter, paint sprayer, concrete mixers, and other similar finishing and construction equipment, and temporary construction lights.

Each Applicant for temporary service shall be required to deposit with BWP a sum established in the current City of Burbank Fee Resolution.

3.21 (c) Character of Service.

- (1) Alternating current, single or three-phase: 120/240, 240, 120/208 or 277/480 volts; regulated frequency of 60 hertz.
- (2) In order to receive service under this schedule, the Customer shall be required to furnish and install, at Customer's expense, a suitable pole or other adequate supporting structure to which BWP may make its service attachment.
- (3) The maximum length of span of overhead service drop wires shall not exceed 75 feet, except as permitted by BWP.
- (4) The Customer shall not use step-up or boost transformers without prior approval of BWP.
- (5) BWP reserves the right to discontinue service without notice whenever in its opinion such service is no longer temporary in character or is not needed, if used for unauthorized purposes, or if used without the protection of approved current-limiting devices.
- (6) Unless special arrangements are made with BWP at time of application for service, temporary construction power installations may not exceed one year in duration and may be removed by BWP at the expiration of one year of service.
- (7) BWP will not energize any panel, nor set any meters in any meter group until the Contractor has removed all construction power backfeeds, if any, from the building(s) to be energized.
- (8) Temporary power at 120/208 or 277/480 volts shall require an on-site padmount transformer.
- (9) Other conditions of service shall be in accordance with Rules and Regulations of BWP.

3.21 (d) Installation Charge. For underground or overhead temporary service there shall be an installation charge.

3.21 (e) Aid-in-Construction Charge. Where temporary power is provided by a padmount transformer, Aid-in-Construction charges will apply like permanent service, but after completion of the project, the transformer will be prorated, and the remaining money will be refunded to the Customer.

3.21 (f) Determination of Billing. The total monthly bill shall be the sum of the Customer Service Charge, Energy Charge, ECAC (Ref. 3.13), any applicable Relocation Charge, and all applicable taxes and fees.

3.21 (g) Minimum Charge. The monthly Minimum Charge shall be the Customer Service Charge.

3.21 (h) Relocation Charge. Should the temporary service location be relocated for Customer convenience during the period of temporary service, the Customer shall pay a Relocation Charge.

3.22 STANDBY SERVICE

3.22 (a) Authority. Sections 8-2-202 and 8-2-204 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.22 (b) Applicability. This schedule shall apply to Customers for Standby Service for electrical loads that are also supplied by Customer generation facilities. Standby Service includes both Back-up and Maintenance Service and Supplemental Service.

(1) Back-up and Maintenance Service

Electric capacity and energy supplied by BWP during a scheduled or unscheduled outage of the Customer's generation facilities to replace power ordinarily generated by the Customer. Electric capacity and energy will be provided for outages scheduled with BWP at least 30 days in advance. Scheduled outages will not be permitted during the months of June through October. During other periods, BWP will not unreasonably withhold approval of Maintenance Service. Customers shall notify BWP as soon as possible (not to exceed 24 hours) after the initiation of each unscheduled outage of the Customer's generation facilities.

(2) Supplemental Service

Electric capacity and energy supplied by BWP on a regular basis to supplement the Customer's power requirement in addition to that ordinarily supplied by the Customer's generation facilities.

3.22 (c) Customer generation exempted from Standby Service Fees.

(1) Customer generation less than 20 kW in capacity.

(2) Customer generation that is used exclusively for the purpose of providing electric service when BWP service is not available, plus testing not to exceed 48 hours per year.

(3) Customer generation from renewable energy systems (such as solar or wind) with capacities of no more than 250 kW or that qualify for Net Energy Metering.

3.22 (d) Character of Service. Character of service shall be in accordance with the BWP Rules and Regulations (Ref. 3.17).

3.22 (e) Determination of Billing for Back-up and Maintenance Service.

- (1) Billing Demand for Back-up and Maintenance Service
The Billing Demand for Back-up and Maintenance Service shall be equal to the total nameplate capacity of the Customer's generation facilities
- (2) Energy Cost Adjustment Charge (ECAC)
 - (a) During an Energy Cost Crisis, the ECAC for Back-up Service or Maintenance Service shall be equal to the average variable cost of the most expensive 10 megawatts of resources actually operated by BWP. In the case of utility-operated resources, this is calculated as the variable fuel cost plus \$0.01/kWh. In the case of purchased power, this is calculated as the purchase rate, plus any required wheeling cost, plus \$0.01/kWh.
 - (b) An Energy Cost Crisis shall be defined as any day when the variable cost of purchased power delivered at SP 15 or Palo Verde exceeds \$0.10/kWh as reported by the Intercontinental Exchange (ICE), or the cost of natural gas delivered in Southern California as reported by Gas Daily exceeds \$10.00 per million BTU. The General Manager or designee will notify all Standby Service Customers by email on a day-ahead basis of any day when the day-ahead prices reach these levels and on a same-day basis when the real-time market prices reach these levels. The General Manager or designee may choose to forgo Energy Cost Crisis pricing at his or her discretion.
- (3) Minimum Charge
The Minimum Charge shall be the Demand Charge.

3.22 (f) Determination of Billing for Supplemental Service.

- (1) Supplemental Service shall be billed at the appropriate rate schedule in accordance with the General Service rate classifications in the BWP Rules and Regulations (Ref. 3.17) except as stated below.
- (2) The Billing Demand for Supplemental Service shall be equal to the total demand by the Customer less the Billing Demand for Back-up and Maintenance Service, and less any exempt generation, in any month.

3.23 COGENERATION SERVICE

3.23 (a) Authority. Sections 8-2-202 and 8-2-204 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.23 (b) Applicability. The cogeneration service rate paid by BWP shall be secured on an individual contract basis and shall conform to the latest applicable rules specifying terms, conditions, and interconnection requirements.

3.24 INTERRUPTIBLE SERVICE

3.24 (a) Authority. Sections 8-2-202 and 8-2-204 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.24 (b) Applicability. Interruptible Service may be available, at the discretion of the General Manager, to General Service Customers who demonstrate to the satisfaction of the General Manager that the industrial facility can tolerate unscheduled interruptions without creating an adverse impact on the power system. The Interruptible Service rate shall be negotiable between the Customer and the General Manager, secured on an individual contract basis, and subject to the Rules and Regulations of BWP.

3.25 NET ENERGY METERING SERVICE (Installations one MW or less)

3.25 (a) Authority. This section is intended to comply with the requirements set forth in California Public Utility Code Section 2827 as revised from time to time. When total interconnected customer generation capacity reaches 5% of Burbank Water and Power's peak load generation capacity, Burbank Water and Power will be authorized per California Public Utility Code Section 2827 to discontinue the net energy metering program and begin a new program. At a to-be-designated time after interconnected customer generation capacity reaches 5%, Burbank Water and Power will begin a new program that no longer provides net energy metering. Customers who install systems before the new program goes into effect will be grandfathered into net energy metering per their interconnection agreement.

3.25 (b) Applicability. Applicable only to Customers who satisfy all requirements of the definition of an "Eligible Customer-Generator" as set forth in Section 2827(b) (4) of the California Public Utilities Code on the effective date of signing an Electrical Interconnection and Net Energy Metering Agreement (Appendix D), or an "Eligible Customer-Generator" on the effective date of signing an Interconnection Agreement (Appendix E), who uses a renewable electrical generation facility, or a combination of those facilities, with a capacity of not more than one megawatt that is located on the Customer's owned, leased, or rented premises, is interconnected and operates in parallel with BWP electric grid, and is intended primarily to offset part or all of the Customer's own electrical requirements. Request to enter into such an agreement will be honored on a first-come-first-served basis until the time that the total rated interconnected generating capacity exceeds 5 percent of BWP's aggregate Customer peak demand. Customers with fuel cell generation must sign Interconnection Agreement (Appendix E).

3.25 (c) Character of Service. Alternating current, single or three-phase: 120/240, 240, 120/208 or 277/480 volts regulated frequency of 60 hertz. Character of service shall be in accordance with the Rules and Regulations of BWP.

3.25 (d) Billing and Credits for Net Energy Generation. Customers taking service under the terms of this schedule will remain on the otherwise applicable electric rate schedule. Customer shall be billed for electrical service and credited for net energy generation, if any, as provided in Section 2827 of the California Public Utilities Code. In the event a customer elects or is placed on a different electric rate schedule or rate structure, any excess energy credits on the account will be zeroed and paid out to the account holder. The compensation rate for excess generation will be in accordance with Article X, Section 11, of the current City of Burbank Adopted Citywide Fee Schedule.

3.25 (e) Net Energy Metering. "**Net energy metering**" means measuring the difference between the electricity supplied through BWP electric grid and the electricity generated by an eligible Customer-generator and fed back to BWP electric grid. **Net energy metering** shall be accomplished using a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of electricity in each direction shall be installed, at BWP's expense, and the additional **metering** shall be used only to provide the information necessary to accurately bill or credit the Customer-generator or to collect renewable electric generating system performance information for research purposes.

3.25 (f) Electrical Interconnection and Net Energy Metering Agreement and Permits. In order to take power under this section, the Eligible Customer-Generator must have completed, signed, and on file at BWP an Electrical Interconnection and Net Energy Metering Agreement (Appendix D) or Interconnection Agreement (Appendix E). The Customer shall also obtain and possess all permits and authorizations in accordance with all applicable laws and regulations for the construction, installation, design, operation, and maintenance of the generating facility.

3.26 AID-IN-CONSTRUCTION CHARGES

3.26 (a) Authority. Sections 8-2-202, 8-2-203, and 8-2-204 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.26 (b) Applicability. This schedule generally applies to capital improvements that primarily benefit new Customers and Customer upgrades.

3.26 (c) Character of Service. Alternating current, single or three-phase: 120/240, 240, 120/208 or 277/480 volts at a regulated frequency of 60 hertz. These and other conditions of service shall be in accordance with the Rules and Regulations of BWP.

3.26 (d) Determination of Charges.

- (1) Service Design and Engineering. All service designs and engineering shall require an upfront deposit as determined by BWP. The design work will then be scheduled along with other eligible Applicants. A deposit for early design will be credited to the cost of the design and installation of the service or any unspent deposit will be refunded as appropriate. The cost of multiple designs to explore options or redesigns required by changes beyond the control of BWP shall be paid by the Applicant.
- (2) Aid-in Construction charges shall recover all "actual costs" to BWP associated with providing the necessary electrical facilities for the described service, as determined by the General Manager and shall include but not be limited to contract labor, meters, transformers, switches and other associated equipment and materials. "Actual costs" are any cost incurred including in-house labor, both direct and indirect.
- (3) The total Aid-in-Construction Charge shall be the sum of the On-Site Facility Charge and the Off-Site Facility Charge.

3.26 (e) Minimum Charge. The Minimum Charge shall be the On-Site Charge.

3.26 (f) On-Site Facility Charge. The On-Site Facility Charge shall be equal to 100% of the costs incurred by BWP associated with providing electrical facilities solely for the Customer's use and benefit. Costs shall include, but not limited to, contract labor, meters, poles, transformers, switches, and associated equipment and materials.

3.26 (g) Off-Site Facility Charges.

1. **Capacity Charge.** A Customer or Developer requesting a new, upgraded or replacement metered electric panel (a "Customer-Developer") will be charged a Capacity Charge based on the kVA demand of such new, upgraded, or replaced metered electric panels, which will be applied according to the current City of Burbank Fee Resolution. The kVA demand is calculated using the following:

- (a) **Residential Panel Factor.** A 20% factor is used to calculate the kVA demand of an all-residential metered electric panel (excluding associated metered house panels). If the panel is fully rated, a 25% factor is used to calculate the kVA demand for that panel. For multi-metered panels, the kVA demand is based on the aggregate of each metered branch circuit.

Example 1: A Customer-Developer is proposing a new 200A 240V single phase electric residential panel. The kVA demand is $200A \times 240V \times 20\%$ equaling 9,600 VA (**9.6 kVA**)

Example 2: A Customer-Developer is proposing a new 200A 240V fully rated single phase electric residential panel. The kVA demand is $200A \times 240V \times 25\%$ equaling 12,000 VA (**12kVA**).

- (b) **Commercial Panel Factor.** A 65% factor is used to calculate the kVA demand of a commercial metered electric panel (including meter house panels feeding any commercial service). If the panel is fully rated, an 81.25% factor is used to calculate the kVA demand for that panel.

Example 1: A Customer-Developer is proposing a new 200A 480V three phase electric commercial panel. The kVA demand is $200A \times 480V \times 1.73 \times 65\%$ equaling 107,952 VA (**108 kVA**)

Example 2: A Customer-Developer is proposing a new 200A 480V fully rated three phase electric commercial panel. The kVA demand is $200A \times 480V \times 1.73 \times 81.25\%$ equaling 134,940 VA (**135 kVA**)

- (c) **Credit.** For metered electric panel upgrades or replacements, a credit for the kVA demand of the existing permitted metered panel (to be removed) will be applied towards the kVA demand of the proposed metered panel (to be installed). Credit for an existing metered panel may only be applied if the metered electric panel has been permitted in its existing form, capacity, and location through a finalized Building Division electric permit and still exists on site in the location it was

permitted. In case of a reduction in kVA demand after application of credit, no Capacity Charge payment is due to the Customer-Developer. Credit may not be transferred between Premises.

Example: A Customer-Developer is proposing to upgrade an existing permitted 100A 480V three phase electric commercial panel to a 200A 480V three phase electric commercial panel. The kVA demand is calculated as $200A \times 480V \times 1.73 \times 65\%$ equaling 107,952 VA with an applied credit of $100A \times 480V \times 1.73 \times 65\%$ equaling 53,976VA. The kVA demand with credit applied is $107,952 VA - 53,976 VA$ equaling 53,976 VA (**54.0 kVA**).

- (d) For Premises with multiple electric panels, each metered electric panel's kVA demand is calculated separately, and the Capacity Charge is based on the aggregate kVA demand of all metered electric panels.

Example: A Customer-Developer is proposing one (1) new 200A 480V fully rated three phase electric commercial panel and (1) new 600A 208V three phase residential panel. The kVA demand is calculated as the aggregate of $200A \times 480V \times 1.73 \times 81.25\%$ equaling 134,940 VA and $600A \times 208V \times 1.73 \times 20\%$ equaling 43,181 VA. The kVA demand is $134,940 VA + 43,181 VA$ equaling 178,121 VA (**178.1 kVA**).

- (e) This Capacity Charge section does not apply to single meter, single family, residential electric panel upgrades for up to 200A 240V.
- (f) This Capacity Charge section does not apply to developments subject to Section 2.01 (j) with BWP estimated peak electrical demand of 5MVA or more that require a separate service agreement.
- (g) Capacity Charge applies to services with electric service confirmations or Aid-In-Construction letters written or updated on October 1, 2023 onward. Projects with a valid electric service confirmations or AIC letter may retain the current pricing if paid prior to the expiration of the electric service confirmation or AIC letter. If the electric service confirmation or AIC letter expires and a renewal is requested on or after October 1, 2023, then the updated electric service confirmation or AIC letter shall include the Capacity Charge.

2. **Off-site improvement costs.** The Customer-Developer will pay up to 100% of the cost of off-site improvements to extend or upgrade overhead/underground distribution lines to the project site if it benefits only that particular Customer-Developer.

or

The cost may be shared between the Customer-Developer and BWP if off-site improvement benefits the whole area, including any new Customer/developer.

3. Off-site improvement costs (Section 3.26(g)(2)) shall be required in the following cases:
 - (a) Multi-Family Dwellings to be served from Underground Circuits.
 - (b) High-rise Commercial Developments to be served from Underground Circuits.
 - (c) Large Industrial Developments to be served from Underground Circuits.
 - (d) Off-site improvement overhead/underground to increase capacity to serve any new load.
 - (e) The existing underground system has to be extended for 500 feet or more.

3.26 (h) 69 kV Customer Station. 69 kV Customer Station charges shall be as follows:

- (1) The Customer will pay for line extensions to the new Customer station both in public right-of-way and on private property. The Customer will also pay for 69,000 volt Gas Insulated Switchgear (GIS) and associated building enclosure.
- (2) The Customer will pay for the cost of power transformers and the cost of switchgear, including any associated buildings. The Customer will also pay for the rest of the distribution lines coming from the Customer station, which are exclusively used by that particular Customer. These costs will be in accordance. In the event the Customer and BWP agree to build a station larger than the needs of the Customer, an agreement will be negotiated to share the cost, subject to the City Council's approval.

3.27 NON-ELIGIBLE CUSTOMER GENERATOR SERVICE

3.27 (a) Authority. Sections 8-2-202, 8-2-203, 8-2-204 of the Burbank Municipal Code and the current City of Burbank Fee Resolution.

3.27 (b) Applicability. Applicable only to Customers who request to interconnect customer generation with the BWP electric system, and meet the following criteria:

- (1) Proposed generation meets the California Energy Commission Renewable Portfolio Standard Eligibility Guidebook (Eligibility Guidebook) and BWP requirements per Appendix E.
- (2) Generation that by virtue of its size (individually or in aggregate), does not meet the Net Energy Metering criteria in Section 3.25.
 - (a) Size will be determined using the CEC AC rating as follows:

Technology	CEC-AC Nameplate Calculation
Solar PV	$(\text{Qty of Modules}) \times (\text{PTC Rating}) \times (\text{Inverter Efficiency } \%) / 1000 = \text{ kW}$
Wind	$(\text{Qty of Turbines}) \times (\text{Power Output}) \times (\text{Inverter Efficiency } \%) / 1000 = \text{ kW}$
Fuel Cell	$(\text{Qty of Cells}) \times (\text{Rated Output}) \times (\text{Inverter Efficiency } \%) / 1000 = \text{ kW}$

- (3) Proposed generation capacity will not exceed the actual historical minimum load or anticipated load for new facilities.

- (4) Subject to the General Manager's discretion that additional renewable resource may be accommodated.
- (5) Customer shall obtain and possess all permits and authorizations in accordance with all applicable laws and regulations for construction, installation, design, operation, and maintenance of the generating facility. All reviews, approvals, and permits have been obtained through the City for the proposed generation.

Request to enter into such an agreement will be honored on a first-come-first-served basis until the time that the total rated interconnected generating capacity exceeds 5 percent of BWP's aggregate Customer peak demand.

3.27 (c) Billing and Credits. The Customer shall design, construct, and operate the proposed Customer generator in such a fashion to not inject electricity into the BWP electrical system. Any energy injected to the BWP electrical system will not be credited back to the Customer.

3.27 (d) Electrical Interconnection. Customer requesting interconnection must meet the requirements of 3.27 (b) and have a fully executed Interconnection Agreement (Appendix E) by the Customer and the General Manager on file at BWP, which contains strict requirements which in part are reflected in the Eligibility Guidebook. BWP reserves the right to interrupt the generator if power flows into the BWP electrical system, and charge the Customer for any generation deemed by BWP as not meeting the requirements of the interconnection agreement and to disconnect service as provided for in the interconnection agreement with the Customer



**WATER AND
POWER**

**PART 4
RULES AND REGULATIONS
GOVERNING WATER SERVICE**

APPROVED:

A handwritten signature in black ink, appearing to read "Richard Wilson".

July 2, 2024

Richard Wilson
Assistant General Manager
Water Service
Burbank Water and Power

Date

PART 4 RULES AND REGULATIONS GOVERNING WATER SERVICE

4.01 WATER CONSERVATION PLAN

4.01 (a) Pursuant to Sections 10616 through 10656 of the California Water Code and to the Department and City Council, Burbank has adopted an Urban Water Management Program which contains Burbank's water conservation measures, including metering, leak detection, public education, public information, home retrofit devices, landscape irrigation program, reuse program, rate structures, drought management plan, and other programs.

4.10 PROVISION OF WATER SERVICE

4.10 (a) BWP shall endeavor to render a dependable supply of potable water in quantities adequate to meet the reasonable needs of its Customers.

4.10 (b) BWP shall endeavor to maintain operating pressures at the service connection of not less than 25 pounds per square inch. Pressures may be lower at times of maximum demand or because of unusual elevations or other special conditions.

4.10 (c) The Customer is advised that in order to protect public water supplies, certain acts are by state law misdemeanors and, in some instances, punishable by imprisonment in the county jail or state prison. State law in this regard includes, but is not limited to, the following:

Section 498 Penal Code: This section includes stealing water, as well as diverting other utilities illegally, and taking water after service has been disconnected and the meter sealed, including unauthorized connection to fire hydrants.

Section 488 Penal Code: This section addresses permitting willful or neglectful seepage or overflow of water on adjacent lands, public or private roads or highways.

Sections 4450 to 4457 Health and Safety Code: These sections address acts which lead to the pollution of any conduit or reservoir.

4.11 CONTINUITY OF WATER SERVICE

4.11 (a) Whenever BWP shall find it necessary for the purpose of making repairs or improvements to the water system, it has the right to temporarily suspend the delivery of water. The making of such repairs or improvements will be completed as rapidly as may be practicable and at such times as will cause the least inconvenience to Customers. BWP will attempt to provide reasonable notice to Customers of such suspension when feasible, but shall not be liable for failure to do so.

4.12 INSPECTION

4.12 (a) BWP shall at all times have the right of ingress and egress to the Customer's premises at any time for any purpose connected with the furnishing of water.

4.13 DAMAGE TO PROPERTY

4.13 (a) The Customer shall at his own risk and expense, furnish, install, and keep in good and safe condition all apparatus and appliances which may be required for receiving, controlling, applying, and utilizing water furnished by BWP. BWP shall not be responsible for any loss or damage caused by the improper installation of such apparatus and appliances, negligence, want of proper care, or wrongful act of the Customer or any of his agents, employees, or licensees on the part of the Customer in installing, maintaining, using, operating or interfering with any such apparatus or appliances.

4.13 (b) BWP shall not be responsible for any damage occurring on the premises served, or elsewhere, by reason of open faucets, faulty fixtures, or broken pipes on such premises when service is turned on whether or not at that time there be any responsible interested person on the premises, nor for any damage resulting from the turning off of water service.

4.13 (c) Any damage occurring to meters or other appliances of pipes owned by BWP caused by carelessness or neglect of the Customer, including any damage which may result from hot water or steam from any boiler or heater on the Customer's premises, shall be paid for by the Customer on presentation of a bill by BWP.

4.13 (d) When any Customer or other person is determined to be the responsible party that has caused damage to a fire hydrant, fire service, blow off or other aboveground appurtenance, BWP shall charge that party the cost of repair plus the cost of water loss computed on the basis of duration of flow and the flow rate based on the type of land use zone in which the fire hydrant is located which are stipulated as follows:

Industrial zone -- 6,000 gallons per minute

Commercial zone -- 4,500 gallons per minute

Residential zone -- 3,000 gallons per minute

4.14 PUBLIC FIRE HYDRANTS

4.14 (a) The Chief of the Fire Department shall designate the size and location of all fire hydrants to be installed.

4.14 (b) Fire hydrants shall be installed in the parkway and/or sidewalk area adjacent to the curb. BWP will, upon request approved by the Chief of the Fire Department, change the location of fire hydrants within such strip when necessary, provided BWP is reimbursed for the cost of relocation.

4.14 (c) Fire hydrants are provided for the primary purpose of extinguishing fires and shall be used only by the Fire Department or BWP or their authorized representatives, or such other person as may be granted a permit by BWP to take water from a fire hydrant.

4.14 (d) In all cases where BWP grants a permit to take water from a fire hydrant, the permitted Customer shall use the eddy valve on the hydrant meter assembly to regulate the delivery of water. The fire hydrant valve shall be used only as a main supply valve. A special hydrant wrench shall be used to operate the hydrant valve. Use of the fire hydrant valve for functions of an eddy valve will be

sufficient cause to prohibit further use of the hydrants and the refusal to grant subsequent permits for the use of fire hydrants.

4.14 (e) A backflow assembly (type RP, see Article 4.35) shall be required for authorized potable water fire hydrant usage.

4.14 (f) A permit to take water from a fire hydrant will specify the rate at which water from the hydrant will be sold. The charge will include the rental of a fire hydrant meter assembly and hydrant wrench.

4.14 (g) Public fire hydrants shall be installed where required and shall be paid for by the Customer and shall remain the property of BWP. Specifications for such service shall be established by BWP and shall provide for the installation of a mainline valve and fire hydrant assembly in accordance with BWP's standards.

4.14 (h) The cost of maintaining and repairing fire hydrants shall be paid by BWP.

4.14 (i) A fire hydrant flow test may be requested for sprinkler system design, insurance rating, or other purposes. BWP will perform the test or provide the flow test data off the computer hydraulic model upon payment of the appropriate fee.

4.15 PRIVATE FIRE SERVICES

4.15 (a) Private fire services shall be installed where required and shall be paid for by the Customer. BWP shall provide for the installation of a by-pass meter in accordance with BWP standards.

4.15 (b) An approved double check detector assembly or reduced pressure backflow assembly shall be installed, owned, maintained, and tested by the Customer and shall comply with all backflow prevention requirements of Section 4.35 of these Rules and Regulations. For fire services larger than 2", BWP responsibility for the fire line ends at the property line. For 2" fire services, BWP responsibility ends at the Customer's point of connection, which is the angle valve inside the concrete box adjacent to the curb.

4.15 (c) BWP will provide the customer with an estimate for the construction cost and fees associated with the customer's project. The construction cost estimate for the water works in the City's right-of-way will cover the cost of labor, material, equipment, paving, and other fees described in these Rules and Regulations. The estimate shall be paid in full and in advance of any work by BWP. The actual costs of installation will be determined after construction is completed. If the actual cost is less than the estimate, the customer will be refunded the difference. An additional deposit will be required before installation if there are changes to the original scope of work or a change in field conditions. The cost estimate is valid for one year. The customer shall contact Water Engineering/Planning Section to renew the cost estimate if the estimate is older than one year.

4.15 (d) The use or attempted use of water through any hydrant, sprinkler head, hose rack, or any other fire prevention device for any purpose other than directly in connection with fire protection purposes, without the prior written consent of BWP in each case, shall constitute illegal use and shall be cause for immediate discontinuance of the fire service. BWP will make no further deliveries of

water through such service, and BWP will not maintain the service until a suitable meter (FM approved) of the type and size approved by BWP is installed in place of the existing backflow device and by-pass meter. The cost and expense of the installation of such meters shall be borne by the Customer and shall be paid in advance to BWP, based on the estimate by BWP of the cost of such installation.

4.16 CONSTRUCTION STANDARDS

4.16 (a) All construction associated with the water system shall be done in conformance with BWP standards. Standards may be modified for the convenience of BWP on a case by case basis.

4.16 (b) All domestic metered services 3-inch and larger shall be installed in a vault structure. Backflow prevention devices, including an approved double check detector assembly or reduced pressure assembly, shall be installed above grade. Existing single check valves (whether in a vault or above ground) are not in compliance with the current backflow standards and shall be replaced by the Customer (as required by BWP) with an approved aboveground backflow assembly.

4.16 (c) No meter services shall be installed in basements or parking structures.

4.20 APPLICATIONS FOR WATER SERVICE

4.20 (a) All Applicants for water service shall have given implied consent to such conditions of pressure and service as may from time to time exist, and to hold BWP harmless from, or on account of, any damage caused by, or arising out of, low pressure or high pressure, fluctuations of pressure, or interruptions of service.

4.20 (b) It shall be the Applicant's responsibility to ascertain the pressure at his premises, install and maintain any pressure booster pumps, pressure regulators, and relief valves as required.

4.20 (c) All requests for construction water or the use of BWP facilities for other temporary purposes shall be made on an approved application form. Charges associated with supplying such connections will be prepaid by the Applicant, and water consumed shall be paid for in conformance with these Rules and Regulations, including the rate schedules.

4.30 WATER CONNECTIONS

4.30 (a) When Application is made for service to premises to which a service connection has not already been installed, payment to BWP of the applicable fees and charges is required. The payment includes a Connection Fee (for production, transmission, and storage system capacity) and the estimated construction cost for the installation and materials needed to tap into the water main, install the service lateral, and set the meter (i.e., hook-up). BWP will furnish and install service pipe of suitable capacity as determined by the current Uniform Plumbing Code (UPC) from its water mains to the curb line or property line of the premises abutting upon a public street, highway, alley, lane, or road along which BWP already has installed or will install water mains. The construction plans must show all proposed plumbing fixtures and location of the new service. The plans must be submitted to BWP for review prior to permit approval. No work by BWP will proceed prior to the Applicant's payment of the construction cost estimate.

4.30 (b) A Customer may request that the water service and meter be changed to a larger or smaller size. The water service and meter must be sized in accordance with the most current UPC plumbing fixture count table. A Customer requesting a change to a larger size shall pay the Construction Fee (Hook-up) associated with the larger size and shall pay the difference between the Connection Fee associated with the larger size and that of the existing size. A Customer requesting a change to a smaller size shall pay the Construction Fee associated with the smaller size. The construction plans must show both existing and new plumbing fixtures and the location of the proposed service. The plans must be submitted to BWP for review prior to permit approval. No work by BWP will proceed prior to the Applicant's payment of the construction cost estimate.

4.30 (c) The water service will end at the curb or property line at the option of BWP. The Customer shall be responsible for the expense of installation and maintenance of the lines on the Customer's side of the property line connecting to BWP's service at the meter's outlet where construction of the Customer's facilities began.

4.30 (d) BWP will furnish and install and, thereafter, maintain all meters, pipes, equipment, and materials for the water service and title to all such meters, pipe, equipment, and materials shall remain for all time at BWP. BWP title and responsibility on ¾-inch through two-inch water service shall end at the outlet side of the meter; the customer's ownership and responsibility begins with the meter gasket. For three-inch and larger meters, shall end at the outlet side of the vault in underground installations.

4.30 (e) Only duly authorized employees of BWP are allowed to connect the Customer's service or to disconnect same from BWP's water mains.

4.30 (f) Where location of the meter box or vault on the City side of the property line is not practicable, the meter box or vault shall be located on the Customer's premises at a point adjacent to the crossing of the service pipe with the property line or such other location that may be agreed upon by BWP at its option.

4.30 (g) BWP shall not be required to install or allow to remain installed a meter, which in BWP's opinion, will not accurately measure normal water flows.

4.30 (h) The water meter shall be accessible at all times for inspection, reading, and testing regardless of whether the meter is in public right of way or on the Customer's premises.

4.30 (i) Water meter boxes shall not be located within 3' of driveways, water vaults within 6' of driveways, except at the option of BWP for its operating convenience. Water meter boxes shall not be located within 3' from top of "X", and 5' from parkway trees except at the option of BWP for its operating convenience. Refer to standard drawing, PSD 624 (location of service vault/box). A copy of the standard drawing may be provided by calling BWP Water Engineering at (818) 238-3500.

4.30 (j) If BWP finds that the Customer has caused damage to the public right of way as a result of Customer's construction on his own premises, such as due to trench slope, BWP shall notify the City's - Public Works Department.

4.30 (k) Where static water pressure is in excess of eighty (80) pounds per square inch or other pressure as may be stipulated by the City's adopted version of the Uniform Plumbing Code Section 1007 (b), an approved-type pressure regulator shall be installed by the Customer and the pressure reduced to eighty (80) pounds per square inch or less.

4.30 (l) All curb cocks or valves installed by BWP on the inlet side of the water meter shall be for the exclusive use of BWP and shall not be operated by anyone other than authorized employees of BWP.

4.30 (m) Each Customer's meter installation shall be provided with a suitable shut-off valve located within one foot of the meter, and there shall be no tap or branch between this valve and the meter.

4.30 (n) The Customer shall pay for a traffic rated vault and cover when the water service is within 3' of the driveway or any other area subject to traffic loads.

4.30 (o) Water services 2" and smaller may be relocated up to 10'- 0" laterally on property, and the relocation cost shall be paid by the Customer. Relocations greater than 10'- 0" will require abandonment of the old service, and installation of a new service shall be paid by the Customer.

4.30 (p) When a Customer requests a new service at a location where there is an existing main in the street available for the service, the Customer must pay the deposit and fees to place the new service in the street, and abandon an existing service from the main in the alley.

4.30 (q) A Customer shall not install any quick-closing valve or other equipment or devices which will cause excessive pressure surges in BWP's Water System. A violation of this subsection will be cause or immediate termination of service. The Customer will be liable for all damages resulting from the installation or use of any such equipment.

4.31 CONNECTION TO EXISTING WATER MAINS

4.31 (a) An Applicant applying for water service to a lot with no prior service, which is adjacent to a water distribution main, installed by or at direct cost to BWP according to BWP records, shall, before such application is accepted, pay to BWP a Water Distribution Main Charge. The charge shall be based on the entire footage of the lot as measured on the side adjacent to the main from which the service is to be taken.

Applicants for water service to a lot adjacent to a water main installed pursuant to Section 4.33 shall pay a prorated share of the costs based on the original installation costs.

4.31 (b) An Applicant applying for water service to a lot which may be served from an alley, where no service is available from the street, shall be required to provide stub-outs to the street to within 4 feet of the curb line. Such stub-outs shall be adequately monumented as to location and include a detailed site plan with dimensions as to location. A site inspection will be required prior to sign-off.

The Customer will also pay a Water Distribution Main Charge based on the front footage of the property on the street where the new main will eventually be constructed.

When the water service is required for fire protection, the supply line shall be designed to carry adequate fire flows from both the alley and the street sides of the system. A new fire service that is greater than 2-inches in size will not be connected to a 4-inch alley main.

When this occurs in a commercial/manufacturing/industrial area, and the main in the street is less than a 12" main, a Water Main Replacement Fee will be collected in addition to the deposit and fees to install the service.

When BWP installs a new water main in the street to replace an existing water main in the alley, property owners connected to the alley main must relocate their private building supply lines from the alley side of the property to the street side. BWP will cover the construction costs related to this relocation, including permit fees. Affected property owners will receive detailed instructions for the relocation process from BWP in advance.

4.31 (c) Where service may be provided from more than one water main fronting Applicant's property, the point of connection and meter location will be at BWP's discretion.

4.31 (d) The Customer shall pay for the abandonment of services no longer necessary to serve the property.

4.31 (e) Payment: BWP will provide the customer with an estimate for the construction cost and fees associated with the customer's project. The construction cost estimate for the water works in the City's right-of-way will cover the cost of labor, material, equipment, paving, and other fees described in these Rules and Regulations. The estimate shall be paid in full and in advance of any work by BWP. The actual costs of installation will be determined after construction is completed. If the actual cost is less than the estimate, the customer will be refunded the difference. An additional deposit will be required before installation if there are changes to the original scope of work or a change in field conditions. The cost estimate is valid for one year. The customer shall contact Water Engineering/Planning Section to renew the cost estimate if the estimate is older than one year.

4.32 MAIN EXTENSIONS

4.32 (a) An Applicant applying for water service where no water distribution main exists shall, before such application is accepted, pay the estimated cost of a main extension to the property to be served, based on BWP's estimate of the costs to extend a distribution main to the Applicant's property.

4.32 (b) The Applicant shall deposit with BWP the estimated amount of the cost to BWP of extending the distribution main to provide service to the Applicant's property, including administration and overhead. Upon receipt of this deposit, BWP will proceed with the plans for the installation of the water main extension. If upon completion of the installation, the actual cost is greater than the amount deposited, the Applicant shall pay the difference to BWP. If, however, the actual cost, including administration and overhead cost, is less than the estimated amount deposited, the difference will be refunded by BWP.

4.34 MAINLINE REPLACEMENTS

4.34 (a) BWP reserves the right to require mainline replacement if a development or redevelopment/tenant improvement does not meet current Water System standards or would demand more mainline capacity for consumption or fire suppression than existing facilities could adequately supply. BWP shall have the sole authority for making the determination of existing mainline capacity and the demand for capacity imputed to the development or redevelopment. The cost of any mainline replacement required to serve the development or redevelopment shall be borne entirely by the Applicant.

4.34 (b) All new water mains constructed in a residential zone will be 8-inches in diameter unless determined otherwise by BWP.

4.34 (c) If the existing mainline is less than 8-inches in diameter in any residential zone in street right-of-ways, fronting on a proposed development or redevelopment requiring service, the mainline shall be replaced in such streets at the expense of the Applicant. The replacement size shall be 8-inches in diameter. R-1 and R-2 zoning are exempt from this requirement.

4.34 (d) If the existing mainline is less than 12 inches in diameter in any Commercial, Manufacturing, or Industrial Zone in street right-of-ways fronting the proposed development or redevelopment requiring service, the mainline shall be replaced in such streets at the expense of the Applicant. The minimum size shall be 12 inch diameter.

The sole exceptions shall be for frontages on streets extending into areas of lower land uses, such that future replacement mains would clearly be less than 12 inches in diameter.

4.34 (e) In lieu of replacing existing water mains [as stated in Sections 4.34 (c) & 4.34 (d)], the Applicant may be required by BWP to pay an equivalent Water Main Replacement Fee (WMRF) if BWP determines that replacement of the mainline would not be in the best interest of BWP at that time. WMRF for both residential and commercial zones are shown in the Citywide Fee Schedule Section 7 (C). WMRF is based on 50% of the estimated cost to install 12" diameter pipe (commercial zones) or 8" diameter pipe (residential zones); however, in those instances where the Applicant owns the property on both sides of the street fronting the proposed future main, the Applicant shall pay 100% of the estimated cost.

4.34 (f) City government projects that are required to have mainline replacements under these Rules and Regulations shall be exempt from the Water Main Replacement Fee.

4.34 (g) If the water main fronting a new development or redevelopment/tenant improvement has been installed within ten years pursuant to Section 4.34 (e), the developer shall pay the WMRF as shown in the current Citywide Fee Schedule.

4.34 (h) Minor Tenant Improvement (TI) projects will be required to pay WMRF if a new water service is required. TI projects located on corner lots and require a new water service (domestic, fire, and/or irrigation), a WMRF will be applied only on the property frontage adjacent to the existing water main where the new service tap will occur.

4.35 BACKFLOW PREVENTION

4.35 (a) Should state law change or should there be a conflict between the state law and these Rules and Regulations; the state law shall govern. California Administrative Code, Title 17—Public.

Health, as amended, insofar as it is applicable to the protection of the water supply of BWP is hereby incorporated herein as if set forth in full.

4.35 (b) BWP is responsible to protect the public water supply from contamination by implementation of a cross-connection control program. The program includes, but shall not be limited to, the following elements:

- (1) Operating rules as covered in this section of the Rules and Regulations for Water Service.
- (2) Plan review for all proposed service connections to evaluate the premises for potential cross-connection.
- (3) Conducting surveys to identify water user premises where cross-connections are likely to occur.
- (4) Provisions for backflow protection by the water user.
- (5) Provision of trained staff to carry out the program.
- (6) Procedures for testing backflow assemblies.
- (7) Maintenance of records of locations, tests, repairs of backflow assemblies.

4.35 (c) No water service connection to any premises shall be installed or maintained by BWP on which there exists, or there is suspected to exist, any actual or potential cross-connection between the public water supply and any other piping, fixtures, appliances, equipment, drains, or any system which might cause contamination or pollution through backflow or back-siphonage unless the water service is protected as required by state law. All Applicants shall be required to pay a Plan Check Charge as set in the Burbank Fee Resolution for plan review. Single-family residences shall be exempt from this charge.

4.35 (d) BWP shall evaluate the Customer's premises for the degree of potential hazard to the public water supply. The abatement of cross-connections within the Customer's premises remains, however, the responsibility of the Customer, under the administrative control of the Los Angeles County Department of Health Services.

4.35 (e) The Customer shall be responsible for providing, installing, testing, and maintaining all required backflow prevention assemblies at their expense. The Customer will pay a monthly Backflow Prevention Assembly Charge for each backflow prevention assembly as set in the Burbank Fee Resolution. The Customer must provide testing by the due date, as shown on the Backflow Assembly Test Report. If testing is not provided to BWP by the due date as shown on the Backflow Assembly

Test Report, BWP may hire a private plumber to do the testing and charge the customer the actual testing cost plus a \$65.00 administrative fee.

4.35 (f) Any backflow prevention assembly required herein shall be a lead-free model and size approved by the Foundation for Cross-Connection Control and Hydraulic Research of the University of Southern California and listed on the Foundation's current list of *Approved Backflow Prevention Assemblies*.

4.35 (g) Backflow Prevention assemblies shall be installed in accordance with BWP Water Division Standard Plans.

- (1) Backflow assemblies shall be installed to provide the clearances shown on the Standard Plans to facilitate inspection and maintenance.
- (2) Backflow assemblies shall be installed as close to the water meter as practical, but in all cases before the first branch line.
- (3) Backflow assemblies shall be installed outside the structure being served. Decorative screening, walls, and/or landscaping shall be approved by the Design Review Committee.

4.35 (h) It shall be the duty of the Customer, at any premises where backflow prevention assemblies are installed, to have certified inspections and operational tests made upon installation at least once per year. In those instances where BWP deems the hazard to be great, certified inspections may be required at more frequent intervals. These inspections and tests shall be at the expense of the Customer. BWP shall notify the Customer when testing of backflow prevention assemblies is needed. The notice shall contain the date when the test must be completed and returned to BWP. These assemblies shall be repaired, overhauled, or replaced within 30 calendar days at the expense of the Customer whenever said assemblies are found to be defective. Records of all tests, repairs, and maintenance shall be made available to BWP.

4.35 (i) The inspection, testing, and repairs of approved backflow assemblies shall be performed by a certified Backflow Prevention Assembly Tester licensed by the Los Angeles County Department of Health Services who must be registered with BWP's online cross connection management portal. Inspection reports must be submitted electronically through BWP's online cross connection management portal. Written reports will not be accepted.

4.35 (j) Service of water to any premises may be discontinued by BWP to insure the health and safety of all Customers of the public water supply:

- (1) if a backflow assembly is not properly installed, tested and maintained, or
- (2) if any defect is found in an installed backflow prevention assembly, or
- (3) if it is found that a backflow prevention assembly has been removed or by-passed, or
- (4) if unprotected cross-connection exist on the premises, or

- (5) if a user supervisor has not been designated (if required), or
- (6) if records of tests, repairs, and maintenance are not provided to the Department.

Service will not be restored until such conditions or defects are corrected, and any charges to BWP paid.

4.35 (k) BWP may, at its discretion, require an industrial water user to designate a user supervisor when the industrial Customer's premises have a multiple piping systems that conveys various types of fluids, some of which may be hazardous and where changes in the piping system are frequently made. The user supervisor shall be responsible for the avoidance of cross-connections during the installation, operation, and maintenance of the Customer's pipelines and equipment.

4.35 (l) The type of backflow protection that shall be provided shall be commensurate with the degree of hazard that exists on the Customer's premises.

- (1) An approved air-gap separation is required for any premise where the public water supply is used to supplement a reclaimed water supply.
- (2) An approved air-gap separation is required or, if approved by the California Department of Health Services, an approved reduced-pressure, principle backflow prevention assembly at the service connection may be provided in lieu of an air-gap for:
 - a. premises where there are wastewater pumping and/or treatment plants, and there is no interconnection with the potable water system. This does not include a single-family residence that has a sewage lift pump.
 - b. premises where reclaimed water is used, and there is no interconnection with the potable water system.
 - c. premises where hazardous substances are handled in any manner in which the substances may enter the potable water system. This does not include a single-family residence that has a sewage lift pump.
 - d. premises where there is an unapproved auxiliary water supply, which is interconnected with the public water system.
 - e. premises where the fire system is supplied from the public water system and interconnected with an unapproved auxiliary water supply.
- (3) An approved lead-free reduced-pressure, principle backflow prevention assembly is required at the service connection for:
 - a. premises where there are irrigation systems into which fertilizers, herbicides, or pesticides are or can be injected.

- b. premises where there is an unapproved auxiliary water supply, and there are no interconnections with the public water system.
 - c. premises where entry is restricted so that inspections for cross-connections cannot be made with sufficient frequency or at sufficiently short notice to assure that cross-connections do not exist.
 - d. premises where there is a repeated history of cross-connections being established or re-established.
 - e. premises where multiple domestic water services are installed on the same parcel with the potential of an interconnection between the water services.
- (4) An approved lead-free double-check backflow prevention assembly is required at the service connection for premises where the fire system is supplied from the public water system.

4.36 TEMPORARY CONNECTION

4.36 (a) Temporary connections to BWP's water system must be in accordance with Article 4.20 (c), including the requirement for application and payment of fees.

4.36 (b) Temporary connections requiring use of public fire hydrants shall be made in conformance with the provisions of Article 4.14.

4.36 (c) Temporary connections involving usage of existing meter services, such as for demolition projects, shall be made in conformance with these Rules and Regulations, including the applicable fee schedules.

4.36 (d) BWP reserves the right to remove a Customer from use of a fire hydrant if the use is causing a disturbance to the water system.

Return of the deposit is subject to the payment for water used at the applicable rate and return of the fire hydrant meter in satisfactory condition. Damages to the hydrant meter shall be paid for by the Customer.

4.37 SPECIAL FACILITIES

The General Manager may establish and enforce charges and conditions for furnishing and supplying water service to any property of a character not adequately provided for in these water Rules and Regulations.

4.37 (a) Requirements. When water service is required for property at an elevation above sea level of eight hundred and ninety (890) feet or higher, payment of a Special Facilities Charge shall be required in addition to all other charges set forth in these Water Rules and Regulations before application for water service to the property can be accepted by BWP, except when the Special Facilities Charge has been paid by the previous Owner of and for the same parcel of land, or when water service can be obtained from an existing water main for which there is no Special Facilities Charge outstanding.

4.37 (b) Contents. Special Facilities Charge shall include the entire cost of the facilities required, including, but not limited to:

- (1) Cost of the land for reservoir, booster pumping plant, water main to the reservoir site, and access roadway to the reservoir site, cost of the reservoir, booster pumping plant, water mains, and necessary equipment appurtenant thereto, and the cost of installation thereof; grading, paving, retaining walls, curbs, drainage work and structures; and other necessary works to make said water plant facilities a permanent operating water installation integrated with the water system of the City.
- (2) Location, size, capacity, and other specifications for the design and construction shall be prescribed by the General Manager.
- (3) All of the aforesaid land acquisitions, water plant, and installations, facilities, and equipment, shall be dedicated to the City as contribution of utility plant and integrated into the water system of the City.

4.37 (c) Refunds. When said Special Facilities water main extension is to be utilized to serve properties additional to that of the original Applicant for whom installed, BWP shall collect a Special Facilities Charge from the Owner of said additional property to be served, as a condition precedent to acceptance of the application and furnishing water service from said water main extension, and the amount so collected by BWP shall be refunded to such original Applicant. Collection of the Special Facilities Charge for the purpose of making a refund to the original Applicant shall be on a pro-rata basis, which shall be the ratio that the frontage or area paralleling the water main for that lot or parcel of land bears to the total frontage or area of all lots or parcels of land paralleling the same water main extension as aforesaid between elevation eight hundred ninety (890) feet and one hundred (100) feet below the bottom of the reservoir(s). To ascertain frontage, when said water main extension is entirely in, on, or over a lot or parcel of land owned by an Applicant for such water service, so that no other land ownership fronts on such water main extension, this Customer shall bear the full cost of said water main extension.

Refunds shall be made only if, as, and when Special Facilities Charges are collected from other Customers requiring service from this water main extension within fifteen (15) years of date of payment, and not otherwise. Any charges collected subsequent to said fifteen (15) year period shall become the property of BWP.

4.37 (d) Exception. The provisions of this section do not apply to any division of land processed pursuant to the provisions of Chapter 27 (Subdivisions) of the Burbank Municipal Code.

4.37 (e) Special Facilities. Special Facilities required for specific developments may be designed and constructed by the Developer if permitted by the General Manager. Design, plans, specifications, and construction shall meet with the General Manager's approval.

4.40 WATER METERS

4.40 (a) In all cases where a water meter is to be set, BWP will, insofar as is practicable, locate the meter at a point designated by the Customer.

4.40 (b) When the location of a water meter is to be changed at the Customer's request, the change will be made by BWP at cost, including administrative and overhead costs, prepaid by the Customer.

4.40 (c) In the event that a Customer questions a water bill pursuant to Article 1.41 and requests a meter test, BWP shall perform the test without charge to the Customer, provided that no such test shall have been performed on that service within the twelve months immediately preceding. If a meter test has been performed on that service within the twelve months immediately preceding, the Applicant shall be required to make a deposit with BWP before it will perform the meter test. If a water meter is found to register between 98 percent and 102 percent of correct, BWP considers the meter accurate by the standards of the water industry, and no adjustment to billings shall be made pursuant to Article 1.41, and the deposit will be forfeited. If the meter is found to register outside of the range, the deposit will be refunded to the Customer and an adjustment made pursuant to Article 1.41.

4.40 (d) If an Applicant desires service for a hotel with restaurant facility, separate meters shall be required such that water for all restaurant purposes (except fire protection in the restaurant) is excluded from water leading to the balance of the facility. This measure is to facilitate wastewater billing.

4.40 (e) A separate irrigation meter will be required if the landscaped area is larger than 2,500 square feet or more than 50,000 gallons of potable water use.

4.41 UNMETERED WATER

It is generally the policy of BWP to not allow unmetered usage of water in Burbank except for extinguishing fires.

4.50 WATER SERVICE DISCONNECTION

4.50 (a) The use of water on any premises which may cause water or other matter to enter or be forced into BWP's water distribution system or if apparatus is connected to the service which may in any way be detrimental to the service rendered by BWP, to its other Customers or to the general public is prohibited and shall be considered by BWP to be a violation of the Rules and Regulations.

4.50 (b) The Customer may request that BWP turn-on or turn-off the water service at the City valve for the purpose of making repairs or changes to Customer's plumbing. The Customer will be billed for the turn-on or turn-off according to the rate set in the Burbank Fee Resolution.



**WATER AND
POWER**

**PART 5
RULES AND REGULATIONS GOVERNING
USE OF RECYCLED WATER**

A handwritten signature in black ink, appearing to read "Richard Wilson", written over a horizontal line.

APPROVED:

July 2, 2024

Richard Wilson
Assistant General Manager
Water Service
Burbank Water and Power

Date

PART 5 RULES AND REGULATIONS GOVERNING USE OF RECYCLED WATER

5.01 PURPOSE

5.01 (a) The City does not have any naturally occurring water rights and must import all its potable water at substantial economic and environmental cost. To reduce the City's dependence on expensive and often drought limited imported potable water, tertiary treated wastewater collected and treated by the City's Public Works Department and distributed by BWP shall be made available for beneficial use as recycled water.

5.01 (b) The tertiary treated recycled water distributed by BWP is permitted for the following beneficial uses:

1. Surface Irrigation
2. Impoundments
3. Industrial or commercial cooling using a cooling tower or evaporative condenser
4. Priming drain traps
5. Industrial Process Water
6. Decorative fountains
7. Commercial laundries
8. Consolidation of backfill around potable water pipelines
9. Artificial snow making for commercial outdoor use
10. Commercial car washes
11. Industrial boiler feed
12. Backfill consolidation around nonportable piping
13. Soil Compaction
14. Mixing Concrete
15. Dust control
16. Cleaning roads, sidewalks, and outdoor work areas

5.01 (c) The use of recycled water is essential for the City's conservation and sustainability goals, increases the City's resilience for future droughts, and develops a viable local water supply

5.01 (d) Customers subject to mandatory recycled water use in accordance with section 5.02 below are required to utilize recycled water in place of potable water for all approved uses where economic and practical.

5.02 PARCELS SUBJECT TO MANDATORY USE OF RECYCLED WATER

Recycled Water Zones have been developed to determine mandatory recycled water use requirements. Recycled Water Zones 1 through 3 are delineated in the following manner:

- (1) Zone 1 consists of parcels which are located adjacent to a current or proposed recycled water main.

- (2) Zone 2 consists of parcels which will require an additional recycled water distribution main less than 250 feet long to serve the subject parcel with recycled water.
- (3) Zone 3 consists of parcels which will require an additional recycled water distribution main greater than 250 feet but less than 1,000 feet long to serve the subject parcel with recycled water.

Recycled water use will be required for all parcels within Recycled Water Zones 1, 2, and 3 which have greater than 2,500 square feet of landscaped area or greater than 50,000 gallons per year of potable water use which can be substituted with recycled water. Residential parcels zoned R-1 and R-2 (single-family and duplex) are not permitted to utilize recycled water.

Parcels located in Recycled Water Zone 1, which are not exempt from mandatory recycled water use requirements, must convert to utilize recycled water upon notification by BWP that recycled water is available at the property. It is the parcel Owner's responsibility to modify their piping and equipment to lawfully use recycled water. Conversion to recycled water will be required within 180 days of notification by BWP of recycled water availability.

Parcels located in Recycled Water Zone 2 are subject to the same requirements as those in Zone 1. As BWP prepares to install a distribution lateral fronting the property, the Owner will be notified that recycled water will be available. Conversion to recycled water will be required within 180 days of notification by BWP of recycled water availability.

Parcels located in Recycled Water Zone 3 should prepare for the use of recycled water when the parcel undergoes new construction or a significant remodel. BWP will determine in the future when to serve these parcels.

When BWP constructs a recycled water main fronting a portion of a parcel, that parcel becomes subject immediately to the required use of recycled water and is reclassified as a Zone 1 parcel.

All properties located within Recycled Water Zones 1, 2, and 3 that are subject to the required use of recycled water will be exempt from the requirements of the model landscape ordinance. The use of recycled water, when required, will be a condition of potable water service.

5.03 APPLICATION AND APPROVAL

5.03 (a) An application for recycled water service shall be made in writing, signed by the Applicant, Owner, or Customer. A signed application is an agreement to comply with these rules and regulations governing the use of recycled water.

5.03 (b) The Customer is required to obtain approval to utilize recycled water from the Los Angeles County Department of Public Health (LACDPH) and State Water Resources Control Board Division of Drinking Water (DDW) and any other governmental approval applicable to such use prior to construction or implementation.

5.03 (c) T The Customer must construct and/or modify their potable and recycled water systems to be horizontally and vertically separated and in compliance with the requirements of all applicable Federal, State, and local statutes, ordinances, and regulations.

5.04 SERVICE LINE

5.04 (a) Size, Location, and Installation of Service Line. BWP reserves the right to determine the size of the service lines, the service connections, the meters, and shall also have the right to determine the kind and size of backflow protection devices for potable and recycled water service. The service lines shall be installed to the property line of the Customer's property, abutting the public street or easement of the recycled water main.

- (1) BWP reserves the right to limit the area of land to be supplied by one service connection to one Owner. A service connection shall not be used to supply adjoining property of a different Owner. A homeowners association responsible for maintaining common area landscaping shall be considered one Owner.
- (2) When property provided with a service connection is subdivided, such connection shall be considered as serving the lot or parcel of land that it directly or first enters. Additional mains and/or recycled water service lines will be required for all subdivided areas in accordance with the Rules and Regulations.
- (3) All recycled water used on any premises must first pass through a meter. Customers shall be held responsible and charged for all recycled water passing through their meter(s).
- (4) Every recycled water service line installed by BWP shall be equipped with a curb stop or gate valve on the inlet side of the meter. Such valve or curb stop shall be for the exclusive use of BWP in controlling the recycled water supply through the service line. The Customer is prohibited from using this valve. If the curb stop or valve is damaged by the Customer's use, the repair or replacement shall be at the Customer's expense.
- (5) The Customer shall provide a suitable shut-off valve located within one foot downstream of the outlet side of the meter. There shall be no tap or branch between this valve and the meter. The valve shall be owned and maintained by the Customer.
- (6) If the customer has multiple recycled water uses under Section 5.01(b), the customer may be required to install multiple dedicated recycled water services for one or more uses as directed by BWP, LACDPH, and/or DDW.

5.04 (b) Construction Fee (Hook up). The fee for providing the recycled water service line, meter, and ancillary facilities as set forth in these Rules and Regulations is the actual cost to BWP for the installation as set forth in the City of Burbank Fee Resolution. BWP will provide the customer with an estimate for the construction cost and fees associated with the customer's project. The construction cost estimate for the water works in the City's right-of-way will cover the cost of labor, material, equipment, paving, and other fees described in these Rules and Regulations. The estimate shall be paid in full and in advance of any work by BWP. The actual costs of installation will be determined

after construction is completed. If the actual cost is less than the estimate, the customer will be refunded the difference. An additional deposit will be required before installation if there are changes to the original scope of work or a change in field conditions. The cost estimate is valid for one year. The customer shall contact Water Engineering/Planning Section to renew the cost estimate if the estimate is older than one year. This fee may be waived for Customers who are required to convert their existing on-site uses to recycled water.

5.04 (c) Connection Fee. The Connection Fee for a new user who does not have an existing connection or who is increasing service/meter sizes shall be the same as for domestic services as set in the City of Burbank Fee Resolution. Credit shall be given for domestic services converted to recycled services provided the domestic service is abandoned. This fee may be waived for Customers who are required to convert their existing on-site uses to recycled water.

5.05 BACKFLOW PROTECTION

5.05 (a) A physical interconnection between the potable and the recycled water systems is prohibited. Separation of the potable and recycled water systems is essential to the protection of water quality in the potable system. BWP will perform regular inspection and/or testing to confirm this separation.

5.05 (b) If a premise is supplied with both potable water and recycled water, then backflow protection with an approved air gap (AG) must be provided at each potable water service connection. A reduced pressure principle (RP) backflow preventer may be used in-lieu only with the approval of DDW and BWP.

5.05 (c) Backflow preventers are not normally used on recycled water systems. However, BWP shall maintain water quality in the recycled distribution system. An approved lead-free backflow preventer may therefore be needed at a specific meter where on-site exposures could impact the quality of the recycled water supply (i.e. fertilizer injection, additions of corrosion inhibitors).

5.05 (d) An approved lead-free detector check assembly backflow device is required on all recycled water fire services. The meter on this assembly will be utilized to indicate prohibited connections to the recycled fire system.

5.05 (e) If potable water is temporarily used to supply the on-site recycled water system, the connection shall be protected with a reduced pressure principle (RP) device or approved air gap. The temporary connection will not be allowed unless the normal recycled water supply is physically disconnected.

5.06 SCHEDULING RECYCLED WATER

BWP reserves the right to control and schedule the time of use and volume of recycled water usage if scheduling is necessary for purposes including, but not limited to, the maintenance of an acceptable working pressure in the recycled water system and for providing reasonable safeguards in relation to public health.

5.07 ON-SITE RECYCLED WATER FACILITIES

5.07 (a) Any on-site recycled water facility shall be provided by the Applicant, Owner, or Customer, at the Applicant's expense. The Applicant, Owner, or Customer shall retain title to all such on-site facilities.

5.07 (b) On-site facilities shall conform to the requirements of Federal, State, and local agencies, in addition to these Rules and Regulations.

5.07 (c) A current set of record drawings of the on-site recycled water facilities shall be submitted to BWP. The drawings shall show both the recycled and the potable water systems. Copies of these drawings must be retained on-site for inspection at any time.

5.07 (d) On-site facilities must be approved by BWP, LACDPH, and DDW prior to the initiation of recycled water service and inspected at regular intervals thereafter for compliance with the Rules and Regulations.

5.07 (e) Hose bibbs shall not be installed on the recycled water system. Quick-couplers fitted with hose bibbs shall not be left unattended.

5.07 (f) Drinking fountains shall be placed beyond the range of or protected from the spray of recycled water.

5.07 (g) Parallel recycled and potable pipelines shall not be laid in a common trench and shall have no less than ten feet of horizontal separation.

5.07 (h) The recycled water system shall be operated to prevent or minimize runoff or discharge outside the Customer's area. Should the application rate exceed the soil infiltration rate, an automatic system shall be used to program several shorter duration watering cycles to control runoff.

5.07 (i) Any changes to the on-site recycled water system or operating procedures shall be reported to BWP in writing.

5.07 (j) All recycled water use signs must display an international symbol similar to that shown in Figure 60310-A in California Code of Regulations (CCR) Title 22 § 60310(g).

5.08 NEW RECYCLED WATER FACILITIES

5.08 (a) An application for recycled water service shall be submitted to BWP prior to commencing construction.

5.08 (b) A Customer may also be required to submit an application for recycled water use to the Los Angeles County Department of Public Health and, if required, DDW, and their approval must be obtained prior to commencing construction. These agencies may require inspection of recycled facilities during construction.

5.08 (c) Prior to commencement of service to any on-site system using recycled water, the installed system shall be tested under active conditions for compliance with the Rules and Regulations.

5.09 CONVERSION OF EXISTING FACILITIES TO RECYCLED WATER

5.09 (a) Where it is planned that an existing potable water system be converted to a recycled water facility, the facilities to be converted to recycled water shall be investigated in detail, including a review of any record drawings, preparation of required reports, and determinations by BWP of measures necessary to bring the system into full compliance with the Rules and Regulations. The owner is responsible to lawfully modify their system to use recycled water and will do so at their expense.

5.09 (b) No existing potable water facilities shall be connected to or incorporated into the recycled water system without BWP, LACDPH, and DDW approval.

5.09 (c) The converted recycled water facility shall be tested under active conditions for compliance with the Rules and Regulations.

5.10 MARKING OF ON-SITE PIPES AND APPURTENANCES

5.10 (a) All recycled water and potable water piping and appurtenances must be identified in accordance with the Recycled Water User Manual developed by the Los Angeles County Recycled Water Advisory Committee. This manual is available from BWP or on the internet at <https://www.lacsd.org/waterreuse>. The owner is responsible for complying with all applicable Federal, State, and local statutes, ordinances, and regulations.

5.11 ON-SITE SUPERVISOR

5.11 (a) Operation and Surveillance. The operation and surveillance of on-site recycled water systems, whether they are public or private, shall be under the management of an on-site supervisor designated by the user and approved by BWP.

5.11 (b) Identification of Supervisor. The identity of the current on-site supervisor will be kept by the LACDPH as well as BWP. It is the responsibility of the user to give notice of any changes in this position.

5.11 (c) Responsibility of Supervisor. The on-site supervisor shall be responsible for the installation and use of pipelines and equipment in accordance with the Rules and Regulations set forth by BWP, as well as applicable Federal, State, and local statutes.

Although the on-site supervisor shall oversee the day-to-day operations of on-site facilities, BWP reserves the right to enter the user's premises for the purpose of inspecting on-site water facilities and areas of water use to ensure compliance with said Rules and Regulations.

5.12 INSPECTION OF FACILITIES

5.12 (a) BWP reserves the right to inspect the premises to assure compliance with these requirements. Inspection may include the domestic water system if the likelihood of cross-connection hazards exists. The following inspections will be performed:

- Annual visual inspection to ensure compliance with recycled water identification requirements including, but not limited to, signage, labelling, and irrigation system components.
- Shutdown test to detect the presence of physical cross-connections between on-site potable and recycled water piping.

5.12 (b) Customer shall have the on-site supervisor accompany BWP's inspector during the inspection. Customer shall have available at time of inspection, current plans of both the domestic and recycled piping system.

5.12 (c) Failure to comply with these inspection requirements may result in a suspension of recycled and potable water service to the property.

5.13 WARNING SIGNS AND LABELS

5.13 (a) Warning signs shall be visibly posted at all reasonable entrances to notify the public where the recycled water is being used and that it is unsafe to drink.

5.13 (b) The size and placement of the signs will be dependent on the nature of the facility. A detailed plan showing placement of signs and their size shall be submitted for approval prior to establishing recycled water service.

5.13 (c) As a minimum, signs shall be no smaller than 8" x 4" with 1/2" letters labeled RECYCLED WATER - DO NOT DRINK.

5.14 PROPERTY OWNER'S RESPONSIBILITY

5.14 (a) If a property utilizing recycled water is sold or the financial responsibility for payment of the recycled water bills is transferred, the application and approval for recycled water service shall be void. The new Owner or operator must reapply for recycled water service in accordance with these Rules and Regulations.

5.14 (b) Property Owner agrees that all leases of a property utilizing recycled water will include language regarding the use of recycled water and compliance with these Rules and Regulations.

5.15 RECYCLED WATER FOR WATER TRUCKS AND MOBILE SWEEPERS

5.15 (a) Recycled water shall be made available to water trucks for use in landscape irrigation, dust control, or construction activities and mobile sweepers for pavement sweeping.

5.15 (b) The water truck or mobile sweeper shall contain an approved air gap between the filler tube and the tank to prevent back-siphonage. The vehicle shall be clearly labeled RECYCLED WATER - DO NOT DRINK.

5.15 (c) Applicant shall first comply with and execute a Temporary Recycled Water Use Agreement. Agreement requires the following:

- (1) Applicant shall be a contractor licensed by the State of California.
- (2) Applicant shall have a City Business License.
- (3) Applicant shall maintain a log of all transfers of recycled water. Any transfers outside the City must be authorized by BWP.
- (4) Applicant shall attend training session on the use of recycled water.
- (5) All vehicles to be used for the transfer of recycled water shall be inspected by BWP before use is authorized.
- (6) All required fees and deposits shall be paid before use is authorized.
- (7) Water trucks that utilize recycled water are not allowed to convert back to use for potable water.



**WATER AND
POWER**

**PART 6
WATER RATES, FEES, AND CHARGES**

APPROVED:

A handwritten signature in black ink, appearing to read "Richard Wilson".

July 2 2024

Richard Wilson

Date

Assistant General Manager
Water Service
Burbank Water and Power

PART 6 WATER RATES, FEES AND CHARGES

Water supplied to the City used for extinguishing fires, sewer flushing, storm drain flushing, and street sweeping shall be supplied free of charge.

Current Water Rates, Fees, and Charges are enumerated in the current City of Burbank Fee Resolution, Article XI, Water Rates and Charges, on file at the City Clerk's Office, and on our website at www.burbankwaterandpower.com (Current Rate Resolution).

6.01 SINGLE FAMILY RESIDENTIAL SERVICE RATES

6.01 (a) Applicability. The rates herein set forth shall be applicable to all metered water within the City serving single-family homes.

6.01 (b) Rates. The single-family residential service water charge shall be made on a monthly basis and shall be the sum of a *Water Availability Charge*, a *Quantity Charge*, and a *Water Cost Adjustment Charge (WCAC)*, provided that the charge shall be no less than a *Minimum Charge* each determined as follows:

6.01 (c) Water Availability Charge. The Water Availability Charge for all size meters shall be a monthly fee as set in the Current Rate Resolution.

6.01 (d) Quantity Charge. The Quantity Charge shall be computed using the rate in the Current Rate Resolution.

6.01 (e) Water Cost Adjustment Charge (WCAC). The WCAC shall be computed using the formula in the Current Rate Resolution. See Section 6.08 for more details.

6.01 (f) Minimum Charge. The minimum charge per Customer shall be the *Water Availability Charge*.

6.02 MULTI-FAMILY RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL SERVICE RATES

6.02 (a) Applicability. The rates herein set forth shall be applicable to all metered water within the City serving multi-family residential, commercial, industrial, the City and schools.

6.02 (b) Rates. The total charge shall be the sum of a *Water Availability Charge*, a *Quantity Charge*, and a *Water Cost Adjustment Charge (WCAC)* as established in the Current Rate Resolution. The charges are determined as follow:

6.02 (c) Water Availability Charge. The Water Availability Charge for all size meters shall be a fixed monthly fee as set in the Current Rate Resolution.

6.02 (d) Quantity Charge. The Quantity Charge shall be computed using the rate in the Current Rate Resolution. Summer rate is applicable from June 1 thru October 31, and non-summer rate is applicable from November 1 thru May 31.

6.02 (e) Water Cost Adjustment Charge (WCAC). The WCAC shall be computed using the formula in the Current Rate Resolution. See Section 6.08 for more details.

6.02 (f) Minimum Charge. The minimum charge per Customer shall be the *Water Availability Charge*.

6.02 (g) Water Efficiency Non-Compliance Surcharge. A surcharge will be applied to multi-family, commercial, and industrial services which are not in compliance with the City's Water Efficiency Ordinance. Surcharges are set in the Current Rate Resolution as a percentage of all water charges for the first year and doubled in subsequent years of non compliance.

6.03 TEMPORARY WATER SERVICE RATES

6.03 (a) Rates. The monthly charge for temporary metered water service shall be the sum of a *Processing Fee*, a *Quantity Charge*, and a *Water Cost Adjustment Charge (WCAC)*. In addition, if a fire hydrant meter is required for the temporary service, a *Rental Rate* will be charged.

6.03 (b) Processing Fee and Deposit. A processing fee shall be charged to initiate a temporary water service account. Customer shall pay a specified deposit to secure the return of the fire hydrant meter, eddy valve, and valve wrench. The processing fee and hydrant deposit are specified in the Current Rate Resolution.

6.03 (c) Service Charge. For metered services, the charge will be the Water Availability Charge per section 6.02.

6.03 (d) Quantity Charge and WCAC. The Quantity Charge and WCAC shall be two times the rates specified under Section 6.02.

6.03 (e) Estimated Monthly Billing. A charge, specified in the City Current Rate Resolution, shall be made to cover the expense of each month for each meter not returned for reading and checking as provided in Article 4.36 (d), *obtaining correct reading, and inspecting the meter assembly*.

6.03 (f) Rental Rate. Fire hydrant meters shall be rented at the rate specified in the Current Rate Resolution.

6.04 PRIVATE FIRE PROTECTION SERVICE RATES

6.04 (a) Applicability. These rates shall apply to a Customer for service for private fire lines used exclusively for fire protection, whether said lines are connected to an automatic sprinkling system or to a hose attachment.

6.04 (b) Rates. The total monthly bill shall be the sum of a *Water Availability Charge*, a *Water Cost Adjustment Charge (WCAC)*, and a *Quantity Charge*.

6.04 (c) Water Availability Charge. The monthly Water Availability charge shall be as specified in the Current Rate Resolution.

6.04 (d) Quantity Charge and WCAC. For all water supplied (as recorded by the detector check valve bypass meter) other than for fire extinguishing purposes, a charge shall be made at a rate three times those specified in Section 6.02. Where water is used for purposes not reasonably related to fire protection, the Division shall either discontinue service or place an FM meter on the service at the Customer's expense and change the applicable rate schedule from Private Fire Protection Service to the rate as specified in Section 6.06.

6.05 UNMETERED CITY LANDSCAPE SERVICE

6.05 (a) Applicability. Unmetered service for the landscape irrigation of areas less than 100 square feet is available to City of Burbank facilities.

6.05 (b) Charges. The charges for an unmetered landscape service shall be the sum of a *Water Availability Charge*, a *Quantity Charge*, and a *Water Cost Adjustment Charge* for one unit for each location as established in the Current Rate Resolution. Cumulative billing for unmetered City landscape service may be approved by the BWP General Manager.

6.06 COMBINATION DOMESTIC/FIRE SERVICE RATE

6.06 (a) Applicability. Combination domestic and fire water service through an FM meter.

6.06 (b) Rates. The total charge shall be the sum of a *Water Availability Charge*, a *Quantity Charge*, and a *Water Cost Adjustment Charge (WCAC)*.

6.06 (c) Water Availability Charge. The Water Availability charge shall be based upon the nominal meter size, with charges as specified in the Current Rate Resolution.

6.06 (d) Quantity Charge, Water Cost Adjustment Charge. The *Quantity Charge* and a *Water Cost Adjustment Charge (WCAC)* shall be as established in the Current Rate Resolution.

6.08 WATER COST ADJUSTMENT CHARGE (WCAC)

6.08 (a) Purpose. The Quantity Charge specified in previous sections is subject to a water cost adjustment charge as specified in this Section in order to compensate the City for its varying costs of purchasing or producing water. The WCAC can be adjusted monthly and shall be calculated to the nearest five mills (\$0.005).

6.08 (b) Formula. The adjustment shall be determined in accordance with the following formula:

$$\begin{array}{l} \text{Adjustments} \\ \text{(mills per unit)} \end{array} = 1000 \quad \times \quad \frac{\text{Estimated Water Costs}}{\text{Estimated Units of Water Sales} \times .95}$$

6.08 (c) Definitions.

Estimated Water Costs shall mean the total cost to the City of purchased water delivered to the City from the Metropolitan Water District (MWD) or other independent suppliers, related MWD charges such as Readiness to Serve Charge, New Demand Charge, Treated Water Peaking Charge and Connection Maintenance Charge, pumped groundwater inventory charges, chemical costs for treating the water, including granular activated carbon, compliance water testing, Upper Los Angeles River Area (ULARA) Watermaster expense related to the maintenance, protection and/or development of basin water resources, and the total cost to the City for electric power to pump water. All such costs shall be estimated monthly by the BWP General Manager for the next 12-month period and adjusted by any under or over-collections of water costs experienced by the City. The Council will be advised of any changes in the WCAC rate.

Estimated Units of Water Sales shall mean the hundreds of cubic feet of potable water sales for the next 12-month period as estimated by the BWP General Manager.

6.09 RECYCLED WATER SERVICE, SCHEDULE RG-1

6.09 (a) Applicability. The rates herein set forth shall be applicable to all metered recycled water service within the City.

6.09 (b) Rates. The recycled water charge shall be made on a monthly basis and shall be the sum of a *Water Availability Charge* and a *Quantity Charge*.

6.09 (c) Water Availability Charge. The Water Availability Charge for all size meters shall be a monthly fee as set in the Current Rate Resolution.

6.09 (d) Quantity Charge. The Quantity Charge shall be computed using the rate in the Current Rate Resolution. The rate in the Current Rate Resolution is equivalent to 85% of the cost the average landscape water user would pay annually for the equivalent volume of potable water.

6.10 TEMPORARY RECYCLED WATER SERVICE RATE

6.10 (a) Recycled water service for water trucks is governed under Section 5.15 of the Rules and Regulations. The charge for water trucks using recycled water shall include a *Processing Fee* and a *Monthly Service Charge*.

6.10 (b) Processing Fee. A processing fee shall be charged to initiate a temporary recycled water service agreement.

6.10 (c) Service Charge. A service charge per month or portion thereof shall be assessed to cover the administration of the temporary service and the quantity charge for the recycled water used.

6.10 (d) Recycled Water Hydrant. Temporary water service from a recycled water hydrant shall be charged the same as from a domestic fire hydrant under Section 6.03.

6.10 (e) Estimated Monthly Billing. A charge, specified in the Current Rate Resolution, shall be made to cover the expense of each month for each meter not returned for reading and checking as provided in Article 4.36 (d), *obtaining correct reading, and inspecting the meter assembly*.

6.10 (f) Rental Rate. Hydrant meters shall be rented at the rate specified in the Current Rate Resolution.

6.11 PHYSICAL SOLUTION WATER COST

6.11 (a) Applicability. The water rights in the Upper Los Angeles River Area were established by the JUDGMENT AFTER TRIAL BY COURT in Superior Court Case No. 650079, entitled The City of Los Angeles, A Municipal Corporation, Plaintiffs, vs. City of San Fernando, et al., Defendants (Judgment). Under the Judgment, certain parties have rights to extract Physical Solution Water from the underlying groundwater basin upon payment of specified charges to the City of Burbank (City). Valhalla and Lockheed have the right to annually extract 300 acre-feet and 25 acre-feet of water, respectively.

From time to time, other property owners, not covered by the Judgment, have a need to produce ground water for temporary and/or long term dewatering activities relating to construction, building foundations, basements or underground facilities. The water is typically discharged to a storm drain or sewer.

The City shall be compensated for the removal of this water from the groundwater basin since all groundwater water extracted in the City is deducted from the City's groundwater allotment.

6.11 (b) Rates. The charge for this water will be the *Physical Solution Water Charge* plus an *Administrative Fee*.

6.11 (c) Physical Solution Water Charge. The method of calculating the rate for the amounts of water extracted by Valhalla and Lockheed described in Section 6.11 (a) above is stipulated in the Judgment and is defined as Los Angeles Department of Water and Power's average cost of water, minus their lifting cost.

Valhalla, Lockheed, and other property owners do not have the right to extract groundwater in excess of the amounts described in Section 6.11 (a). However, the City may allow these extractions and sets the rate at the equivalent cost to provide potable water during the summer.

The cost per acre-foot of Physical Solution water is set in the Current Rate Resolution.

6.11 (d) Administrative Fee. A monthly Administrative Fee as set in the Current Rate Resolution will be added to the monthly billing. This fee is also stipulated in the Judgment.



**WATER AND
POWER**

**PART 7
RULES AND REGULATIONS
GOVERNING FIBER OPTIC SERVICE
FIBER OPTIC RATES, FEES, AND CHARGES**

APPROVED:



James Compton
Assistant General Manager
Operations Technology
Burbank Water and Power

7/2/24

Date

PART 7 RULES AND REGULATIONS GOVERNING FIBER OPTIC SERVICE FIBER OPTIC RATES, FEES, AND CHARGES

7.10 GENERAL SERVICE CONDITIONS

7.10 (a) BWP shall maintain the fiber optic cable from any manhole, pullbox, vault or pole to the Customer's point of demarcation.

7.10 (b) The Customer is responsible for applying their own equipment and signal for dark fiber services.

7.10 (c) The Customer shall contact BWP well in advance of any new, upgraded or relocated fiber optic installations.

7.10 (d) The Customer shall make an appointment to meet with BWP and conduct a job site walk-through to determine the type of service and to mutually agree on a point of termination prior to any work being performed.

7.10 (e) The Customer has the responsibility to determine if any proposed building construction places BWP's existing fiber optic facilities in conflict with any federal, state or local codes. Any temporary or permanent relocation of BWP facilities to accomplish a project will require all costs be borne by the Customer.

7.10 (f) BWP must review commitments made to a Customer, for any service installation, if more than 12 months have elapsed between the initial meeting and the start of construction.

7.10 (g) Although BWP will make every effort to provide Customers with quality, reliable, continuous fiber optic service, BWP makes no guarantees to system interruptions specifically caused by weather, earthquakes or any other conditions beyond the control of BWP.

7.10 (h) Any extension or connection to the fiber network shall be paid by the party requiring the extension or connection.

7.10 (i) To ensure the safety of BWP personnel, it is mandatory that all Customer work on Burbank fiber optic cable be coordinated with BWP representatives.

7.10 (j) No user shall be granted direct physical access to the fiber network in the public right-of-way.

7.10 (k) All City-owned fiber extensions will include fiber for the City's use without restriction.

7.10 (l) Maintenance of fiber extensions will be shared based on fiber allocations.

7.10 (m) A fiber use agreement is not a franchise.

7.10 (n) No exclusive rights to service will be granted to any company for communication services.

7.20 FIBER OPTIC RATES, FEES, AND CHARGES

7.20 (a) Authority comes from Sections 8-2-203, 8-2-212, and 8-2-213 of the Burbank Municipal Code, and the current City of Burbank Fee Resolution.

7.20 (b) All agreements are subject to approval by the Council.

7.20 (c) Agreements shall have a minimum term of one year.

7.20 (d) Credit worthiness and disconnection of service for non-payment are to be consistent with the current Rules and Regulations.



**WATER AND
POWER**

APPENDICES

APPENDIX A

HARMONICS

A1. Nature of Harmonics

Harmonics are integral multiples of the fundamental frequency. For example, for 60 Hz power systems, the second harmonic would be 2·60 or 120 Hz and the third harmonic would be 3·60 or 180 Hz.

Harmonics are caused by devices that change the shape of the normal sine wave of voltage or current in synchronism with the 60 Hz supply. In general those include three-phase devices in which the three phase coils are not exactly symmetrical, and single and three-phase loads in which the load impedance changes during the voltage wave produce a distorted current wave such as the magnetizing current in a coil with an iron core. It can be shown that a distorted wave can be made up of a fundamental and harmonics of various frequencies and magnitudes.

Inductive reactance varies directly as the frequency so that the current in an inductive circuit is reduced in proportion to the frequency for a given harmonic voltage. Conversely, capacitive reactance varies inversely as the frequency so that the current in a capacitive circuit is increased in proportion to the frequency for a given harmonic voltage. If the inductive reactance and the capacitive reactance in a series circuit are the same, they will cancel each other, and a given harmonic voltage will cause a large current to flow limited only by the resistance of the circuit. This condition is called resonance, and is more likely to occur at the higher harmonic frequencies.

A2. Characteristics of Harmonics

The harmonic content and magnitude existing in any power system is largely unpredictable and effects will vary widely in different parts of the same system because of the different effects of different frequencies. Since the distorted wave is in the supply system, harmonic effects may occur at any point on the system where the distorted wave exists; this is not limited to the immediate vicinity of the harmonic-producing device. Where power is converted to direct current or some other frequency, harmonics will exist in any distorted alternating component of the converted power.

Harmonics may be transferred from one circuit or system to another by direct connection or by inductive or capacitive coupling. Since 60 Hz harmonics are in the low-frequency audio range, the transfer of these frequencies into communication, signaling, and control circuits employing frequencies in the same range may cause objectionable interference. In addition, harmonic currents circulating within a power circuit reduce the capacity of the current-carrying equipment and increase losses without providing any useful work.

A3. Harmonic-Producing Equipment

(1) Arc Equipment.

Arc furnaces and arc welders have a changing load characteristic during each half-cycle that demands harmonic currents from the supply system. Normally these do not cause very much trouble unless the supply conductors are in close proximity to communication and control circuits or there are large capacitor banks on the system.

(2) Gaseous Discharge Lamps.

Fluorescent and mercury lamps produce small arcs and, in combination with the ballast, produce harmonics, particularly the third. Experience shows that the third-harmonic current may be as high as 30% of the fundamental in the phase conductors and up to 90% in the neutral where the third harmonics from each phase add directly, since they are displaced one third of a cycle. This is why the NEC [9] requires a full neutral for circuits supplying this type of load.

(3) Rectifiers.

Half-wave rectifiers, which suppress alternate half-cycles of current, generate both even and odd-numbered harmonics. Full-wave rectifiers tend to eliminate the even-numbered harmonics and usually diminish the magnitude of the odd-numbered harmonics.

The major producer of harmonics is the controlled rectifier, which chops the ac wave, particularly near the peak of the cycle. Since the wave shapes of both the input and the output depend upon the control setting to start rectification, both the shape of the input and output waves and, hence, the frequency and magnitude of the harmonics will vary with the setting of the control. Large rectifiers, which are frequently supplied from six and twelve-phase transformer connections to produce smoother direct current, will produce different harmonics than those supplied from a three-phase system.

Phase-controlled rectifiers used to provide variable-speed drives for dc motors, or used as frequency changers to provide variable-speed drives for ac motors, are major sources of harmonics.

(4) Rotating Machinery.

Normally the three phase coils of both motors and generators are sufficiently symmetrical that any harmonic voltages generated from lack of symmetry are too small to cause any interference. The nonlinear characteristics of the stator iron can produce appreciable harmonics, especially at high-flux densities.

(5) Induction Heaters.

Induction heaters use 60 Hz or higher frequency power to induce circulating currents in metals to heat the metal. Harmonics are generated by the interaction of the magnetic fields caused by the current in the induction heating coil and the circulating currents in the metal being heated. Large induction heating furnaces may create objectionable harmonics.

(6) Capacitors.

Capacitors do not generate harmonics. However, the reduced reactance of the capacitor to the higher frequencies magnifies the harmonic current in the circuit containing the capacitors. In cases of resonance, this magnification may be very large. High harmonic currents may

overheat the capacitors. In addition, the high currents may induce interference with communication, signal, and control circuits.

Special capacitors prescribed by equipment manufacturers are required to perform satisfactorily under actual operating conditions. Thus the manufacturer must be furnished the harmonic voltage content of the power supply to determine the correct type to be used.

A4. Reduction of Harmonic Effects

Where harmonic interference exists, the regular measures of increasing the separation between the power and communication conductors and the use of shielded communication conductors should be considered. Where capacitor banks magnify the harmonic current, the capacitors should be changed to suitable types or removed. Where resonant conditions exist, the capacitor bank should be changed in size to shift the resonant point to another frequency. Where harmonics pass from a power system to a communications, signal, or control circuit through a direct connection such as a power supply, filters may be required to suppress or short-circuit the harmonic frequencies.

During preliminary meetings with the supplying utility, the anticipated harmonic analysis of the power supply should be determined. This information, coupled with that provided by the manufacturer of any equipment to be installed that may generate a voltage distortion (along with appropriate safety factors), can be used to govern the specifications or the application of other equipment that may be exposed to the harmonic voltage condition.

SOLUTIONS FOR HARMONICS PROBLEMS

According to the proposed IEEE 519 Standard, limits are set for harmonic current and voltages as follows:

Voltage Limits

Primary Distribution 5% THD
 At Load 8% THD

Maximum Harmonic Current Distortion in % of Fundamental
 Harmonic Order (odd only)

I _{sc} /I _L	<11	11-15	17-21	23-33	>33	THD
<20	4.0	2.0	1.5	0.6	0.3	5.0
20-50	7.0	3.5	2.5	1.0	0.5	8.0
50-100	10.0	4.5	4.0	1.5	0.7	12.0
100-1000	12.0	5.5	5.0	2.0	1.0	15.0
>1000	15.0	7.0	6.0	2.5	1.4	20.0

I_{sc}=Maximum short circuit current at the point of common coupling (PCC).

I_L= Maximum load current (fundamental frequency) at PCC.

Even harmonics are limited to 25% of values in the table.

APPENDIX B

RANGE OF OBJECTIONABLE VOLTAGE FLICKER

Certain types of utilization equipment such as motors have a high initial inrush current when turned on and impose a heavy load at a low power factor for a very short time. This sudden increase in the current flowing to the load causes a momentary increase in the voltage drop along the distribution system, and a corresponding reduction in the voltage at the utilization equipment. A voltage dip of 1/4-1/2% will cause a noticeable reduction in the light output of an incandescent lamp and a less noticeable reduction in the light output of gaseous discharge lighting equipment.

In general, the starting current of a standard motor averages about 5 times the full-load running current. The approximate values for all ac motors over 1/2 hp are indicated by a code letter on the nameplate of the motor. The values indicated by these code letters are given in ANSI/NEMA MGO-1978[8] and also in Article 430 of the NEC [9].

A motor requires about 1 kVA for each motor horsepower in normal operation, so the starting current of the average motor will be about 5 kVA for each motor horsepower. When the motor rating in horsepower approaches 5% of the secondary unit substation transformer capacity in kilovolt-amperes, the motor starting apparent power approaches 25% of the transformer capacity which, with a transformer impedance voltage of 6-7%, will result in a noticeable voltage dip on the order of 1%.

In addition, a similar voltage dip will occur in the wiring between the secondary unit substation and the motor when starting a motor with a full-load voltage drop on the order of 4 or 5%. However, the voltage drop is distributed along the circuit so that maximum dip occurs only when the motor is moved from the far end to the beginning of the circuit, the voltage drop in the circuit approaches zero. As the affected equipment is moved from the far end to the beginning of the circuit, the voltage dip remains constant up to the point of connection of the motor and then decreases to zero as the equipment connection approaches the beginning of the circuit.

The total voltage dip is the sum of the dip in the secondary unit substation transformer and the secondary circuit. In the case of very large motors of several hundred to a few thousand horsepower, the impedance of the supply system should be considered.

Where loads are turned on and off rapidly as in the case of resistance welders, or fluctuate rapidly as in the case of arc furnaces, the rapid fluctuations in the light output of incandescent lamps, and to a lesser extent, gaseous discharge lamps, is called flicker. When flicker continues over an appreciable period, voltage variations as low as 1/2% may be objectionable. If utilization equipment involving rapidly fluctuating loads is on the order of 10% of the capacity of the secondary unit substation transformer and the secondary circuit, accurate calculations should be made using the actual load currents and system impedance to determine the effect on lighting equipment.

Figure B1 may be used to determine whether voltage fluctuations will cause objectionable fluctuations in the light output of incandescent lamps. The borderline of irritation curve starts with a voltage change of 1% at a frequency of 7 fluctuations per second and increases to about 6% at 1 fluctuation per minute. The range between permissible flicker and objectionable flicker is due to the fact that some people are

bothered more than others. Also, the effect of flicker depends upon lighting intensity and working conditions. Tests have indicated that flicker that is irritable to some people is hardly noticed by other people. Flicker is more of a problem with incandescent lighting than with fluorescent and high-intensity discharge types.

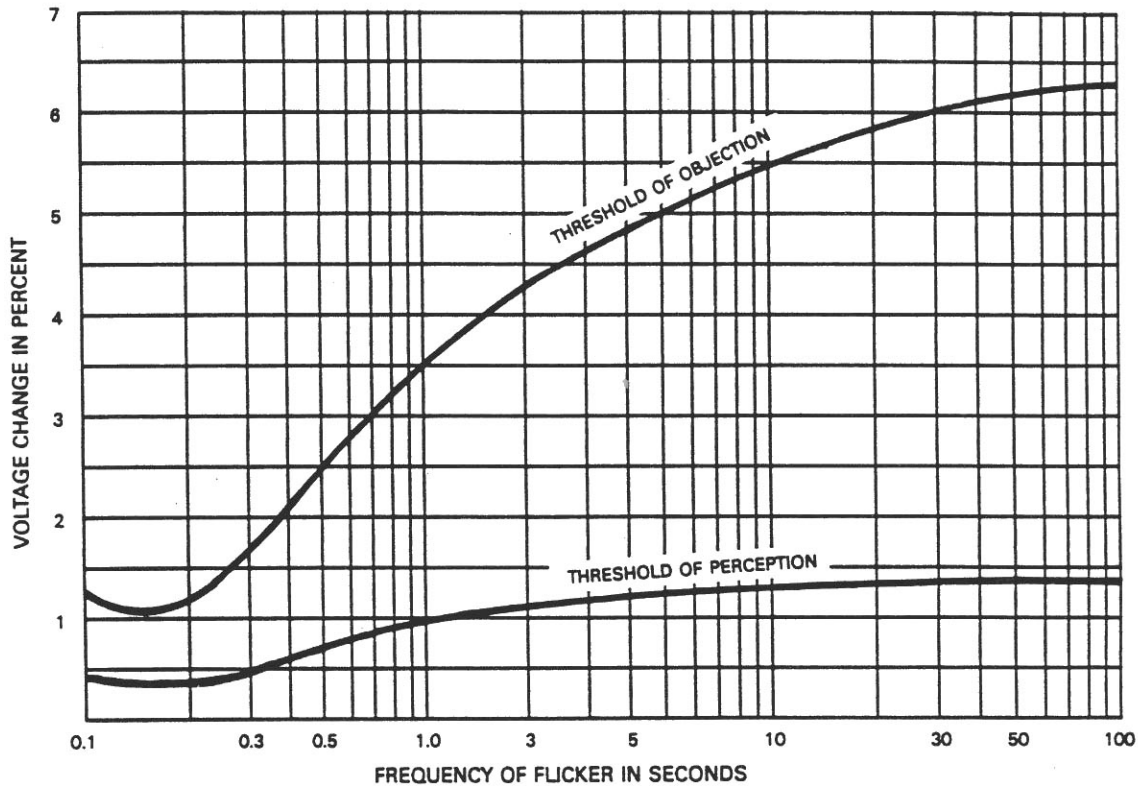


Fig B1
Range of Observable and Objectionable Voltage Flicker Versus Time

In using this curve, the purpose for which the lighting is provided needs to be considered. For example, lighting used for close work such as drafting requires flicker limits approaching the borderline of visibility curve. For general area lighting such as storage areas, the flicker limits may approach the borderline of the irritation curve. Note that the effect of voltage dips depends on the frequency of occurrence. An occasional dip, even though quite large, is rarely objectionable.

When objectionable flicker occurs, either the load causing the flicker should be reduced or eliminated, or the capacity of the supply system increased to reduce the voltage drop caused by the fluctuating load. In large plants, flicker-producing equipment should be segregated on separate transformers and feeders so as not to disturb flicker-sensitive equipment.

Special consideration should always be given when starting larger motors to minimize the voltage dip so as not to affect the operation of other utilization equipment on the system supplying the motor. Large motors (see Table 1) may be supplied at medium voltage such as 2,400, 4,160 or 12,470 V from a separate transformer to eliminate the voltage dip on the low-voltage system. However, consideration should be given to the fact that the maintenance electricians may not be qualified to maintain medium-voltage

equipment. A contract with a qualified electrical firm may be required for maintenance. Standard voltages and preferred horsepower limits for polyphase induction motors are shown in Table 12.

Table 1
Standard Voltages and Preferred Horsepower Limits
for Polyphase Induction Motors

Motor Nameplate Voltage	Preferred Horsepower Limits
Low Voltage Motors:	
115	No Minimum – 15 hp Maximum
230	No Minimum – 200 hp Maximum
460 and 575	1 hp Minimum – 1,000 hp Maximum
Medium Voltage Motors:	
2,300	50 hp Minimum – 6,000 hp Maximum
4,000	100 hp Minimum – 7,500 hp Maximum
4,500	250 hp Minimum – No Maximum
6,000	400 hp Minimum – No Maximum
13,200	1,500 hp Minimum – No Maximum

Objectionable dips in the supply voltage from the utility should be reported to the utility for correction.

APPENDIX C

POLYPHASE VOLTAGE UNBALANCE

C1. Introduction

Studies on the subject of three-phase voltage unbalance indicate that:

- (1) All utility-related costs required to reduce voltage unbalance and all manufacturing-related costs required to expand a motor's unbalanced voltage operating range are ultimately borne directly by the customer.
- (2) Utilities' incremental improvement costs are maximum as the voltage unbalance approaches zero and decline as the range increases and
- (3) Manufacturers incremental motor-related costs are minimum at zero voltage unbalance and increase rapidly as the range increases.

When these costs, which exclude motor-related energy losses are combined, curves can be developed that indicate the annual incremental cost to the customer for various selected percent voltage-unbalance limits. The optimal range of voltage unbalance occurs when the costs are minimum.

Field surveys and statistics indicate that:

- (1) Each motor rating is associated with a unique optimal range of voltage unbalance
- (2) These ranges vary from 0 - 2.5 percent to 0 - 4.0 percent voltage unbalance with the average at approximately 0 - 3.0 percent.
- (3) Approximately 98 percent of the electric supply systems surveyed are within the 0 - 3.0 percent voltage-unbalance range, with 66 percent at 0 - 1.0 percent or less.

C2. Recommendation

Electric supply systems should be designed and operated to limit the maximum voltage unbalance to 3 percent when measured at the electric-utility revenue meter under no-load conditions. This recommendation should not be construed as expanding the voltage ranges.

C3. Definitions

Voltage unbalance of a polyphase system is expressed as a percentage value and calculated as follows:
$$\text{Voltage unbalance} = 100 \times \frac{(\text{max deviation from average voltage})}{(\text{average voltage})}$$

Example: With phase-to-phase voltages of 230, 232, and 225, the average is 229: the maximum deviation from average is 4: and the percent unbalance is $(100 \times 4) / 229 = 1.75$ percent

C4. Derating for Unbalance

The rated load capability of polyphase equipment is normally reduced by voltage unbalance. A common example is the derating factor used in the application of polyphase induction motors.

C5. Protection from Severe Voltage Unbalance

User systems should be designed and operated to maintain a reasonably balanced load.

In severe cases of voltage unbalance, consideration should be given to equipment protection by applying unbalance limit controls.

APPENDIX D

BURBANK WATER AND POWER Electrical Interconnection and Metering Agreement for Solar Electric Generating Facilities and/or Battery Energy Storage Systems

This Electrical Interconnection Agreement for Net Energy Metering from Solar Electric Generating Facility and/or Battery Energy Storage System (this "Agreement") is made and entered into this ___ day of _____, 20___, by and between _____ ("Customer") and the City of Burbank, through its Burbank Water and Power (BWP), referred to collectively as "Parties" or individually as "Party."

The Parties agree as follows:

Section 1. Applicability and Definitions

This Agreement provides the requirements for Customer to interconnect and operate Solar Electric Generating Facilities (SEG) (Interconnection Type A) or stand-alone Battery Energy Storage Systems (BESS) (including vehicle-to-grid technology) of up to 1.0 MW (Interconnection Type C) or combination of both SEG and BESS (Interconnection Type B) onsite at a Customers' premises in parallel with the BWP Distribution System in order to serve a portion or all of the Customer's electrical loads. The term "BWP Distribution System" means all electrical wires, wires, equipment, and other facilities owned or provided by BWP other than customer-owned interconnection facilities, by which BWP provides electrical distribution service to its customers, including the Customer. Net Metering is applicable only to customers who satisfy all requirements of the definition of an "Eligible Customer-Generator" as set forth in Section 2827 of the California Public Utilities Code on the effective date of this Agreement (such customers that satisfy all such requirements, referred to herein as "Net Metering Customer"). SEG capacity shall be limited to a maximum of 100% of the customer's consumption for a full twelve-month period immediately prior to the execution of this Agreement. BESS when combined with SEG shall be rated as close to the SEG kW rating as standard battery sizes permit but not to exceed 150% of the SEG kW rating. BESS stand-alone systems size are limited by the rating of utility equipment serving the customer's premises and will NOT BE PERMITTED TO EXPORT energy to the BWP Distribution System.

Section 2. Description of Solar Electric Generating Facility or Battery Energy Storage System or Both

Customer can elect to interconnect and operate a solar electric generating facility or a battery energy storage system or both located on Customer's owned, leased or rented premises within the City of Burbank and operate it in parallel with BWP's electric grid, so long as such interconnection and operation complies with all conditions and requirements set forth in this Agreement. Customer represents and warrants that 1) these facilities are intended primarily to offset all or part of the Customer's own electrical requirements 2) any collocated SEG or BESS within the same campus or parcel utilized by any affiliate or subsidiary company will be treated as part of the definition of the facility for purposes of the NEM agreement and 3) prior to any expansion or addition to the SEG or BESS, Customer shall obtain BWP's prior consent. To the extent necessary, BWP may perform

engineering studies at the Customer's expense. In the event that BWP consents to any such expansion or addition, the parties shall amend Section 2 of this agreement.

2.1 The Facility shall consist of photovoltaic electricity-generating modules, a battery energy storage system (if Interconnection Type B or C is selected below), electrical controls, an inverter, automatic disconnect(s), manual disconnect(s), and wiring to connect all of the above to BWP's electricity distribution system at BWP's meter.

2.2 Interconnection Type

Please select applicable Interconnection Type

A. Solar Electric Generating Facility Only

B. Solar Electric Generating Facility and Battery Energy Storage System

C. Battery Energy Storage System Only

2.3 Solar Electric Generating System Size (CEC AC kilowatts)
_____ kW

2.4 Expected Annual Generation from Solar Generating Facility:
_____ kWh

The most recent 12 months of energy consumption shall be used to determine the proper size of the photovoltaic system which should not exceed customer's prior 12 months of consumption.

2.5 Battery Energy Storage System Rated Output
_____ kW

2.6 Battery Energy Storage System Rated Capacity:
_____ kWh

2.7 Inverter Manufacturer and Model Number

2.8 Inverter Rating (kW_{AC}) (Total kW where Facility consists of more than one inverter)

2.9 DC Source Rating (kW_{DC}) (Total kW where Facility consists of more than one inverter)

2.10 Facility Address:

2.11 Customer's Phone Numbers

Home () _____ Cell () _____

Work () _____

2.12 The Facility expects to begin operation on or about this date: _____

2.13 Specific location of lockable and utility accessible Inverter, A/C disconnection devices and so forth located conspicuously on the property:

2.14 BWP Utility Account Number: _____

Section 3. Facility Operation

3.1 Customer shall construct, design, install, operate, and maintain the Facility in a manner consistent with the normal and safe operation of the electrical distribution system owned and operated by BWP and consistent with the terms of this Agreement.

3.2 Customer understands, accepts, and agrees that connection and operation of the Customer's Facility shall be subject to the terms and conditions set forth in this Agreement and in BWP's Rules and Regulations for Utility Service, as now in effect or as the same may be amended from time to time (the "Rules"). Any conflict between this Agreement and Rules will be governed by the terms of the Rules.

Section 4. Billing and Credits for Net Energy Generation – Interconnection Types A and B

4.1 Customer shall be billed for electrical service and credited for net energy generation, if any, as provided in Section 2827 of the California Public Utilities Code.

4.2 Customer may elect to either receive annual payment from BWP for any net energy generation under the terms and conditions set forth in Assembly Bill 920 of 2009 or Customer may elect for any kWh credit to roll over indefinitely.

Section 5. Interruption or Reduction of Deliveries

5.1 BWP shall not be obligated to accept, and BWP may require Customer to interrupt or reduce, deliveries of energy to BWP:

(a) when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of BWP's equipment or part of BWP's Distribution System; or

- (b) if BWP determines that curtailment, interruption, or reduction of receipt of energy from Customer's Facility is necessary because of an emergency, forced outage, Force Majeure, or compliance with prudent electrical practices.
- 5.2 Notwithstanding any other provision of this Agreement, if at any time BWP, in its sole discretion, determines that the Facility may endanger BWP personnel or members of the general public, or that the continued operation of the Facility may impair or otherwise negatively affect the integrity of BWP's Distribution System, BWP shall have the right to disconnect the Facility from BWP's Distribution System.
- 5.3 The Facility shall remain disconnected until such time as BWP is satisfied that the condition(s) referenced in Section 5.2 have been corrected, and BWP shall not be obligated to compensate Customer for any loss of generation or energy during any and all periods of such disconnection.
- 5.4 Customer SEG, BESS or combination of both, may automatically reconnect its Facility to the BWP Grid after normal power restoration following an outage and/or interruption without notifying BWP, provided that the SEG, BESS or combination of both ensures that these systems are anti-islanding compliant in accordance with the current releases of IEEE 1547, and UL 1741. BWP reserves the right to require that the Customer's system does not automatically reconnect if BWP notifies Customer in advance that there is a reasonable possibility that reconnection would pose a safety hazard.
- 5.5 If BWP has disconnected Service to the Facility or has notified Customer that reconnection may pose a safety hazard, Customer may call BWP at (818) 238-3582 to request authorization to reconnect the Facility.

Section 6. Interconnection

- 6.1 Customer shall not connect the Facility, or any portion of it, to BWP's distribution system, until written approval of the Facility has been given to Customer by BWP.
- 6.2 Customer shall deliver energy from the Facility to BWP at BWP's meter located on Customer's premises. **(Applicable to Interconnection Types A and B only).**
- 6.3 Customer, and not BWP, shall be solely responsible for all legal, regulatory and financial obligations arising from the construction, installation, design, operation, and maintenance of the Facility in accordance with all applicable laws, regulations, and electrical codes.
- 6.4 BWP shall own, operate and maintain on Customer's premises a net revenue meter capable of registering the flow of electricity in two directions. If the existing Customer electrical revenue meter is not capable of measuring the flow of electricity in two directions, BWP shall purchase and install such a meter. **(Applicable to Interconnection Types A and B only).**
- 6.5 BWP shall own, operate and maintain on Customer's premises a Solar Performance meter capable of measuring power quality and solar output and automatically reporting this information to BWP. The Solar Performance meter panel and meter must be installed prior to

interconnection of the Facility to BWP's distribution system. **(Applicable to Interconnection Types A and B only).**

- 6.6 BWP shall have the right to have its representatives present at the final inspection made by the governmental authority having jurisdiction to inspect and approve the installation of the Facility. Customer shall notify BWP at least five (5) working days prior to such inspection.

Section 7. Design Requirements

- 7.1 Customer's Facility, and all portions of it used to provide or distribute electrical power and parallel interconnection with BWP's distribution equipment, shall be designed, installed, constructed, operated, and maintained in compliance with this Agreement.
- 7.2 The Facility shall conform to all applicable safety and performance standards established by the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), accredited testing laboratories such as Underwriters Laboratories, and applicable building codes.
- 7.3 The Facility shall meet the following specific design requirements:
- (a) It shall automatically detect and isolate from the BWP source without any intentional delay within five cycles based on the latest revision of IEEE 1547 requirements for overvoltage, undervoltage, overfrequency, underfrequency, and the operation of AC overcurrent relay, circuit breaker, or internal fusing when the AC current is greater than the full load current.
 - (b) Inverter output distortion shall meet IEEE 519 standards.
 - (c) In the event of inverter control failure, the DC contactor must return to the normally open condition.
 - (d) A lockable and accessible disconnect switch acceptable to BWP must be clearly labeled as described in the National Electric Code (NEC) and conspicuously located shall be provided and maintained by Customer. The location of the disconnect switch shall be as described in Section 2.13.
 - (e) The Facility and subcomponents must be tested for islanding in conformance with current releases of IEEE 1547 and UL 1741 and the test result confirmed in writing by BWP.
 - (f) The Facility shall be equipped with a lightning surge arrester, if required by the City's Building Official.
 - (g) The circuit and breaker feeding the inverter must be clearly identified inside the electrical main or sub-panel as described in the NEC.

Section 8. Battery Energy Storage System Requirements

The following requirements are applicable to "Battery Energy Storage Systems".

- 8.1 Customer must provide one of the following:
- (a) Proof that battery storage is designed and built to store energy produced by the solar electric generating facility only. Battery storage system CANNOT be charged by the grid. (Interconnection Type B)
 - (b) Non-Export Protective device. (Interconnection Type C only)
- 8.2 Total aggregate Inverter/Battery storage system rating for Facilities with more than one inverter must not exceed 150% of the solar generating system's CEC-AC kW rating.
- 8.3 The BESS shall be sized such that the Customer does not exceed its installed service size (Ampere rating).

Section 9. Non-Export Requirements for "Battery Energy Storage Systems Only"

The following requirements are applicable to "Battery Energy Storage Systems Only".

- 9.1 A reverse-power protection device must be installed.
- 9.2 The connected inverter must be certified as non-islanding, and incidental export of power must be limited by the design of the interconnection.
- 9.3 Inadvertent Export:
Inadvertent export is a situation where the customer's load drops unexpectedly, and the on-site generation or battery cannot ramp down quickly enough to adjust to the new load. In this situation there may be a few seconds of production that cannot be used on-site because the load is no longer there. In those situations, the ability to deal with inadvertent exports for those few seconds is critical for maintaining the balance of the system. In these situations, the battery system functions as a non-exporting system, but the ability to inadvertently exports in these rare occasions provides the customer with the ability to install systems that help them manage their on-site needs more effectively and potentially reduce the stress on the system.

BWP will permit inadvertent export provided that the export of real power from the small generating facility in any single event for a duration not exceeding 30 seconds and of a magnitude no more than the generating facility's gross nameplate rating multiplied by 0.1 hours per day over a rolling 30-day period (e.g., for a 100 kVA gross nameplate BESS facility, the maximum energy allowed to be exported for a 30-day period is 300 kWh). Any export of energy under this section will not be credited to the customer's bill.

Section 10. Maintenance and Permits

- 10.1 Customer shall maintain the Facility and interconnection facilities in a safe and prudent manner and in conformance with all applicable laws and regulations including, but not limited to, the design requirements of Section 7 above.

- 10.2 Customer, at Customer's sole expense, shall obtain and possess all permits and authorizations in accordance with all applicable laws and regulations for the construction, installation, design, operation and maintenance of the Facility. **Customer understands that this Agreement does not constitute a permit to construct or install the Facility and that a permit must be obtained from the Building Division of the City of Burbank.**
- 10.3 Customer shall reimburse BWP for any and all losses, damages, claims, penalties, or liability BWP incurs as a result of Customer's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Customer's Facility.
- 10.4 Customer shall submit to BWP any new modification for review and approval, prior to construction.

Section 11. Access to Premises

BWP may enter Customer's premises without prior notice to inspect, at all reasonable hours, the Facility's protective devices, to read or test any meter for the Facility, or to disconnect the Facility pursuant to Section 5 of this Agreement.

Section 12. Indemnity and Liability by Customer

Customer shall indemnify and hold the City Of Burbank ("City"), its directors, officers, agents and employees harmless against all loss, damage, expense and liability to third persons for injury to or death of persons or injury to property caused by or arising out of the design, construction, installation, ownership, maintenance, or operation of the Generating Facility, provided that Customer's indemnity obligation shall not apply to any loss, damage, expense or liability caused by or arising out of the sole negligence or willful misconduct of the City or its directors, officers, agents and employees. Customer shall, upon the City's request, defend any suit asserting a claim covered by this indemnity.

Section 13. Insurance

To the extent that Customer has currently in force all risk property insurance and comprehensive personal or commercial general liability insurance, Customer agrees that it will maintain such insurance in force for the duration of this Agreement. BWP and the City shall have the right to inspect or obtain a copy of the original policy or policies of insurance prior to commencing operation. In the event the solar generating system is greater than 30 kW (CEC AC), such insurance shall, by endorsement to the policy or policies, provide for thirty (30) calendar days written notice to BWP prior to cancellation, termination, alteration, or material change of such insurance.

Section 14. Rates and Billing

- 14.1 Customer's otherwise applicable tariff (Rate Schedule) or "Rate Schedule" means the Rate Schedule in BWP's published Electric Rules and Regulations that would otherwise apply to Customer from time to time in the absence of this Agreement.
- 14.2 Customer is responsible for paying all charges in the applicable Rate Schedule including the minimum charge, service charge and demand charge, when applicable, regardless of Customer's monthly or annual net generation.
- 14.3 The following are applicable to Interconnection Types A and B only:
- a) All rates charged will be in accordance with Customer's otherwise applicable tariff (Rate Schedule), as in effect from time to time, on a Net Energy Metering basis. "Net Energy Metering" means measuring the difference between the electricity supplied through the electric grid to the Customer and the electricity generated by Customer's Generating Facility and fed back to the electric grid over the one-month billing period as described in Subsection 14.4 below.
 - b) The customer will be billed on a monthly basis. The monthly Net Energy Metering calculation shall be made by measuring the difference between the electricity supplied to the Customer and the electricity generated by the Customer and fed back to the grid over a normal one-month billing period. At the end of each one-month billing period following the date of first interconnection, BWP shall determine if Customer was a net consumer or a net producer of electricity. In the event the electricity supplied by BWP during the one-month period exceeds the electricity generated by Customer during the same period, Customer is a net energy consumer.
 - c) If Customer is a net energy consumer, BWP shall bill Customer for the net energy consumption during such billing period based on the Customer's otherwise applicable Rate Schedule and Customer shall pay for such net energy consumption monthly in accordance with Customer's monthly billing statement. If Customer elects, any excess kilowatt-hours generated during the billing cycle and stored in the net meter, shall be carried over to the following billing period indefinitely or until the account is closed.
 - d) If Customer's Rate Schedule employs "time of use" rates, any net monthly consumption of electricity shall be calculated according to the terms of the applicable Rate Schedule. When Customer is a net generator during any discrete time of use period, the net kilowatt hours produced shall be valued at BWP's electric rate applicable to that specific time period.
 - e) If Customer's Rate Schedule employs tiered rates, any net monthly consumption of electricity shall be calculated according to the terms of the Rate Schedule. If Customer is a net generator over a billing period, the net kilowatt-hours generated shall be valued at the cost of power to BWP during that billing period, and if the number of kilowatt-hours generated exceeds the baseline quantity, the excess shall be valued at the same price per kilowatt-hour as BWP would charge for electricity over the baseline quantity during that billing period.
 - f) BWP shall provide residential Customers with Solar Performance and Net Energy

Metering consumption information on a monthly basis.

- g) If Customer terminates service under this Agreement prior to the end of any calendar year period, BWP shall reconcile Customer's consumption and production of electricity and bill Customer for Net Energy Metering charges, if any, and adjust the excess energy to zero, if any.

Section 15. Governing Law

The laws of the State of California shall govern this Agreement.

Section 16. Amendment, Modifications or Waiver

Any amendments or modifications to this Agreement shall be in writing and agreed to by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any Party of the breach of any term or covenant contained in this Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or a waiver of the breach of any other term or covenant unless such waiver is in writing.

Section 17. Notices

All written notices shall be directed as follows:

Burbank Water and Power
164 West Magnolia Blvd.
Burbank, California 91502

Customer: Customer's name and address as shown in Section 2.

Customer's notices to BWP pursuant to this Section must refer to the Facility Identification Number set forth in Section 2.

Section 18. Term of Agreement and Termination

- 18.1 This Agreement shall be in effect when signed by the Customer and BWP.
- 18.2 This Agreement shall remain in effect until terminated as provided herein. Upon termination, the Generating Facility shall be permanently disconnected from the BWP distribution system.
- 18.3 Customer may terminate this Agreement at any time upon providing thirty (30) days prior written notice to BWP.

18.4 BWP may terminate this Agreement for Customer’s breach of any material term. BWP shall give thirty (30) days written notice of such termination to Customer. When necessary to protect the safety of its employees or the general public, notice of less than thirty days may be given, provided the notice period is reasonable under the circumstances.

Section 19. Assignment Prohibited

This Agreement is personal to Customer and may not be assigned without the written consent of BWP.

Section 20. Understanding

This Agreement contains the entire understanding between the Parties and supersedes all previous communications, representations, understandings, and agreements, either oral or written, between the Parties with respect to the subject matter hereof. There are no other promises, terms, conditions, obligations, understandings, or agreements either written or oral between the Parties with respect to the subject matter hereof. Any amendment, alteration or modification to this Agreement shall be in writing and approved by both Parties.

Section 21. Successors and Assigns

This Agreement is and shall be binding on all successors and assigns of each of the Parties hereto without the necessity of any further documentation.

Section 22. Limitation on Liability

CUSTOMER HEREBY ACKNOWLEDGES AND AGREES THAT THE CITY OF BURBANK (INCLUDING ANY OF ITS DEPARTMENTS, EMPLOYEES, OFFICERS OR AGENTS) SHALL NOT BE LIABLE TO CUSTOMER FOR COSTS OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOST PROFITS; LOST SALES OR BUSINESS EXPENDITURES; INVESTMENTS; COMMITMENTS IN CONNECTION WITH ANY BUSINESS; LOSS OF ANY GOODWILL, OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATED TO THIS AGREEMENT, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY, AND WHETHER OR NOT THE CITY OF BURBANK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Customer

Burbank Water and Power

Signature

Signature

Print Name

Print Name

Title

Title

APPENDIX E



INTERCONNECTION AGREEMENT

Dated as of

[Insert date]

by and between

The City of Burbank,

through its Burbank Water and Power

And

Insert Customer Name

(Must be same as billing name)

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INTERCONNECTION AGREEMENT

This Interconnection Agreement, dated as of [Insert Date] (as amended, restated, supplemented or otherwise modified from time to time, this “Agreement” is entered into by and between The City of Burbank, through its Burbank Water and Power (“BWP”) and [Company] (“Customer”). Customer and BWP are sometimes also referred to in this Agreement collectively as “Parties” or individually as “Party.” In consideration of the mutual promises and obligations stated in this Agreement and its attachments, the Parties agree as follows:

1.0 Scope and Purpose

This Agreement provides for Customer to interconnect and operate the Generating Facilities in parallel with BWP Distribution System to serve a portion of the electrical loads at the location identified in Section 2. The Generation Facilities are made up solely of one or more Renewable Electrical Generation Facility/ies, that is (a) located on the customer's owned, leased, or rented premises, (b) designed such that it will have (i) a fuel cell as part of the Renewable Electric Generation Facility(ies) or (ii) a total capacity of more than one megawatt (CEC-AC) (c) interconnected and operates in parallel with the electrical grid, and (d) intended primarily to offset part of the customer's own electrical requirements. This Agreement does not constitute an agreement by BWP to provide retail electrical service to Customer. Such arrangements must be made separately between BWP and Customer. This Agreement is contingent on Customer receiving electrical service from BWP.

2.0 Summary and Description of Customer’s Generating Facility

A description of the Generating Facilities, including a summary of its significant components, a plot plan and a single-line diagram (the “Design Documents”) showing the general arrangement of how Customer’s Generating Facilities and loads are interconnected with BWP’s Distribution System is set forth on Appendix A to this Agreement. Customer shall not cause or permit the Project to have any changes or deviations from the Design Documents or description below without the prior written approval by BWP.

The Project shall consist of [#] ___ Generating Facilities, as described below (including name and address used by BWP to locate such Generating Facilities and Point of Common Coupling (PCC): “Generating Facility 1” shall be: [Facility Description including the type of Renewable Electrical Generation Facility]

Street Address _____
City _____
Zip Code _____
Cross Streets _____

The Gross Nameplate Rating of Generating Facility 1 is _____ kW.

The Net Nameplate Rating of Generating Facility 1 is _____ kW.

The Minimum load at Generating Facility 1 is expected to be _____ kW.

The annual energy production of Generating Facility 1 is expected to be _____ kWh.

Generating Facility 1 is expected to achieve Commercial Operation on [insert date].

“Generating Facility 2” shall be: [Facility Description including the type of Renewable Electrical

Generation Facility]

Street Address _____

City _____

Zip Code _____

Cross Streets _____

The Gross Nameplate Rating of Generating Facility 2 is _____ kW.

The Net Nameplate Rating of Generating Facility 2 is _____ kW.

The Minimum load at Generating Facility 2 is expected to be _____ kW.

The annual energy production of Generating Facility 2 is expected to be _____ kWh.

Generating Facility 2 is expected to achieve Commercial Operation on [insert date].

If more than two Generation Facilities will be installed, please include additional sheets.

The expected date of Commercial Operation (“Scheduled Commercial Operation Date”) for each Generating Facility listed above shall be no later than two years of the date of this Agreement; provided, however, if BWP fails to approve, request modifications or otherwise comment on the Design Documents within 30 days of submission of such documents, then the Scheduled Commercial Operation Date shall be extended by one day for each day of delay after such 30 day period.

3.0 Documents Included

This Agreement includes the following Appendices, which are specifically incorporated herein and made a part of this Agreement.

Appendix A - Description of Generating Facility, the site (“Customer’s site”), plot and site development plans showing generators, disconnects, metering equipment locations and BWP access to generator, disconnect and meter locations, control and protection schematic, manufacturer’s datasheets and maintenance requirements for protective equipment, single-line diagrams, and any additional information required by BWP. (Design Documents)

As of the date of this Agreement, Customer represents and warrants that the Design Documents initially attached hereto reflect the most current and accurate Design Documents, prepared and submitted in accordance with Good Utility Practices. Prior to the commencement of Construction, Customer shall submit, in writing, a revised set of Design Documents for BWP’s review and approval. Within thirty (30) days following delivery of the revised set of Design Documents, BWP shall either (a) notify Customer that the Design Documents, as revised, are approved, or (b) request reasonable revisions for submission and further review by BWP. Upon BWP’s approval, the Parties shall execute a mutual written agreement for such revised Design Documents to replace the Design Documents attached as of the date hereof.

Appendix B – Fuel Cell Prequalification Requirements, detailed requirements for prequalifying a Fuel Cell before interconnecting with the BWP’s Distribution System.

Appendix C - Customer Certification of Biomethane (RPS Guidebook), Submittal and BWP approval of the precertification is required prior to interconnection.

Appendix D – Additional Metering and Telemetering Requirements and Material List with estimated equipment costs. This will be developed based on the submitted Customer Design Documents and dependent on the type of Generation installed and any specific site restrictions.

Appendix E – Annual Certification of Biomethane Compliance (RPS Guidebook), Verification of continued compliance is a requirement of this agreement.

Appendix F – Authorization to Interconnect and Form of Permission to Operate.

4.0 Term and Termination

4.1 This Agreement shall be effective upon the date it is fully executed and shall remain in effect until twenty (20) years from the Commercial Operation Date. If the Customer desires to extend this Agreement beyond the then existing term, it may deliver written notice requesting an extension for an additional year to commence at the end of the then existing term. This Agreement shall be extended for an additional year pursuant to such request if BWP agrees, in its sole discretion, to such extension in writing.

If the Customer has not achieved Commercial Operation of a Generating Facility by the Scheduled Commercial Operation Date, this Agreement shall automatically terminate without obligation by either Party.

Any Generating Facility that has not achieved Commercial Operation by the Scheduled Commercial Operation Date shall no longer qualify for interconnection under this Agreement.

This Agreement may be terminated earlier upon the occurrence of any one of the following events:

- (a) The Parties mutually agree in writing to terminate the Agreement;
- (b) Unless otherwise agreed in writing by the Parties, at 12:01 A.M. on the day following the date the Customer electric service account through which the Project is interconnected to BWP's Distribution System is closed or terminated;
- (c) The Generation Facilities are no longer being owned or operated by Customer; or
- (d) At 12:01 A.M. on the 61st day after Customer or BWP provides written Notice to the other Party of Customer's or BWP's intent to terminate this Agreement, subject to the provisions of Section 4.2 and Section 4.3, respectively.
- (e) A Generation Facility that no longer meets the definition of Renewable Electrical Generation Facility or no longer meets the requirements of Appendix B and C for qualifying renewable fuels (a "Disqualified Generation Facility") and Customer fails to disconnect such Disqualified Facility within five (5) business day of notice that such Generation Facility is a Disqualified Generation

Facility (a "Disqualification Notice"), then this Agreement will terminate immediately. If BWP determines that (a) Customer failed to provide evidence in a timely manner, (b) Customer provided insufficient evidence that its Generating Facility continues to meet the Eligibility Requirements or (c) the evidence provided fails to support Customer's representation that the Generating Facility

satisfies the Eligibility Requirements, this Agreement will be terminated if Customer fails to disconnect such Disqualified Facility within five (5) business days of receipt of a Disqualification Notice. Any Disqualification Notice shall contain reasons for disqualification. Notwithstanding any termination of this Agreement, BWP will not unreasonably condition, withhold, delay or deny any request by Customer to remedy the underlying cause of the termination.

4.2 Customer may elect to terminate this Agreement pursuant to the terms of Section 4.1(d) for any reason.

4.3 BWP may elect to terminate this Agreement pursuant to the terms of Section 4.1(d) for one or more of the following reasons:

(a) A change in any local, state or federal law, statute or regulation, either of which materially alters or otherwise affects BWP's ability or obligation to perform BWP's duties under this Agreement (a "Material Impact"); provided, that BWP and Customer shall use reasonable efforts to attempt to comply with such Material Impact; provided, further, that BWP shall not be required to incur material costs, fees, expenses or obligations to comply with such Material Impact. BWP will work with the Customer to amend this Agreement due to changes in laws, statutes or regulations in 4.3a as reasonable and applicable to bring this Agreement in compliance with applicable changes to laws, statutes or regulation.

(b) Unless otherwise agreed in writing by the Parties, Customer fails to take all corrective actions reasonably specified in BWP's Notice that any of Customer's Generating Facilities are out of compliance with the terms of this Agreement within the time frame set forth in such Notice which time frame shall, in any event, be no less than 60 days; provided, however, that such failure shall not result in any such right of termination if the nature of such failure, and within such 60-day period Customer undertakes such corrective actions and thereafter diligently prosecutes such correction action to completion and such correction takes no longer than [180] days from the date of such notice unless otherwise approved in writing by BWP.

(c) Customer is in default of any of the terms and conditions of this Agreement and such default is not cured within sixty (60) days following Customer's receipt of written Notice from BWP of such default; provided, however, that Customer shall not be in default if the nature of such default is such that more than 60 days are reasonably required to correct such default, and within such 60-day period Customer undertakes such cure and thereafter diligently prosecutes such cure to completion and such correction takes no longer than 180 days from the date of such notice unless otherwise approved in writing by BWP; or

(d) Customer abandons the Generating Facility. BWP shall deem a Generating Facility to be abandoned if BWP determines, in its reasonable discretion, such Generating Facility is non-operational and Customer does not provide a substantive response to BWP's Notice of its intent

to terminate this Agreement as a result of Customer's apparent abandonment of such Generating Facility affirming Customer's intent and ability to continue to operate such Generating Facility. Notwithstanding the foregoing, Customer shall be deemed not to have abandoned any Generating Facility during any period in which such Generating Facility is non-operational as a result of the maintenance, replacement or other corrective activity of all or any portion thereof.

4.4 Any agreements attached to and incorporated into this Agreement shall terminate concurrently with this Agreement unless the Parties have agreed otherwise in writing.

Upon the termination of this Agreement, Customer (a) agrees that it shall, at its own cost and expense, permanently disconnect the Project to the reasonable satisfaction of BWP and shall not thereafter operate any of the Generating Facilities without BWP’s written approval, (b) Customer shall remain liable for any amounts owed to BWP prior to the termination of this Agreement and (c) Customer shall reimburse BWP for any costs and expenses incurred after the date of termination to the extent that such costs and expenses relate to the actions taken by BWP to disconnect the Project or otherwise in relation to the Project to ensure the reliability and safety of the BWP electrical system.

5.0 Contacts and Notice

The Administrative Contact information for **BWP** is: Burbank Water and Power:
Attention: Key Account Manager 164 W. Magnolia Blvd.
Burbank, CA 91502-1720
Phone: (818) 238-3706
FAX: (818) 238-3715

The Administrative Contact information for **Customer** is:

Customer Name: _____
Contact Person: _____
Customer Address: _____
Customer City, State, Zip: _____
Customer Phone: _____
Customer Fax: _____

The Operational Contact information for **BWP** is: BWP Energy Control Center
Phone: (818) 238-3750

The Operational Contact information for **Customer** is:

Customer Name: _____
Contact Person: _____

Either Party may designate a new Official and/or Operating Representative by giving reasonable written Notice to the other Party.

Any written notice, demand, or request required or authorized in connection with this Agreement (“Notice”) may be delivered in person, sent by reputable nationally recognized overnight delivery

service (such as Federal Express or UPS) or sent by certified mail, postage prepaid, to the person specified below:

If to **BWP**:
Burbank Water and Power: Attention: Key Account Manager
164 W. Magnolia Blvd.

Burbank, CA 91502-1720
Phone: (818) 238-3706
FAX: (818) 238-3715

If to Customer:

Customer Name: _____
Attention: _____
Address: _____
City: _____
State: _____
Zip Code: _____
Phone: _____
Fax: _____

Any Notice shall be deemed given upon actual delivery as required above or upon any earlier refusal by any addressee to accept delivery. A Party may change its address for Notices at any time by providing the other Party Notice of the change in accordance with Section 5.0.

6.0 Acknowledgments, Representations, and Warranties

Customer acknowledges that Customer is subject to the Rules and Regulations (as defined below), including, but not limited to the Rules and Regulations Governing Electric Service as stated in the Rules and Regulations for Utility Service (“Rules and Regulations”), which Customer has agreed to by the virtue of being connected to the BWP system and that its obligations under this Agreement are further subject to the Rules and Regulations. BWP reserves the right to update these Rules and Regulations as needed and Customer agrees to comply with the updated Rules and Regulations and in the event of any conflict with the Rules and Regulations, this Agreement shall prevail.

Customer acknowledges that it is the responsibility of Customer to review the most current Rules and Regulations in effect at any time.

Customer represents and warrants that (a) the “Generation Facilities” are the only electrical generation facilities owned, leased or otherwise operated by Customer on Customer’s site and (b) the Generation Facilities meet the requirements for Renewable Electrical Generation Facility.

If a Generating Facility consists of one or more fuel cells, Customer represents, warrants and covenants that with respect to such Generating Facility:

- (1) each such fuel cell:
 - (a) meets the requirements of an Renewable Electrical Generation Facility,
 - (b) would satisfy the requirements of the renewable resource for the Renewable Electrical Generation Facility in the versions of the California Energy Commission’s Renewables Portfolio Standard Eligibility Guidebook (“Eligibility Guidebook”) and the Overall Program Guidebook (“Eligibility Requirements”) in place on the date of this agreement and
 - (c) uses renewable energy resources eligible to qualify under the State of California’s

Renewables Portfolio Standard (“RPS-eligible renewable energy resource”);

- (2) if such fuel cell delivers biomethane through a dedicated pipeline, such pipeline satisfies the requirements set forth in Section II.C.1 of the Eligibility Guidebook; and,
- (3) if such fuel cell delivers biomethane through a common carrier, that:
 - (a) each biomethane source meets one of the criteria set forth in Section II.C.2.a (3) of the Eligibility Guidebook,
 - (b) the delivery of biomethane through a common carrier pipeline meets the requirements set forth in Section II.C.2.b and,
 - (c) for each biomethane source, the capture and injection of biomethane into a common carrier pipeline directly result in at least one of the environmental benefits described in Section II.C.2.c of the Eligibility Guidebook.

Customer acknowledges, covenants and agrees that if, during the term of this Agreement, any of the documents submitted to BWP is no longer true, correct and complete, including, but not limited to any changes to the approved biomethane pipeline carrier, supplier, storage facility, or delivery entities or if additional entities have been contracted, the Customer shall deliver corresponding attestations from Appendix C to BWP and approved by BWP. Customer acknowledges and agrees that failure to submit the documents described in the foregoing sentence within 90 days of an event that makes such documents no longer true, correct and complete with respect to a Generating Facility, such Generation Facility shall be deemed to be out of compliance with this Agreement.

Customer represents, warrants and covenants that, beginning on the date of Initial Operation and continuing throughout the term of this Agreement, all of the Generating Facilities shall continue to meet the Eligibility Requirements at all times. If any Generating Facility ceases to meet the Eligibility Requirements, Customer agrees that it shall promptly provide BWP with Notice of such change pursuant this Agreement. If, at any time during the term of this Agreement, BWP determines, at its reasonable discretion, that the Project or any Generating Facility, or any portion thereof, no longer meets the Eligibility Requirements, BWP may require Customer to provide evidence, that such Generating Facility continues to meet the Eligibility Requirements, within 20 business days of BWP’s request for such evidence.

BWP may periodically inspect any of Customer’s Generating Facility and/or require documentation from Customer to monitor and verify such Generating Facility’s compliance with the Eligibility Requirements; provided that BWP will provide a minimum of 10 business days’ notice to the Customer prior to such inspection. If BWP determines, in its discretion, that

- (a) Customer failed to provide documentation required under this Agreement in a timely manner,
- (b) Customer provided insufficient evidence that a Generating Facility continues to meet the

Eligibility Requirements or (c) the evidence provided fails to support Customer’s representation that a Generating Facility satisfies the Eligibility Requirements, then such Generating Facility shall be deemed to be a Disqualified Generating Facility. In the event that BWP delivers a Disqualification Notice to Customer, Customer shall disconnect the Disqualified Generating Facility within five (5) business days of such notice. If Customer fails to disconnect the Disqualified Generating Facility within five (5) business days, BWP may disconnect the Disqualified Generating Facility, and, in its sole discretion, terminate this Agreement. Following any disconnection as provided in this paragraph, BWP will not unreasonably condition, withhold,

delay or deny reconnection.

At no period of time for any portion of generation shall non-qualifying fuels be used for the output for any of the Generating Facilities. Any and all Fuel purchases related to any of the Generating Facilities must be qualifying fuels under this Agreement.

Customer will be charged per section 14.0 for any periods that fuel cell generation was operating with non-eligible fuels.

The Generating Facility consisting of a fuel cell which does not meet the Eligibility Requirements may not be interconnected and shall be disconnected if already interconnected. Customer will only interconnect generation facilities as described in Section 2.0. This Agreement applies to the total generation facilities on the Customer site and supersedes any prior interconnection agreement. Customer shall not interconnect any generation not covered by this Agreement.

7.0 Definitions

The following terms, when used herein, shall have the meanings specified below:

24/7/365: At any time, including twenty-four hours a day, seven days a week and three-hundred sixty-five days a year or 366 days a year during a leap year.

Commercial Operation: When a Generating Facility has commenced generating electricity, excluding electricity during the period in which Customer is engaged in on-site testing and commissioning of the Generating Facility, and such Generating Facility is Interconnected.

Commercial Operation Date: The date on which a Generating Facility commences Commercial Operation in accordance with this Agreement.

Customer: The term is defined in the preamble.

Design Documents: The term is defined in Section 2.0.

Distribution System: All electrical wires, equipment, and other facilities owned or provided by BWP other than Interconnection Facilities, by which BWP provides Distribution Service to its customers, including the Customer.

Emergency: Whenever in BWP's discretion an Unsafe Operating Condition or other hazardous condition exists or whenever access is necessary for service restoration, and such immediate action is necessary to protect persons, BWP's facilities (including any other non-electrical facilities) or property of others from damage or interference caused by Interconnection Customer's Project (both generating and non-generating), or the failure of protective device to operate properly, or a malfunction of any electrical system equipment or a component part thereof.

Fee Schedule: The most current fee schedule as adopted by the City Council of the City of Burbank.

Generating Facility: The term "Generating Facility" shall mean, individually, any of the

generating facilities defined in Section 2.0, including all Generators, electrical wires, equipment, and other facilities, excluding Interconnection Facilities, owned or provided by Customer for the purpose of producing electric power, including storage. The term “Generating Facilities” shall mean, collectively, all of the Generating Facilities.

Generator: A device converting mechanical, chemical, thermal, photonic, or other energy into electrical AC energy, including all of its protective and control functions and structural appurtenances. One or more Generators comprise a Generating Facility.

Good Utility Practice/s: Those practices, and methods as changed from time to time, that are commonly used in prudent electrical engineering and operations to design, construct, operate, maintain and repair electric equipment, together with all ancillary equipment and components, lawfully and with safety, dependability, efficiency, and economy.

Gross Rating; Gross Nameplate Rating: The total gross generating capacity of a Generator or a Generating Facility as designated by the manufacturer(s) of the Generator(s).

Interconnection; Interconnected: The physical connection of a Generating Facility in accordance with the requirements of this Agreement so that Parallel Operation with BWP’s Distribution System can occur (has occurred).

Interconnection Facilities: The electrical wires, switches, and related equipment that are required in addition to the facilities required to provide electric Distribution Service to Customer to allow Interconnection. Interconnection Facilities may be located on either side of the Point of Common Coupling as appropriate to their purpose and design. Interconnection Facilities may be integral to a Generating Facility or provided separately. Interconnection Facilities may be owned by either Customer or BWP.

Island; Islanding: A condition on BWP’s Distribution System in which one or more Generating Facilities deliver power to Customers using a portion of BWP’s Distribution System that is electrically isolated from the remainder of BWP’s Distribution System. A condition where all or part BWP’s Distribution System separates from the remainder of the grid and operates with embedded generation.

Metering: The measurement of electrical power in kilowatts (kW) and/or energy in kilowatt-hours (kWh), and if necessary, reactive power in kVAR at a point, and its display to BWP.

Metering Equipment: All equipment, hardware, software including meter cabinets, conduit, etc., that are necessary for Metering.

Minimum: As used in Minimum Load means the least amount of Customer demand at any one time from Customer end-use devices.

Generation Output Metering: Metering of the net electrical power output in kW or energy in kWh, from a given Generating Facility or parts thereof. This may also be the measurement of the difference between the total electrical energy produced by a Generator and the electrical energy consumed by the auxiliary equipment necessary to operate the Generator.

Net Nameplate Rating: The net nameplate rating shall be calculated using the CEC-AC Nameplate Calculation as follows:

Technology

Solar PV

Wind

Fuel Cell

CEC-AC Nameplate Calculation

(Qty of Modules) x (PTC Rating) x (Inverter Efficiency %) / 1000 = ____ kW

(Qty of Turbines) x (Power Output) x (Inverter Efficiency %) / 1000 = ____ kW

(Qty of Cells) x (Rated Output) x (Inverter Efficiency %) / 1000 = ____ kW

Non-Emergency: Conditions or situations including but not limited to meter reading, inspection, testing, routine repairs, replacement, and maintenance.

Notice: The term is defined in Section 5.0.

Parallel Operation: The simultaneous operation of a Generator with power delivered by BWP while Interconnected. Parallel Operation includes only those Generating Facilities that are Interconnected with BWP's Distribution System for more than 60 cycles (one second).

Periodic Test: A test performed on part or all of a Generating Facility/Interconnection Facilities at pre-determined times or operational intervals to achieve one or more of the following: 1) verify specific aspects of its performance; 2) calibrate instrumentation; and/or 3) verify and re-establish instrument or Protective Function set-points.

Point of Common Coupling (PCC): A transfer point for electricity between the electrical conductors of BWP and the electrical conductors of Customer or at Customer metered bounds as designated in the plot plan and single line diagram attached in Appendix A.

Point of Interconnection: The point where the Interconnection Facilities connect with BWP's Distribution System.

Project: All Generating Facilities and Interconnection Facilities on the Customer's site, including all ancillary facilities.

Protective Equipment: The equipment, hardware and/or software (whether discrete or integrated with other functions) whose purpose is to protect against Unsafe Operating Condition.

Protective Function(s): the actions of the protective equipment.

Renewable Electrical Generation Facility: means a facility that generates electricity from a renewable source listed in paragraph (1) of subdivision (b) of Section 25741 of the Public Resources Code. A small hydroelectric generation facility is not an eligible renewable electrical generation facility if it will cause an adverse impact on instream beneficial uses or cause a change in the volume or timing of streamflow.

Rules and Regulations: The Rules and Regulations of BWP, as published and found at BWP's website, as such Rules and Regulations may be amended, modified, supplemented or replaced.

Short Circuit Contribution Ratio (SCCR): The ratio of a Generating Facility's short circuit contribution to the short circuit contribution provided through BWP's Distribution System for a three-phase fault at the distribution equipment connecting the Generating Facility to BWP's Distribution System.

Single Line Diagram; Single Line Drawing: A schematic drawing, showing the major electric switchgear, Protective Function devices (including relays, current transformer and potential transformer configurations/wiring in addition to circuit breakers/fuses), wires, generators, transformers, meters and other devices, providing relevant details to communicate to a qualified engineer the essential design and safety of the system being considered.

Standby Service: Each of the services described in Schedule S (Standby Service) and set forth in the Fee Schedule.

System Integrity: The condition under which BWP's System is deemed safe and can reliably perform its intended functions in accordance with the safety and reliability rules of BWP.

Telemetry: The electrical or electronic transmittal of Metering data on a real-time basis to BWP.

Transfer Trip: A Protective Function that trips a Generating Facility remotely by means of an automated communications link controlled by BWP.

Unintended Island: The creation of an Island, usually following a loss of a portion of BWP's Distribution System, without the approval of BWP.

Unsafe Operating Conditions: Conditions that, if left uncorrected, could result in harm to personnel or to the public, damage to equipment, loss of System Integrity or operation outside pre-established parameters required by this Agreement.

8.0 Design, Permitting, Procurement, Construction, Testing, and Inspection

Customer shall design, procure and construct the Project using Good Utility Practices and shall obtain all necessary permits in connection therewith. Customer shall not undertake any action which is inconsistent with standard safety practices, material and equipment specifications, design criteria and applicable laws and regulations.

Customer shall obtain and possess all permits and authorizations in accordance with all applicable laws and regulations for the construction, installation, design, operation, and maintenance of the generating facility. All reviews, approvals, and permits required by the City must be obtained through the City for the proposed generation prior to any Interconnection of Generations Facilities.

Customer shall commence construction of the Generating Facilities only after receiving approval from BWP of the revised Design Documents in accordance with Section 3.0. Within 120 days after the Commercial Operation Date, Customer shall deliver to BWP the final drawings of the installed Generating Facilities ("as-built") together with all related information and documents, including such appropriate drawings and diagrams as are customarily provided under Good Utility Practice

and applicable laws and regulations. BWP's review of the final specifications shall not be construed as confirming, endorsing or otherwise approving the as-built drawings and related documentation. Customer shall make any corrections to the Project if BWP identifies any inconsistencies between the as-built drawings and the approved Design Documents unless approved by BWP in writing.

Prior to the Commercial Operation Date of any Generating Facility, Customer shall test the Generating Facility to ensure its safe and reliable operation and provide written certification to BWP that the Generating Facility complies with the terms of this Agreement. BWP reserves the right to test the Customer's equipment prior to approving the connection to BWP's system. BWP may request Customer to make modifications to its facilities that are found necessary as a result of such testing in order for such facilities to comply with the terms of this Agreement. Customer shall bear the cost of all such testing and modifications. BWP will provide written permission to complete the interconnection after it determines that all requirements respecting the Generating Facility as set forth in this Agreement have been met and can be accomplished without hazard to the public, personnel or the BWP System. Following successful completion of the testing and inspection, written permission to operate will be granted immediately and signed-off on site. A form of Permission to Operate Letter is attached to this Agreement as Appendix F. If the testing and inspection is unsuccessful, within thirty (30) days following a written request by Customer, BWP shall deliver written notification to Customer specifying in reasonable detail the conditions that caused the testing and inspection to be unsuccessful and requesting Customer to correct the conditions specified in the notification. Customer shall make all necessary modifications to correct the conditions specified in BWP's notification and all modifications are subject to inspection and approval, as above.

Customer shall generate test energy in parallel with the BWP system at a Generating Facility only if it has arranged for the delivery of such test energy.

Customer shall notify, in writing, BWP's Operating Contact at least fourteen (14) days prior to:

- i. The initial on Customer site testing of Protective Apparatus; and,
- ii. The initial parallel operation of the Generators with BWP's electrical system.

BWP shall have the right to have a representative present at each event at the Customer's sole but reasonable expense.

BWP shall conduct all such testing and inspections, and otherwise perform all of the activities which BWP is authorized and required to engage in, pursuant to the terms of this Agreement, within a reasonable time frame not to exceed the fourteen (14) day notice period provided in paragraphs 8.0(i) and (ii), following receipt of request from Customer. Upon Customer's written request BWP will deliver to Customer a schedule of current customer billable rates to be charged by BWP for its representatives. If a Generation Facility fails to meet all such testing and inspections, Customer shall make all such necessary modifications and may submit another request for such Generation Facility to be tested and inspected.

If the Generating Facility includes a fuel cell, at least thirty days prior to the Commercial Operation

Date (but in no event, more than 90 days prior to the Commercial Operation Date), Customer shall meet the requirements of Appendix B and C and certify and deliver to BWP a copy of all the documents set forth in Appendix C. Such a Generating Facility shall not be interconnected if, in the reasonable determination of BWP, Customer has failed to provide the adequate documentation in Appendix B.

Prior to the completion of the 6th year of operation following BWP's issuance of the permission to operate, but no earlier than 6 months before the completion of the 6th year of operation, and every 6 years thereafter, Customer shall test all interconnected inverters operating at the site subject to the testing requirements of this section. Customer shall maintain the testing results and documentation for the life of the facility and shall produce them to BWP when requested. Interconnected inverters shall be replaced, subject to BWP review and approval per the requirements of this agreement, if the inverter lifespan is exceeded and if it fails testing as required in this section.

9.0 Forecasting and Scheduling

Customer shall provide BWP's Operational Contact with a schedule of planned operation for each Generating Facility at least a week in advance with any periods of non-operation indicated on the schedule. Changes to the schedule for any reason will be communicated to BWP's Operational Contact at the first opportunity.

10.0 Operational Outages

Customer will inform BWP at its first opportunity should an equipment outage (either planned or unplanned) occur in any of the Generating Facilities. If BWP determines that curtailment or interruption of a Generation Facility is necessary because of an Emergency, forced outage, Force Majeure or in compliance with Good Utility Practice, Customer shall curtail or interrupt such Generation Facility in accordance with BWP's direction. Notwithstanding any other provision in this Agreement, if at any time BWP, in its sole and absolute discretion, determines that a Generating Facility or any of its ancillary facilities, may endanger BWP personnel or the members of the general public, or that continued operation of such Generating Facility may impair the System Integrity, (a) BWP shall have the right to disconnect and lock-out such Generating Facility or both Generating Facilities from BWP's Distribution System and (b) such Generating Facility or both Generating Facilities shall remain disconnected and locked-out until such time as BWP is satisfied that the conditions described above have been corrected and BWP shall not be obligated to compensate Customer for any loss of use of generation or energy during any and all periods of disconnection. If BWP has disconnected a Generating Facility, Customer shall obtain BWP's prior authorization before attempting to reconnect such Generating Facility.

11.0 Monitoring and Metering

Customer will install hardware and software to support Customer's operational needs. In addition Customer will allow to be installed both retail revenue and performance metering and telemetering equipment. BWP will install metering equipment at the Customer switchgear, and other locations BWP reasonably deems necessary under the BWP Rules and Regulations and this Agreement to support BWP needs at Customer's reasonable expense.

BWP's meters will provide the information that BWP requires for safe operation of the grid and for billing Customer. Customer will provide facility access and support for the installation, inspection, calibration and repair of the metering and telemetry systems installed by BWP at Customer's reasonable expense.

Please see Appendix D for BWP required meters and telemetering equipment.

12.0 Access

Customer will provide, at no cost to BWP, all rights of use, licenses, and rights of way as may be reasonably required for BWP to access the Generating Facilities and Interconnection Facilities (with the exception of the prime mover) for inspections, to perform or witness testing, or to perform or witness maintenance 24/7/365. Additionally, Customer shall provide BWP with a 24/7/365 direct contact in case any problems arise in meeting this access requirement. BWP has the right to drop any of Customer's Generating Facilities from the remote substation if access is unreasonably delayed or denied.

13.0 Operations and Maintenance

Customer Protective Equipment shall be operated and maintained in accordance with Good Utility Practice and good engineering practices with respect to synchronizing, voltage, and reactive power control. BWP shall have the right to monitor operation of each Generating Facility in real time (see metering requirements) and may require reasonable changes in Customer's method of operation if such reasonable changes are necessary in accordance with good engineering and operational practices to maintain BWP's electric system Integrity.

Customer shall notify the BWP operational contact by telephone or other means of direct communication prior to operation of any Generating Facility to obtain approval for parallel operation. All BWP telemetry systems and metering shall be activated before parallel operation commences.

BWP shall have the right to restrict Customer from connecting any or all of its Generating Facilities to the BWP's electric system whenever BWP determines, in its sole and absolute judgment, that such a restriction is necessary or appropriate to facilitate installation, construction, repair, replacement, investigation, inspection or maintenance of any BWP's facilities, or to maintain BWP's electric system integrity. Each Party shall endeavor to correct, within a reasonable period, the condition on its system which necessitates the disconnection. Each Generating Facility shall be operated with all of its Protective Apparatus in service whenever a Generator is connected to or is operated in parallel with the BWP's electric system. Any deviation shall only be for periods of emergency or maintenance and shall only be by agreement of the Parties.

Customer shall maintain each Generating Facility and the Interconnection Facilities in a safe and prudent manner and in conformance with all applicable laws and regulations, including, but not limited to, the design requirements of Section 18.0 below.

Customer, at Customer's sole expense, shall obtain and possess all permits (including those from the Building Division of The City of Burbank) and authorizations in accordance with all applicable laws and regulations for the construction, installation, design, operation and maintenance of the

Generating Facilities including environmental reviews. Customer understands that this Agreement does not constitute a permit to construct or install the Project, including any Generating Facility. Customer shall indemnify and reimburse BWP for any and all actual losses, damages, claims, penalties or liability BWP incurs as a result of Customer's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Project, including any of the Generating Facilities.

Each Party shall have an Operating Representative to coordinate all operational, technical and maintenance matters regarding the generation and delivery of electric power under this Agreement. The Parties' initial Operating Representatives are set forth in Section 5.0 of this document.

14.0 Sales and Compensation for Energy

Customer will not participate in any wholesale or retail sales of energy, ancillary services, or other capabilities of the installed Generation Facilities. Generation Facilities will not qualify for crediting of any excess power that may be generated if the Generation Facilities does not meet the applicability for Net Energy Metering under BWP Rules.

Customer will be charged for energy that was produced by the fuel cell for such period of time that was determined by BWP to have not met the Eligibility Requirement. The billing rate for periods of non-compliance is calculated as the then current ECAC charge (3.13C Rules and Regulations) less avoided fuel costs. The billing which *will be initially at a rate of 6.07 cents per kWh until replaced by the then current rate* as established and/or amended from time to time in the City of Burbank Fee Schedule. Avoided fuel costs will be calculated as the cents per kWh marginal cost of generating energy from a combined cycle natural gas plant with a heat rate of 7,500 Btu per kWh, using the then current budgeted forward gas price plus \$0.15 per MMBtu for transportation costs.

Customer will be responsible for any reasonable cost incurred by BWP by a third party to review the Customer's prequalification and continuing review of the Customer evidence of their fuel cell meeting the Eligibility Requirements.

The back billing rate in effect as of the date of this Agreement is subject to change throughout the term of this Agreement. The Customer acknowledges and agrees that it is not entitled to rely on the existing current rate and rate structure to remain the same during the term of this Agreement.

15.0 Standby Services and Billing

Customer shall take Standby Service per the BWP Rules and Regulations, which will be in conformity with State law, for all of the Generating Facilities. Standby Service shall be subject to a Standby Service Charge, if applicable under the BWP Rules and Regulations. Such Standby Service Charge, if any, shall initially billed at the rates and charges set forth in the then current Fee Schedule at the time of the Agreement until replaced by the then current rate as established and amended from time to time in the City of Burbank Fee Schedule.

Applicable rates and charges in effect as of the date of this Agreement are subject to change throughout the term of this Agreement. The Customer acknowledges and agrees that it is not entitled to rely on the existing current rates and rates structure to remain the same during the term

of this Agreement.

16.0 Harmonics

Customer will mitigate any harmonics that the distributed generation systems create in accordance with IEEE 519-1992 and/or EN61000-2-4. Customer and BWP will review any harmonics beyond the recommended levels in IEEE 519 and agree to what issues need mitigation.

17.0 Reliability

Customer will use commercially reasonable efforts to operate and maintain each Generating Facility so that it operates in a safe and reliable fashion. Should the systems become either unsafe or unreliable, BWP may ask that the systems be disconnected from the grid until such time as they are again capable of operating in a safe and reliable fashion. Once notified by BWP to disconnect, Customer shall disconnect the requested system at the first opportunity to do so. In the event of noncompliance, BWP has the option to disconnect the Customer's Generating Facilities from the BWP system.

18.0 Reverse Power Flows

18.1 Generation Facilities meeting the applicability for Net Energy Metering under BWP Rules, which will be in conformity with State law, will be allowed reverse power flows to the BWP electric system.

18.2 Section 18.2 applies to Customers whose Generation Facilities does not meet the applicability for Net Energy Metering under BWP Rules.

(a) Customer agrees that the Generating Facilities are solely for use on-site at the Customer location and will not inject power into the BWP system, to this end Customer will install a protective device for each Generating Facility that will prevent the distributed generation systems from creating reverse power flow on any phase of any feeder. BWP may change the protection device settings on each feeder that runs to the Customer site to prevent reverse power flow from entering the BWP system. Should reverse power flow be detected the protective device will open the feeder automatically.

(b) Customer further acknowledges and agrees that in the event that the Customer's generation exceeds the amount of power consumed on site at any time, BWP has the right to disconnect Customer's Generation Facilities from the distribution system.

(c) Because the Customer may have large motors that can auto-generate during shutdown, BWP understands that some transient reverse power flow may occur from these systems. To that end the BWP protective devices will be calibrated based on information provided by Customer on the auto-generation time for the largest pieces of equipment on the site. Should Customer not provide such information, BWP will set the protective devices to open after 15 cycles (0.25 seconds) of reverse power flow. This grace period is to allow Customer control systems time to correct any generation/load mismatch on their site.

(d) BWP will proceed with their standard ECC procedure for re-establishing connection and resetting the protective device. BWP will inform Customer if the connection cannot be reestablished in a reasonable period of time.

(e) Should a protective device trip again after reestablishment, BWP and Customer will coordinate to correct the condition causing the trip to re-occur.

19.0 Generating Facility Design and Operating Requirements

Customer's interconnected facilities design and operation must meet the requirements of ANSI/IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (IEEE 1547 latest revision). Designs for the generation and interconnected facilities must be approved by BWP prior to interconnection or operation.

20.0 General Interconnection and Protective Function Requirements

The Protective Functions and requirements are designed to protect BWP's System and not the Project or any of its Generating Facilities. Customer shall be solely responsible for providing adequate protection for the Project and Interconnection Facilities.

Customer Protective Functions shall not impact the operation of other Protective Functions on BWP's Distribution System in a manner that would affect BWP's capability of providing reliable service to its customers.

20.01 CUSTOMER SHALL NOT CONNECT THE PROJECT, OR ANY PORTION OF IT, TO BWP'S DISTRIBUTION SYSTEM, UNTIL WRITTEN APPROVAL OF THE FACILITY HAS BEEN GIVEN TO *CUSTOMER* BY BWP.

20.02 CUSTOMER, AND NOT BWP, SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL LEGAL REQUIREMENTS INCLUDING ANY ENVIRONMENTAL REVIEWS AND CITY OF BURBANK REQUIREMENTS, AND FOR SATISFYING ALL FINANCIAL OBLIGATIONS, ARISING FROM THE CONSTRUCTION, INSTALLATION, DESIGN, OPERATION, AND MAINTENANCE OF THE PROJECT IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

20.03 BWP SHALL HAVE THE RIGHT TO HAVE ITS REPRESENTATIVES PRESENT AT THE FINAL INSPECTION AND COMMISSIONING OF EACH INSTALLED GENERATING FACILITY. CUSTOMER SHALL NOTIFY BWP AT LEAST TEN (10) BUSINESS DAYS PRIOR TO SUCH INSPECTION.

21.0 Protective Functions Required

Each of the Generating Facilities operating in parallel with BWP's Distribution System shall be equipped with the following Protective Functions to sense abnormal conditions on BWP's System and cause a Generating Facility to be automatically disconnected from BWP's System or to prevent a Generating Facility from being connected to BWP's System inappropriately:

- i. Over and under voltage trip functions and over and under frequency trip functions;
- ii. A voltage and frequency sensing and time-delay function to prevent the Generating Facility from energizing a de-energized Distribution System circuit and to prevent a Generating Facility from reconnecting with BWP's Distribution System unless BWP's Distribution System service voltage and frequency is within the ANSI C84.1-1995 Table 1 Range B voltage Range of 106 volts to 127 volts (on a 120 volt basis), inclusive, and a frequency range of 59.3 Hz to 60.5 Hz, inclusive, and are stable for at least 60 seconds; and,
- iii. A function to prevent a Generating Facility from contributing to the formation of an Unintended Island, and cease to energize BWP's Distribution System within two seconds of the formation of an Unintended Island.

BWP reserves the right to audit any testing and/or certification of protective devices on the Customer system. BWP reserves the right to test the protection equipment that is installed in the Customer system, including live tests of the protective equipment. BWP will conduct its own testing as BWP determines is prudent. BWP will inform Customer in advance of any live testing of the protective equipment on Customer's site. A Generating Facility shall cease to energize BWP's Distribution System for faults on BWP's Distribution System circuit to which it is connected (IEEE 1547-4.2.1). A Generating Facility shall cease to energize BWP's Distribution System circuit prior to re-closure by BWP's Distribution System equipment (IEEE 1547-4.2.2).

22.0 Suitable Equipment Required

Circuit breakers or other interrupting equipment must be Certified or "Listed" (as defined in Article 100, the Definitions Section of the National Electrical Code) as suitable for their intended application. This includes being capable of interrupting the maximum available fault current expected at their location. Customer's Project and Interconnection Facilities shall be designed so that the failure of any single device or component shall not potentially compromise the safety and reliability of BWP's System. Each Generating Facility's paralleling-device shall be capable of withstanding 220% of the Interconnection Facility rated voltage (IEEE 1547-4.1.8.3). Each Interconnection Facility shall have the capability to withstand voltage and current surges in accordance with the environments defined in IEEE Std C62.41.2 (latest revision) or IEEE Std C37.90.1 (latest revision) as applicable and as described thereof in L.3.e (IEEE 1547-4.1.8.2).

23.0 Visible Disconnect Required

As required by BWP's operating practices, Customer shall furnish and install a ganged, manually-operated isolating switch (or a comparable device mutually agreed upon by BWP and Customer) near the Point of Interconnection to isolate a Generating Facility from BWP's Distribution System. The device does not have to be rated for load break nor provide over-current protection.

The device must:

- i. Allow visible verification that separation has been accomplished. (This requirement may be met by opening the enclosure to safely observe contact separation.)

- ii. Include markings or signage that clearly indicates open and closed positions.
- iii. Be capable of being reached:
 - (a) For Emergency purposes quickly and conveniently 24 hours a day by BWP personnel for construction, operation, maintenance, inspection, testing or to isolate a Generating Facility from BWP's Distribution System without obstacles or requiring those seeking access to obtain keys, special permission, or security clearances; and,
 - (b) For Non-Emergency purposes during normal business hours. BWP, where possible, will provide Notice to Customer for gaining access to Customer's premises.
- iv. Be capable of being locked in the open position.
- v. Be capable of having an Accident Prevention Tag as Defined in Cal OSHA Title 8, Subchapter 7, Croup 2, Article 7, GISO §3341 tag hung on the disconnect that shows that the disconnect is locked in the open position.
- vi. Be clearly marked on the submitted single line diagram and its type and location approved by BWP prior to installation. If the device is not adjacent to the PCC, permanent signage must be installed at a BWP approved location providing a clear description of the location of the device. If the switch is not accessible outside the locked premises, signage with contact information and a BWP approved locking device for the premises shall be installed.

24.0 Drawings Required

Prior to Parallel Operation of a Generating Facility, Customer must submit and obtain approval of Customer's Protective Function and control diagrams by BWP. Generating Facilities equipped with Protective Functions and a control scheme previously approved by BWP for system-wide application or only UL Certified Equipment may satisfy this requirement by reference to previously approved drawings and diagrams. Copies of the control and protective diagrams shall accompany all required drawings included in this document as Appendix A.

Any future changes to any of the drawings submitted to BWP as part of the process of completing this agreement, including changes to the "as-built" drawings will be submitted to BWP within 10 business days of completion of said drawings.

25.0 Prevention of Interference

Customer shall not operate Generating Facilities or Interconnection Facilities that superimpose a voltage or current upon BWP's Distribution System that interferes with BWP operations, service to BWP Customers, or communication facilities. If such interference occurs, Customer must diligently pursue and take corrective action at its own expense after being given Notice and reasonable time to do so by BWP. If Customer does not take corrective action in a timely manner,

or continues to operate the facilities causing interference without restriction or limit, BWP may, without liability, disconnect Customer's Generating Facilities from BWP's Distribution System. To eliminate undesirable interference caused by its operation, each Generating Facility shall meet the following criteria:

(a) Voltage Regulation

Each Generating Facility shall not actively regulate the voltage at the PCC while in parallel with BWP's Distribution System. Each Generating Facility shall not cause the service voltage at other customers to go outside the requirements of ANSI C84.1 (latest revision), Range A (IEEE 1547-4.1.1).

(b) Voltage Trip Setting

The voltage ranges in Table H.1 define protective trip limits for the Protective Function and are not intended to define or imply a voltage regulation function. The Generating Facilities shall cease to energize BWP's Distribution System within the prescribed trip time whenever the voltage at the PCC deviates from the allowable voltage operating range. The Protection Function shall detect and respond to voltage on all phases to which a Generating Facility is connected.

Each Generating Facility shall be capable of operating at a range between 88% and 110% of the applicable interconnection voltage. Voltage shall be detected at either the PCC or the Point of Interconnection, with settings compensated to account for the voltage at the PCC. However, the voltage range at the PCC, with the generator on-line, shall stay within +/-5% of nominal.

Whenever BWP's Distribution System voltage at the PCC varies from and remains outside normal (Nominally 120 volts) for the predetermined parameters set forth in the Table below, the Generating Facility's Protective Functions shall cause the Generator(s) to become isolated from BWP's Distribution System:

Table H1:

Voltage Trip Settings for Generating Facilities*			
Voltage at Point of Common Coupling (the ranges below are used to trip the generator during abnormal distribution system conditions)		Maximum Trip Time**	
Assuming 120 Volt Base	% of Nominal Voltage	# of Cycles (Assuming 60 Hz)	Seconds
Less than 60 volts	Less than 50%	10 Cycles	0.16 Seconds
Greater than or equal to 60 volts but less than 106 volts	Greater than or equal to 50% but less than 88%	120 Cycles	2 Seconds
Greater than 132 volts but less than or equal to 144 volts	Greater than 110% but less than or equal to 120%	60 Cycles	1 Second
Greater than 144 volts	Greater than 120%	10 Cycles	0.16 Seconds
<p><i>*For Generating Facilities with a Rating greater than 30 kVA, set points shall be field adjustable and different voltage set points and trip times from those in Table H.1 may be negotiated with BWP</i></p>			
<p><i>** "Maximum Trip Time" refers to the time between the onset of the abnormal condition and the Generating Facility ceasing to energize BWP's Distribution System. Protective Function equipment and circuits may remain connected to BWP's Distribution System to allow sensing of electrical conditions for use by the "reconnect" feature. The purpose of the allowed time delay is to allow for a Generating Facility to minimize tripping during short term system disturbances. Set points shall not be user adjustable for generating facilities less than 30 kW.</i></p>			

(c) Paralleling

Each Generating Facility shall parallel with BWP's Distribution System without causing a voltage fluctuation at the PCC greater than plus/minus 5% of the prevailing voltage level of BWP's Distribution System at the PCC, and meet the flicker requirements of Section H.2.d. Section L, Certification and Testing Criteria, provides technology-specific tests for evaluating the paralleling Function. (IEEE 1547-4.1.3)

(d) Flicker

Refer to Appendix B of BWP's Rules and Regulations with regard to flicker.

(e) Integration with BWP's Distribution System Grounding

The grounding scheme of each Generating Facility shall not cause over-voltages that exceed the rating of the equipment connected to BWP's Distribution System and shall not disrupt the coordination of the ground fault protection on BWP's Distribution System (IEEE 1547-4.1.2)

(f) Frequency

BWP controls system frequency, and each Generating Facility shall operate in synchronism with BWP's Distribution System. Whenever BWP's System frequency at the PCC varies from and remains outside normal (nominally 60 Hz) by the predetermined amounts set forth in Table H.2, the applicable Generating Facility's Protective Functions shall cease to energize BWP's Distribution System within the stated, maximum trip time.

Frequency Trip Settings:

Table H2:

Frequency Range (Assuming 60Hz Nominal)	Maximum Trip Time [1] (Assuming 60 Cycles per Second)
Less than 57.0 Hz	10 Cycles
Less than an adjustable value between 59.8 Hz and 57 Hz but greater than 57 Hz. [2]	Adjustable between 10 and 18,000 Cycles[2, 3]
Greater than 60.5 Hz.	10 Cycles

[1] – “Maximum Trip time” refers to the time between the onset of the abnormal condition and a Generating Facility ceasing to energize BWP's Distribution System. Protective Function sensing equipment and circuits may remain connected to BWP's Distribution System to allow sensing of electrical conditions for use by the “reconnect” feature. The purpose of the allowed time delay is to allow a Generating Facility to “ride through” short-term disturbances to avoid nuisance tripping. Set points shall not be user adjustable (though they may be field adjustable by qualified personnel). For Generating Facilities with a Gross Rating greater than 30 kVA, set points shall be field adjustable and different voltage set points and trip times from those in Table H.2 may be negotiated with BWP.

[2] – Unless otherwise required by BWP, a trip frequency of 59.3 Hz and a maximum trip time of 10 cycles shall be used.

[3] – When a 10 cycle Maximum trip time is used, a second under frequency trip setting is not required.

(g) Harmonics

Refer to Appendix A of the BWP Rules and Regulations for Harmonics.

(h) Direct Current Injection

Generating Facilities should not inject direct current into BWP's Distribution System.

(i) Power Factor

Customer shall provide adequate reactive power compensation on site to maintain each Generating Facility power factor near unity at rated output or a BWP specified power factor within a power factor range from 0.995 leading to 0.995 lagging, based on local system conditions.

Technology Specific Requirements:

(a) Three-Phase Synchronous Generators:

For a Generating Facility with three-phase Generators, such Generating Facility's circuit breakers shall be three-phase devices with electronic or electromechanical control. Customer shall be responsible for properly synchronizing each of its Generating Facilities with BWP's Distribution System by means of either manual or automatic synchronous equipment. Automatic synchronizing is required for all synchronous Generators that have a Short Circuit Contribution Ratio (SCCR) exceeding 0.05. Loss of synchronism protection is not required except as may be necessary to meet Section H.2.d (Flicker) (IEEE1547- 4.2.5). Unless otherwise agreed upon by Customer and BWP, synchronous Generators shall automatically regulate power factor, not voltage, while operating in parallel with BWP's Distribution System. A power system stabilization Function is specifically not required for Generating Facilities under 10 MW Net Rating.

(b) Induction Generators

Induction Generators (except self-excited Induction Generators) do not require a synchronizing Function. Starting or rapid load fluctuations on induction Generators can adversely impact BWP's Distribution System voltage. Corrective step-switched capacitors or other techniques may be necessary and may cause undesirable ferro-resonance. When these counter measures (e.g. additional capacitors) are installed on Customer's side of the PCC, BWP must review these measures. Additional equipment may be required as determined by BWP.

(c) Inverters

Grid-interactive inverters do not require separate synchronizing equipment. Non-grid-interactive or "stand-alone" inverters shall not be used for Parallel Operation with BWP's Distribution.

(d) Supplemental Generating Facility Requirements

(i) Fault Detection

A Generating Facility with an SCCR exceeding 0.1 or one that does not cease to energize BWP's Distribution System within two seconds of the formation of an Unintended Island shall be equipped with Protective Functions designed to detect BWP System faults, both line-to-line and line-to-ground, and cease to energize BWP's Distribution System within two seconds of the initiation of a fault.

(ii) Transfer Trip

Customer will provide a Transfer Trip capability for the installed Generation Facilities.

(iii) Reclose Blocking

The BWP distribution system serving Customer facilities may have automatic reclosing installed and enabled. Reclosing can result in serious damage to AC power sources and requires special protection to insure safe and reliable operation.

The Customer is responsible for protection of the Customer's equipment.

If the aggregated Generating Facilities capacity exceeds 15% of the peak load on any

Phase 1 Inverter-Distributed Energy Resource (I-DER) Functions	Description	Setting	Comments
Anti-Islanding: Support anti-islanding to trip off under extended anomalous conditions	The I-DER system trips off if voltage or frequency limits are exceeded over specified time periods. Although default trip-off limits settings would be implemented initially, these settings could be modifiable through agreement between the Area EPS and the I-DER operator.	Enabled	
LHVRT: Provide ride-through of low/high voltage excursions beyond normal limits	The I-DER system remains connected during voltage excursions beyond normal limits, based on extended voltage limits during specified time windows. The I-DER system would disconnect only when the ride-through window has expired. Although default ride-through settings would be implemented initially, these settings could be modifiable through agreement between the Area EPS and the I-DER operator, based on the technical capabilities of the I-DER system and used to possibly mitigate abrupt losses of generation.	Enabled	

²Recommendations for Updating the Technical Requirements for Inverters in Distributed Energy Resources Smart Inverter Working Group Recommendations January 2014

Phase 1 I-DER Functions	Description	Setting	Comments
LHFRT: Provide ride-through of low/high frequency excursions beyond normal limits	<p>The I-DER system remains connected during frequency excursions beyond normal limits, based on extended frequency limits during specified time windows. The I-DER system would disconnect only when the ride-through window has expired.</p> <p>Although default ride-through settings would be implemented initially, these settings could be modifiable through agreement between the Area EPS and the I-DER operator, based on the technical capabilities of the I-DER system and used to possibly mitigate abrupt losses of generation.</p>	Enabled	
Volt-Var Control: Provide volt/var control through dynamic reactive power injection through autonomous responses to local voltage measurements	The I-DER system implements volt/var curves that define the available reactive power required at different voltage levels. Settings are coordinated between the utility and I-DER operator. Available reactive power is defined as what reactive power is available without decreasing real power output. I-DER controller contains pre-established volt/var settings, and/or Volt/var settings can be updated remotely.	Disabled	All power will be delivered at unity
Ramping: Define ramp rates	The default ramp rate is established, contingent upon what the I-DER can do. Additional emergency ramp rates and high/low ramp rate limits may also be defined.	Disabled	
Fixed PF: Provide reactive power by a fixed power factor	The I-DER system sets the inverter to the specified power factor setting: I-DER controller contains pre-established power factor setting, and/or Power factor setting can be updated remotely.	Enabled and set to unity	

Phase 1 I-DER Functions	Description	Setting	Comments
Soft-Start Reconnection: Reconnect after grid power is restored	The I-DER system reconnects to the grid after power is restored using soft-start methods such as ramping up and/or randomly turning on within a time window after grid power is restored, to avoid abrupt increases in generation. The delay time between power restoration and the start of reconnection is preset, as are the ramping rate and the time window.	Enabled	

Should the Customer install a Phase 3 capable system, the Customer must notify BWP so that specific settings can be agreed upon. See required phase 3 settings below.

Phase 3 I-DER Functions with Communications	Description	Setting	Comments
Monitor Alarms: Provide emergency alarms and information	The I-DER system (and aggregations of I-DER systems, such as virtual power plants) provides alarms and supporting emergency information via the FDEMS to the utility. This function is feasible only if the ICT infrastructure is available.	Enabled	
Monitor DER Status and Output: Provide status and measurements on current energy and ancillary services	The I-DER system (and aggregations of I-DER systems, such as virtual power plants) provides current status, power system measurements, and other real-time data (possibly aggregated via the FDEMS) to the utility, in order to support real-time and short-term analysis applications. This function is feasible only if the ICT infrastructure is available. (Revenue metering data is provided via alternate means.)	Enabled	

Phase 3 I-DER Functions with Communications	Description	Setting	Comments
<p>Limit Maximum Real Power: Limit maximum real power output at an ECP or the PCC upon a direct command from the utility</p>	<p>The utility issues a direct command to limit the maximum real power output at the ECP or PCC. The reason might be that unusual or emergency conditions are causing reverse flow into the feeder's substation or because the total I-DER real power output on the feeder is greater than some percentage of total load. The command might be an absolute watt value or might be a percentage of I-DER output. This function is feasible only if the ICT infrastructure is available. It might also be used to ensure fairness across many I-DER systems.</p>	<p>Disabled</p>	
<p>Command DER to Connect or Disconnect: Support direct command to disconnect or reconnect</p>	<p>The I-DER system performs a disconnect or reconnect at the ECP or PCC. Time windows are established for different I-DER systems to respond randomly within that window to the disconnect and reconnect commands. This function is feasible only if the ICT infrastructure is available.</p>	<p>Disabled</p>	

Phase 3 I-DER Functions with Communications	Description	Setting	Comments
Provide DER information: Provide operational characteristics at initial interconnection and upon changes	The I-DER system provides operational characteristics after its “discovery” and whenever changes are made to its operational status.	Enabled	
Initiate Periodic Tests: Test I-DER functionality, performance, software patching, and updates	Initial I-DER software installations and later updates are tested before deployment for functionality and for meeting regulatory and utility requirements, including safety. After deployment, testing validates the I-DER systems are operating correctly, safely, and securely.	Disabled	
Schedule Output at PCC: Schedule actual or maximum real power output at specific times	The utility establishes (or pre-establishes) a schedule (e.g. on-peak & off-peak) of actual or maximum real power output levels at the ECP or PCC, possibly combining generation, storage, and load management. The reason might be to minimize output during low load conditions while allowing or requiring higher output during peak load time periods.	Disabled	
Schedule DER Functions: Schedule real power and ancillary service outputs	The I-DER system receives and follows schedules for real power settings, reactive settings, limits, modes (such as autonomous volt/var, frequency-watt), and other operational settings.	Disabled	

Phase 3 I-DER Functions with Communications	Description	Setting	Comments
<p>Schedule Storage: Set or schedule the storage of energy for later delivery, indicating time to start charging, charging rate and/or “charge-by” time</p>	<p>For a I-DER system that has storage capabilities, such as battery storage or a combined PV + storage system or a fleet of electric vehicles. Preset time-of-charge values can be established. Settings are coordinated between the utility and I-DER operator. Different scenarios could include: Low load conditions at night are causing some renewable energy to be wasted, so charging energy storage I-DER systems at that time makes power system operations more efficient. I-DER controller charges at the specified rate (less than or equal to the maximum charging rate) until the state-of-charge (SOC) reaches a specified level. I-DER controller charges at the necessary rate in order to reach the specified SOC within the “charge-by” time.</p>	Disabled	

Phase 3 Autonomous I-DER Functions	Description	Setting	Comments
<p>Frequency-Watt: Counteract frequency excursions beyond normal limits by decreasing or increasing real power</p>	<p>The I-DER system reduces real power to counteract frequency excursions beyond normal limits (and vice versa if additional generation or storage is available), particularly for microgrids. Hysteresis can be used as the frequency returns within the normal range to avoid abrupt changes by groups of I-DER systems.</p>	Disabled	
<p>Voltage-Watt: Modify real power output autonomously in response to local voltage variations</p>	<p>The I-DER system monitors the local (or feeder) voltage and modifies real power output in order to damp voltage deviations. Settings are coordinated between the utility and I-DER operator. Hysteresis and delayed responses could be used to ensure overreactions or hunting do not occur.</p>	Disabled	

Phase 3 Autonomous I-DER Functions	Description	Setting	Comments
Dynamic Current Support: Counteract voltage excursions beyond normal limits by providing dynamic current support	The I-DER system counteracts voltage anomalies (spikes or sags) through “dynamic current support”. The I-DER system supports the grid during short periods of abnormally high or low voltage levels by feeding reactive current to the grid until the voltage either returns within its normal range, or the I-DER system ramps down, or the I-DER system is required to disconnect.	Disabled	

Phase 3 Autonomous I-DER Functions	Description	Setting	Comments
Limit Maximum Real Power: Limit maximum real power output at the ECP or PCC to a preset value	I-DER systems are interconnected to the grid with a preset limit of real power output to be measured at the PCC. The reason might be that the I- DER system is sized to handle most of the local load behind an ECP or the PCC, but occasionally that load decreases below a critical level and the increased real power at the ECP or PCC may cause backflow at the substation and be a reliability concern for the utility. Most likely for larger I-DER systems.	Disabled	
Set Real Power: Set actual real power output at the ECP or PCC	The utility either presets or issues a direct command to set the actual real power output at the ECP or PCC (constant export/import if load changes; constant watts if no load). The reason might be to establish a base or known generation level without the need for constant monitoring. This is the approach often used today with synchronous generators. This function is feasible only if the ICT infrastructure is available. Meter reads could provide 15-minute energy by the end of the day could provide production information for operational planning.	Disabled	

Phase 3 Autonomous I-DER Functions	Description	Setting	Comments
Smooth Frequency Deviations: Smooth minor frequency deviations by rapidly modifying real power output to these deviations	The I-DER system modifies real power output rapidly to counter minor frequency deviations. The frequency-watt settings define the percentage of real-power output to modify for different degrees of frequency deviations on a second or even sub- second basis.	Disabled	

Optional I-DER Functions	Description	Setting	Comments
Backup Power: Provide backup power after disconnecting from grid	The I-DER system, including energy storage and electric vehicles, has the ability to provide real power when the site is disconnected from grid power. The reason is to provide backup power to the facility and possibly black start capabilities.	Disabled	
Imitate capacitor bank triggers: Provide reactive power through autonomous responses to weather, current, or time-of-day	Similar to capacitor banks on distribution circuits, the I-DER system implements temperature-var curves that define the reactive power for different ambient temperatures, similar to use of feeder capacitors for improving the voltage profile. Curves could also be defined for current-var and for time-of-day-var.	Disabled	
Operate within an Islanded Microgrid: Operate within an islanded microgrid	After grid power is lost or disconnected, or upon command, the I-DER system enters into microgrid “mode” as either “leading” or “following” the microgrid frequency and voltage, while acting either as base generation or as load-matching, depending upon preset parameters.	Disabled	
Provide low cost energy	Utility, REP, or FDEMS determines which I-DER systems are to generate how much energy over what time period in order to minimize energy costs. Some I-DER systems, such as PV systems, would provide low-cost energy autonomously, while storage systems would need to be managed.	Disabled	

Optional I-DER Functions	Description	Setting	Comments
Provide low emissions energy	Utility, REP, or FDEMS determines which non-renewable I-DER systems are to generate how much energy in order to minimize emissions. Renewable I-DER systems would operate autonomously.	Disabled	
Provide renewable energy	Utility, REP, or FDEMS selects which non-renewable I-DER systems are to generate how much energy in order to maximize the use of renewable energy. Renewable I-DER systems would operate autonomously.	Disabled	
Execute schedules: Scheduled, planned, or forecast of available energy and ancillary services	The FDEMS provides scheduled, planned, and/or forecast information for available energy and ancillary services over the next hours, days, weeks, etc., for input into planning applications. Separate I-DER generation from load behind the PCC. This function is feasible only if the ICT infrastructure is available.	Disabled	

Optional I-DER Functions	Description	Setting	Comments
Issue generation and storage schedules	The I-DER system provides schedules of expected generation and storage reflecting customer requirements, maintenance, local weather forecasts, etc. This function is feasible only if the ICT infrastructure is available.	Disabled	
Provide black start capabilities	The I-DER system operates as a microgrid (possibly just itself) and supports additional loads being added, so long as they are within its generation capabilities. This function is feasible only if the ICT infrastructure is available.	Disabled	
Participate in AGC: Support frequency regulation by automatic generation control (AGC) commands	The I-DER system (or aggregations of I-DER systems) implements modification of real- power output based on AGC signals on a multi-second basis. This function is feasible only if the ICT infrastructure is available.	Disabled	

Optional I-DER Functions	Description	Setting	Comments
Provide “spinning” or operational reserve as bid into market	The I-DER system provides emergency real power upon command at short notice (seconds or minutes), either through increasing generation or discharging storage devices. This function would be in response to market bids for providing this reserve. This function is feasible only if the ICT infrastructure is available.	Disabled	
Respond to Pricing Signals: Manage real power output based on demand	The I-DER system receives a demand response (DR) pricing signal from a utility or retail energy provider (REP) for a time period in the future and determines what real power to output at that time. This function is feasible only if the ICT infrastructure is available.	Disabled	
Respond to Pricing Signals: Manage selected ancillary services based on demand response (DR) pricing signals	The I-DER system receives a DR pricing signal from a utility or retail energy provider (REP) for a time period in the future and determines what ancillary services to provide at that time. This function is feasible only if the ICT infrastructure is available.	Disabled	

Optional I-DER Functions	Description	Setting	Comments
Registration: Initiate automated “discovery” of I-DER systems	The I-DER system supports its automated “discovery” as interconnected to a location on the power system and initiates the integration process. This function is feasible only if the ICT infrastructure is available. Otherwise, manual methods must be used.	Disabled	

27.0 Indemnity and Liability

Customer shall indemnify and hold the City of Burbank, including BWP, its directors, officers, agents and employees (“Indemnitees”) harmless against all loss, damage, expense and liability to third persons for injury to or death of persons or injury to property caused by or arising out of the design, construction, installation, ownership, maintenance, or operation of the Project or any portion thereof, provided that Customer’s indemnity obligation shall not apply to any loss, damage, expense and liability to third persons for injury to or death of persons or injury to property to the extent caused by or arising out of the negligence or willful misconduct of the Indemnitees. Customer shall, upon BWP’s request, defend any suit asserting a claim covered by this indemnity.

28.0 Insurance

During the term of this Agreement, Customer shall maintain comprehensive general liability insurance for the design, operation and maintenance of the Project; including blanket contractual liability coverage with a combined single limit of not less than [\$1,000,000 subject to approval of City of Burbank Risk Management] each occurrence. From time to time BWP may require a reasonable increase in the coverage limits of the foregoing insurance consistent with prevailing risk management practices for similar commercial activities. BWP will notify Customer about changes in coverage limits. Such insurance shall name BWP, its officers, agents, and employees as additional insured parties in a form subject to the reasonable approval of BWP’s legal counsel. Customer shall, prior to the operation of any of its Generating Facility in parallel with BWP’s Distribution System, furnish BWP with a certificate evidencing such insurance and providing that such insurance shall not be cancelled or materially reduced without thirty (30) days advance written Notice to BWP. [Subject to review by City of Burbank Risk Management]

29.0 Governing Law

The laws of the State of California shall govern this Agreement.

30.0 Amendment

Any amendments or modifications to this Agreement shall be in writing and agreed to by both Parties. The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any Party of the breach of any term or covenant contained in this Agreement, whether by conduct or otherwise, shall be deemed to be construed as a further or continuing waiver of any such breach or a waiver of the breach of any other term or covenant unless such waiver is in writing. The General Manager of BWP, or its designee, is authorized to (a) enter into any amendments approving, modifying or accepting an updated Design Documents, (b) enter into any ministerial amendments to update or correct this Agreement and (c) administer this Agreement in the ordinary course.

31.0 Assignment Prohibited; Successors and Assigns

This Agreement is personal to Customer and its affiliates and successors in title and may not be assigned without the written consent of BWP. This Agreement is and shall be binding on all permitted successors and assigns of each of the Parties hereto without the necessity of further

documentation.

Notwithstanding the foregoing or anything else to the contrary herein, Customer may assign this Agreement, without the consent of BWP, to any “Affiliate” of the Customer, or into which or with which Customer is merged or consolidated, or to any person or entity which acquires all or substantially all of the stocks or assets of Customer or any affiliate of the Customer and such “Affiliate” or successor has an electric service account with BWP for the location of the Generating Facilities as described in Section 2.0; provided, however, such assignment shall not relieve the Customer of its obligations and liabilities under this Agreement. The term “Affiliate” shall mean any person or entity which Customer has a majority ownership interest or that is under majority common ownership of Customer.

32.0 Entire Agreement

This Agreement contains the entire understanding between the Parties and supersedes all previous communications, representations, understandings, and agreements, either oral or written, between the Parties with respect to the subject matter hereof. There are no other promises, terms, conditions, obligations, understandings, or agreements either written or oral between the Parties with respect to the subject matter hereof.

33.0 Review of Records and Data

BWP shall have the right, in addition to those in Section 6 and 8, to review and obtain copies of Customer’s operations and maintenance records, logs, agreements, invoices, and any other evidence that the fuel cell meets the Eligibility Requirements as noted in Section 6, Appendix B and C, and other information such as unit availability, maintenance outages, circuit breaker operation requiring manual reset, relay targets, and unusual events, as reasonably necessary, pertaining to Customer’s Generating Facilities, or its interconnection with BWP’s Distribution System.

BWP may use a third party to review such information.

For fuel cell generation, Customer shall provide auditable package documentation annually to BWP by March 31, for the prior calendar year that includes completion of Appendix E and the following information for each biomethane source:

- 1) Fuel use summary showing the monthly fuel invoice, injection, delivery, and use quantities in MMBtus, and the monthly total generation of the electrical Generation Facility.
- 2) Fuel delivery summary spreadsheet showing the monthly fuel quantities received into and delivered from each pipeline along the delivery path.
- 3) Delivery path summary spreadsheet summarizing the delivery path.
- 4) Transport contract summary spreadsheet summarizing the information in the transport contracts.
- 5) Monthly meter data for the biomethane source’s injection point on the delivery pipeline.

- 6) Monthly pipeline nomination reports for each pipeline and storage facility along the delivery path.
- 7) Monthly invoices for the procurement of the biomethane.
- 8) Monthly meter data showing the total use of all fuels (biomethane and nonrenewable fuels) at the Generating Facility.
- 9) A summary statement, including supporting documentation, of all biomethane associated with, or planned to be delivered to, the Generating Facility remaining in a storage facility at the close of the calendar year. Biomethane quantities not identified in the summary report may not be used at a later time.

Customer authorizes BWP to release to regulatory bodies information regarding the Project, including the Customer's name and location, and the size, location and operational characteristics of the generating facility, as requested from time to time pursuant to governing statutes and regulations.

34.0 Force Majeure

Any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorism, terrorist activities, inability to obtain services, labor, or materials or reasonable substitutes therefore, governmental actions, civil commotions, fire, flood, earthquake or other casualty, and other causes beyond the reasonable control of the party obligated to perform (collectively, a "Force Majeure"), notwithstanding anything to the contrary contained in this Agreement, shall excuse the performance of such party for a period equal to the period of any such prevention, delay or stoppage and, therefore, if this Agreement specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by an event of Force Majeure; provided, that a Force Majeure shall excuse performance only if the party facing such Force Majeure (a) delivers prompt notice to the other party of the occurrence of such Force Majeure and (b) uses commercially reasonable efforts to circumvent, address or otherwise overcome the Force Majeure.

35.0 General

Time is of the essence of this Agreement and each of the terms and conditions hereof. This Agreement may be executed in any number of duplicate counterparts, each of which, when executed, shall be deemed an original and all of which shall constitute one and the same agreement. No provision of this Agreement may be amended or added to except by an agreement in writing signed by the parties hereto or their respective successors in interest. The illegality, invalidity, or unenforceability of any provision of this Agreement shall in no way impair or invalidate any other provision of this Agreement, and such remaining provisions shall remain in full force and effect.

IN WITNESS THEREOF, the Parties hereto have caused this Agreement to be executed as of _____, 2015.

**THE CITY OF BURBANK,
through its Burbank Water and Power**

By _____

Jorge Somoano

Title Acting General Manager, Burbank Water and Power

Approved as to form

By _____

Title Senior Assistant City Attorney, City Attorney's Office

Customer Name

By _____

Title _____

By _____

Title _____

Appendix A

Project Documents (Provided by Customer)

Appendix B

Fuel Cell Qualification Requirements

Prior to Interconnection, Customer shall provide sufficient documentation and information for BWP to determine that the biomethane would meet the CEC Eligibility Requirements. If BWP determines in its reasonable judgment that Customer either failed to provide evidence or that it provided insufficient evidence that its Generating Facility does not or will not meet the Eligibility Requirements, then the Generating Facility shall be deemed to not be meeting the Eligibility Requirements until such time as Customer demonstrates to BWP's reasonable satisfaction that Customer meets the Eligibility Requirements for its Generating Facility consisting of a fuel cell.

Such information shall include but not be limited to:

1. List of all biomethane to be used at the facilities.
2. Certification that the facility's fuel sources qualify as biomethane as specified in the definition of the biomethane in the Eligibility Guidebook.
 - a. List of names of each fuel production facility.
 - b. Demonstrate and provide evidence to BWP's satisfaction, for each biomethane source that the capture and injection of biomethane into a common carrier pipeline directly results in at least one environmental benefit in California as defined in the Eligibility Guidebook.
 - c. Every producer of biomethane shall provide at minimum the following certification:
 - i. Provide the fuel production facility owner/operator, the address of the fuel production facility, the start and end dates of the fuel supply contract.
 - ii. Provide the quantity of fuel to be delivered under this contract in MMBtus/month.
 - iii. Provide the delivery point of the gas into the natural gas pipeline system, if applicable.
 - iv. Provide attestation, in form and substance satisfactory to BWP, by an authorized officer or agent of the fuel production facility owner under penalty of perjury, that the fuel consists, or will consist, solely of an RPS eligible fuel as defined in the Eligibility Guidebook and constitutes an RPS eligible renewable fuel pursuant to the Eligibility Guidebook.
 - d. Every pipeline entity that provides storage or delivery of renewable pipeline biomethane shall provide at minimum the following certification:
 - i. Provide the named fuel production facility name.
 - ii. Provide the entity handling the delivery of the biomethane gas.

- iii. Provide the name of the entity delivering the gas at the point of receipt into the pipeline.
 - iv. Provide the receipt point where the gas enters the pipeline and the delivery point where the gas exits the pipeline.
 - v.
 - vi. Provide the name of the entity receiving the gas at the delivery point.
 - vii. Provide sufficient evidence that demonstrates that the delivery of biomethane meets the delivery requirements of the Eligibility Guidebook.
 - viii. Provide attestation by authorized officer or agent of the pipeline biomethane delivering entity and attest under penalty of perjury on behalf of the entity that renewable pipeline biomethane, as defined in the Eligibility Guidebook, from the named fuel production facility, is planned to be delivered, and to continue to be delivered, for the term of the delivery contract, from the named entity at the above receipt point to the named receiving entity at the above delivery point, in an eligible manner as described by the Eligibility Guidebook.
3. Customer must furnish copies of all contracts with any sensitive or confidential information redacted from each of these agreements, between Customer and Suppliers and Pipeline entities showing the production, transmission, and delivery of each biomethane resource acquired as fuel for Customer's Generation Facilities.
- a. The biomethane procurement contract for each biomethane source must demonstrate at minimum the following:
 - i. The biomethane procurement contract execution date and term.
 - ii. The biomethane sources are specified in the contract.
 - iii. The contracted quantity of biomethane in MMBtu from each source, which may include the full output or a percentage of the full output from each source, and the specific time frame for biomethane deliveries.
 - iv. All renewable and environmental attributes associated with the production, capture, and injection of the biomethane are transferred in whole to the electrical generating facility using the biomethane.
 - b. The pipeline transport contracts must demonstrate at minimum the following:
 - i. The point of receipt (POR), where the biomethane enters the pipeline.
 - ii. The point of delivery (POD), where the gas exits the pipeline or enters storage.
 - iii. The transport maximum daily quantity, the maximum amount that can be transferred through the pipeline each day, if specified in the transport contract.

Appendix C

Customer Certification of Biomethane

“Generating Facility”: [Facility Description]

Customer Name: _____
 Street Address: _____
 City: _____
 Zip Code: _____

Customer certifies to the City of Burbank that the facility's fuel sources, identified below, qualify as biomethane as specified in the definition of biomethane in the Eligibility Guidebook.

All sources of biomethane

	Fuel Production Facility Name	Delivery Entity
1		
2		
3		
4		
5		
6		
7		

I am an authorized officer or agent of the above-noted electrical generation facility owner with authority to submit this application for precertification on said facility owner’s behalf, and hereby submit this precertification form and any supplemental forms and attachments included herewith on behalf of said facility owner of the above noted electrical generation facility as an eligible renewable energy resource that such electrical generation facility would qualify under California’s RPS. I attest on behalf of said facility owner to the following with respect to fuel identified in this form and any supplemental forms and attachments included herewith:

- The fuel described in this form and any supplemental forms and attachments included herewith is being procured for precertification and the above noted electrical generation facility owner intends to continue procuring that fuel from the above noted fuel production facility(ies);

The fuel satisfies the definition and requirements of “biomethane” as specified in the Eligibility Guidebook;

- The above noted electrical generation facility owner has not sold, traded, given away, claimed, or otherwise disposed of any of the attributes that would prevent the resulting electricity from being compliant with the definition of “green attributes” as defined in the Eligibility Guidebook, nor will it do so for any biomethane used to generate at the above noted electrical generation facility; and,

- The above noted electrical generation facility owner has not made, and will not make, for any biomethane used to generate electricity at the above noted electrical generation facility, any marketing, regulatory, or retail claim of GHG reductions from methane destruction without rightful ownership of the environmental attributed associated with the capture and destruction of the biomethane, and in full compliance with the Eligibility Guidebook.

I have read the above information as well as the Eligibility Guidebook, and understand the provisions, eligibility criteria, and requirements of the Eligibility Guidebook. I acknowledge that interconnection of the above generating facility is conditioned on the above noted facility owner's acceptance and ongoing satisfaction of all the biomethane requirements as set forth in the Eligibility Guidebook and confirmed by the City of Burbank. I further acknowledge that the Energy Commission may revise the Eligibility Guidebook in the future, and that it is my responsibility to remain informed of any changes that could affect the precertification of the above noted electrical generation facility. I declare under penalty of perjury that the information provided in this form and any supplemental forms and attachments included herewith including all that is required to be submitted pursuant to the interconnection agreement between the City of Burbank and the customer, _____, is true and correct to the best of my knowledge and that I am authorized to submit this form and any supplemental forms and attachments included herewith on behalf of the above noted electrical generation facility owner. I am delivering this certification to and for the benefit of the City of Burbank.

Name of Facility: _____
 Authorized Officer/Agent: _____
 Officer Title: _____
 Company: _____
 Signature: _____
 Date Signed: _____

Fuel Production Facility Certification of Biomethane

Name of Customer: _____

Fuel Production Facility Name: _____

Fuel Production Facility Owner/Operator: _____

Address: _____

City: _____ State: _____ Zip: _____

Start date of fuel supply contract: _____

End date of fuel supply contract: _____

Type of biomethane: _____

Delivery Method: _____

Delivery point to the natural gas pipeline system, if applicable:

Quantity of fuel under this contract (MMBtu/month) Date of first delivery, or use, of gas:

Is the fuel production facility, or biomethane source, if different from the fuel production facility, required by law to capture and destroy methane?

Yes / No (Circle one)

I am an authorized officer or agent of the above-noted fuel production facility owner, and hereby attest on behalf of said fuel production facility owner to the following with respect to the fuel described above:

- The fuel consists solely of an RPS eligible fuel that meets the definitions and requirements as specified in the Eligibility Guidebook;
- The fuel has been sold for use in the above noted electrical generation facility meet;
- The above noted fuel production facility owner has not sold, traded, given away, claimed, or otherwise disposed of any of the attributes for the fuel separate from the fuel itself that would prevent the resulting electricity from being compliant with the definition of "green attributes" as defined in the Eligibility Guidebook, nor will it do so for any fuel used to generate RPS eligible electricity at the above noted electrical generation facility; and,
- The fuel production facility owner has not made, and will not make, for any fuel used to generate RPS-eligible electricity at the above noted electrical generation facility, any marketing, regulatory, or retail claim of GHG reductions from methane destruction without rightful ownership of the

environmental attributed associated with the capture and destruction of the fuel, and in full compliance with Eligibility Guidebook.

•

I have read the above information as well as the Eligibility Guidebook and understand the provisions, eligibility criteria, and requirements of the Eligibility Guidebook. I acknowledge that the above noted electrical generation facility is conditioned on the above noted fuel production facility owner's acceptance and satisfaction of all applicable program requirements as set forth in the Eligibility Guidebook I declare under penalty of perjury that the information provided in this form is true and correct to the best of my knowledge and that I am authorized to submit this form on behalf of the above noted fuel production facility owner. I am delivering this certification to and for the benefit of the City of Burbank.

Authorized Officer/Agent: _____

Officer Title: _____ Company: _____

Signature: _____ Date Signed: _____

Pipeline Biomethane Delivery Entity Certification

Complete a copy of this form for each entity that takes title to and transports the fuel (each, a “delivery entity”) from each fuel production facility used as a source by the electrical generation facility.

Electrical generation facility name: _____

Fuel production facility name: _____

Provide the name of the delivery entity transporting the biomethane from the receipt point to the delivery point:

Provide the name of the entity from which the biomethane was received at the receipt point:

Provide the name of the receipt point (where the biomethane enters the pipeline or where the delivery entity received the biomethane, as applicable) and the name of the delivery point (where the biomethane exits the pipeline or where the biomethane was delivered to an entity other than the delivery entity, as applicable).

Provide the name of the entity receiving the biomethane at the delivery point:

I am an authorized officer or agent of the above-noted biomethane delivery entity, and hereby attest on behalf of said biomethane delivery entity that biomethane, as defined in the *Eligibility Guidebook*, from the above noted fuel production facility, has been delivered, and will continue to be delivered pursuant to the terms of the delivery contract, from the named entity delivering the biomethane to the above noted receipt point to the named entity receiving the biomethane at the above noted delivery point, in the manner as required by the *Eligibility Guidebook*. I also attest that the above noted biomethane delivery entity has not sold, traded, given away, claimed, or otherwise disposed of any of the attributes associated with the biomethane separate from the biomethane itself that would prevent the resulting electricity from being compliant with the definition of “green attributes” as defined in the *Eligibility Guidebook*, nor will it do so for any biomethane used to generate electricity at the above noted electrical generation facility delivered pursuant to the terms of the delivery contract. I attest that the above noted biomethane delivery entity has not made, and will not make, for any biomethane used to generate electricity at the above noted electrical generation facility, any marketing, regulatory, or retail claim of GHG reductions from methane destruction without rightful ownership of the environmental attributes associated with the capture and destruction of the biomethane, and in full compliance with *Eligibility Guidebook*. I have read the above information as well as the *Eligibility Guidebook* and understand the provisions, eligibility criteria, and requirements of that guidebook and my responsibilities under that guidebook. I acknowledge that the above noted electrical generation facility is conditioned on the above noted biomethane delivery entity’s acceptance and satisfaction of all applicable program requirements as set forth in the *Eligibility Guidebook*. I declare under penalty

of perjury that the information provided in this form is true and correct to the best of my knowledge and that I am authorized to submit this form on behalf of the above noted biomethane delivery entity. I am delivering this certification to and for the benefit of the City of Burbank.

Authorized Officer/Agent: _____

Officer Title: _____

Company: _____

Signature: _____ Date Signed: _____

Appendix D

Metering/Telemetering Requirements

(Section to be determined after receiving required documentation in Appendix A)

Appendix E

Annual Certification of Biomethane compliance (Eligibility Guidebook)

I am an authorized officer or agent of the entity that owns the Generation Facility, as noted below, and hereby submit this report and attest to the following on behalf of said entity:

- 1) I am an authorized officer or agent of the entity that owns the Generation Facility, as noted below and for which this report was prepared, and have authority to submit this report on behalf of said company;
- 2) The information and data provided in this report is submitted to Burbank Water and Power (BWP) for use in verifying the quantities of biomethane used by the Generation Facility noted below, the corresponding amount of electricity generated by the Generation Facility, and the delivery path(s) used to deliver the biomethane to the Generation Facility in accordance with the *Eligibility Guidebook*;
- 3) The Generation Facility for which this report was prepared is the final and sole owner of all biomethane fuel identified in this report;
- 4) The biomethane fuel identified in this report and its delivery to the Generation Facility satisfies all the requirements for biomethane as described in the *Eligibility Guidebook*;
- 5) To the best of my knowledge, none of the electricity generated by the Generation Facility as identified in this report, nor any of the renewable energy certificates, as defined in the *Eligibility Guidebook*, associated with electricity generation, has been or will be used, sold, retired, claimed, or represented as part of electricity generation more than once to satisfy BWP procurement requirements or voluntary contributions;
- 6) I have read the *Eligibility Guidebook* and understand the provisions, eligibility criteria, and requirements of the guidebook and my responsibilities under the guidebook. I also agree to be responsible to provide additional information for verification purposes, if requested by BWP.
- 7) I declare under penalty of perjury that the information and data provided in this report is true and correct to the best of my knowledge.

Signed: _____ Dated: _____

Name of Officer or Agent: _____

Title of Officer or Agent: _____

Authorized Officer or Agent of Entity That Owns Electrical Generation Facility

Name: _____

Title: _____

Phone: _____

E-mail: _____

Fax: _____

Entity That Owns Electrical Generation Facility

Entity Name: _____

Street Address: _____

City, State, Zip Code: _____

Appendix F

Permission to Interconnect and Form of Permission to Operate Letter Procedure for Permission to Interconnect

1. Once the Customer has fulfilled all of the requirements specific to its Interconnection Agreement for one or more specified Generating Facilities (Designated Generating Facilities) in a manner reasonably satisfactory to Burbank Water and Power (BWP), BWP will issue a written permission to interconnect (Permission to Interconnect) to allow temporary operation of the Designated Generation Facilities only to extent needed for testing newly installed and approved Designated Generation Facilities. Customers are NOT permitted to operate any Generating Facilities prior to receiving an official Permission to Interconnect and shall be held liable for any damages or losses that may occur as a result of any unauthorized operation.
2. Upon receiving the Permission to Interconnect the Interconnecting Customer may energize its Designated Generation Facilities (subject to the terms and conditions of the Interconnection Agreement and any agreements between BWP and the Interconnecting Customer) for the term as set forth in the Permission to Interconnect.
3. It is required that the Customer safely operates and maintains its Generation Facilities in accordance with all applicable laws, rules, and regulations governing generation facilities. In particular, the Customer should schedule regular maintenance and must maintain any permanent plaques and other signage related to its Generation Facilities.
4. Additionally, the Customer is required to notify BWP of any changes (or proposed changes) related to: the configuration or operation of its generating equipment, the ownership of the Generation Facilities or part thereof, or the host retail electric billing account
5. After the Customer receives the Permission to Interconnect, customers should review the BWP website periodically for changes and updates to the Rules and Regulations.

Form of Permission to Operate

Date of Permission to Operate: _____.

Customer hereby certifies that the Generation Facilities identified below (the "Permitted Generating Facilities") meet all the requirements of the Interconnection Agreement and complies with all applicable laws and is safe to operate.

"Generating Facility [___]" shall be: [Facility Description including the type of Renewable Electrical Generation Facility]

Street Address: _____

City: _____

Zip Code: _____

Cross Streets: _____

The Gross Nameplate Rating of Generating Facility 1 is _____kW.

The Net Nameplate Rating of Generating Facility 1 is _____kW.

Customer further certifies that it shall operate and maintain the Permitted Generating Facilities in accordance with the Interconnection Agreement.

Customer Representative: _____

Customer Signature: _____

BWP hereby certifies the Permitted Generating Facilities at the location described above meets the requirements of Section 8.0 of the Interconnect Agreement on the date of this issuance of the Permission to Operate and is allowed to operate according to the terms of the Interconnection Agreement.

BWP Representative: _____

BWP Signature: _____