City of Moreno Valley

Electric Service Rules, Fees and Charges

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ELECTRIC RULE 1—ADOPTION OF ELECTRIC RULES AND DEFINITIONS

These Electric Rules established by the City of Moreno Valley ("City") and approved by the City Council are effective throughout the service area of the City of Moreno Valley's Electric Utility.

All rules are subject to change. Copies of the rules currently in effect will be kept in the offices of the Electric Utility Division, Department of Public Works. Customers or others contemplating any expenditures or activities governed by these rules should assure themselves that they have the current version by contacting the Electric Utility Division. A copy of the current rates is also available on the City's website – www.moval.org.

For the purpose of these rules, the following terms shall have the following meanings:

Applicant: A person, persons, firm, association, governmental agency, corporation or other entity that submits a request for electric service from the Utility and who will be responsible for all related charges.

Billing Demand: The load or demand used for computing charges under rate schedules based on the size of the Customer's load or demand. It may be connected load, the measured maximum demand, or a modification of either as provided for by the applicable rate schedule.

Billing Period: The time interval between two consecutive meter readings that are taken for billing purposes.

California Independent System Operator (CAISO): The California Independent System Operator Corporation, a nonprofit corporation that controls the transmission facilities of all participating transmission owners and dispatches certain generating units and loads. The CAISO is responsible for operation and control of the statewide transmission grid.

City Council: The City Council of the City of Moreno Valley, designated as the governing body of the Utility.

Commission: The Public Utilities Commission of the State of California, sometimes referred to as the Public Utilities Commission or the CPUC.

Connected Load: The sum of the nameplate-rated capacities of all of the Customer's equipment that can be connected to the Utility's lines at any one time as more completely described in the rate schedules.

Customer: The person, persons, firm, association, governmental agency, corporation or other concern that use, are entitled to use, or benefit from the use of electricity from the Utility.

Customer's Mailing Address(es): The physical and/or electronic mailing (e-mail) address specified in a customer's application or contract, or any other address subsequently given to the Utility by the Customer, to which any bill, notice or other communication is to be sent.

Customer Services: The Utility's staff assigned to handle Customer requests and establish new service.

Date of Presentation: The date upon which a bill or notice is sent or delivered by the Utility to the Customer via U.S. Mail or electronic mail (e-mail).

Distribution Line Extension: New distribution facilities of the Utility that are a continuation of, or branch from, the nearest available existing permanent Distribution Line (including any facility rearrangements and relocations necessary to accommodate the Distribution Line Extension) to the point of connection of the last service. SCE's Distribution Line Extension includes transmission underbuilds and converting an existing single-phase line to three-phase in order to furnish three-phase service to an Applicant, but excludes service transformers, meters and services.

Distribution Lines: Overhead pole lines and underground facilities consisting of conduit, wire and cable that are operated at distribution voltages, and which are designed to supply two (2) or more services.

Distribution System: Those distribution facilities owned, controlled, and operated by the Utility that are used to provide distribution service under the rules.

Electric Rules: Sheets which set forth the application of all rates, charges, and service when such applicability is not set forth in and as part of the rate schedules

Electric Vehicle: An electric vehicle is any vehicle that utilizes electricity from external sources of electrical power, including the grid, for all or part of vehicles, vessels, trains, boats, or other equipment (e.g. aircraft, forklifts, port equipment) that are mobile sources of air pollution and greenhouse gasses. Types of electric vehicles include, but are not limited to, plug-in hybrid electric vehicles (PHEV), battery electric vehicles (BEV), electric golf carts, or neighborhood electric vehicles (NEV), transit buses, short-haul fleets and ground equipment supporting goods movement.

Electronic Record: A record created, generated, sent, communicated received, or stored by electronic means.

Electronic Signature: An electronic sound, symbol, or process attached to or logically associated with an electronic record and executed or adopted by a person with the intent to sign the electronic record.

Electronic Transfer: Paperless exchange of data and/or funds, usually involving computer and telecommunication technology.

Energy Diversion: Electricity being received by a Customer without registering through the meter due to either tampering with the meter or bypassing the meter.

HP: Horsepower.

kVAR: Kilovar.

kVARh: Kilovar-hour.

kW: Kilowatt.

kWh: Kilowatt-hour.

Mailed: Any notice or other communication will be considered "mailed" when sent by electronic means (e-mail) or when it is enclosed in a sealed envelope, properly addressed, and deposited in any U.S. Post Office box, postage prepaid.

Maximum Demand: The average kilowatts during the specified interval when the Customer's use is greatest in the billing period as indicated or recorded by the meter.

Meter: The instrument used for measuring the electricity delivered to the Customer.

Metering Facilities: The necessary meter, instrument transformers, test facilities, data communication equipment, and other associated metering equipment.

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 different points and times on the system will vary.

On-Site Facilities: On-site facilities include the facilities located on the Premises as well as those in adjacent rights-of-way, easements and a proportionate share of any facilities on adjacent property used to provide service to the Premises.

Paid or Payment: Funds received by the Utility through postal service, the Utility payment office, or deposited in a Utility account by Electronic Transfer.

Person: Any individual, partnership, corporation, public agency or other organization operating as a single entity.

Point of Delivery: The point where conductors of the Utility are connected to the conductors of the Customer, regardless of the location of the Utility's meters or transformers. The Utility conductors may be owned, leased, or under license by the Utility, and conductors of the Customer may be owned, leased or under license by the Customer.

Premises: All real property, buildings, and appurtenances upon an integral parcel of land undivided by a street, highway or other public thoroughfare.

Rate Schedule: May be one or more rate sheets setting forth the charges and conditions for a particular class or type of service in a given area or location. A rate schedule, as referred to herein, shall include all the wording on the applicable rate sheet or sheets, such as, but not limited to the

following: Class of Service, Character or Applicability, Territory, Rates, Conditions, and reference to Rules.

Service Wires or Connection: The group of conductors connecting the service entrance conductors of the Customer to the Utility's supply line, regardless of the location of the Utility's meters or transformers.

Service Extension: The overhead and underground primary or secondary facilities (including, but not limited to the Utility-owned service facilities and Applicant-owned service facilities) extending from the point of connection at the Distribution Line to the Point of Delivery.

Utility: The City of Moreno Valley Electric Utility.

ELECTRIC RULE 2—DESCRIPTION OF SERVICE

A. GENERAL

1. The type of service available at any particular location should be determined by inquiry at the Utility's local office.

2. Alternating-current service will be regularly supplied at a frequency of approximately 60 Hertz (cycles per second).

3. In areas where a certain standard secondary voltage is presently being served to one or more Customers, an Applicant applying for new service in such areas may be required by the Utility to receive the same standard voltage supplied to existing Customers.

4. All electric service described in this rule is subject to the conditions in the applicable Rate Schedule and other pertinent rules.

5. It is the responsibility of the Applicant to ascertain and comply with the requirements of all governmental authorities having jurisdiction.

6. Service to a premise is normally established at one delivery point, through one meter, and at one voltage class. Other arrangements for service at multiple service delivery points, or for services at more than one voltage class, are permitted only where feasible and with the approval of the Utility. For purposes of this rule, distribution service voltage classes, delta or wye connected, are described as:

a. 12,000 volt nominal, three phase (3Ø) and lower

b. 6,930 volt nominal, single-phase, (1Ø) and lower

B. SERVICE DELIVERY VOLTAGES

1. Following are the standard service voltages normally available, although not all of them are or can be made available at each Point of Delivery:

Distribution Voltages		
Single-phase Secondary	Three-phase Secondary	Three-phase Primary
120/240, 3-wire	240/120, 4-wire	12,000, 3-wire
120/208, 3-wire*	480/277, 4-wire	2400, 3 wire*
	208Y/120, 4-wire	4,160, 3-wire*
		4,160Y/2,400, 4-wire*
		12,000Y/6,930, 4-wire*

***Limited Availability.**

2. All voltages referred to in this rule and appearing in some rate schedules are nominal service voltages at the Point of Delivery. The Utility's facilities are designed and operated to provide sustained service voltage at the Point of Delivery, but the voltage at a particular Point of Delivery, at a particular time, will vary within fully satisfactory operating range limits established in Section C.

3. The Point of Delivery and point of metering will normally be at the same voltage and within close proximity to each other. When the Utility determines it is not feasible for the Point of Delivery and point of metering to be at the same voltage and within close proximity to each other, the demand and energy meter readings used in determining the charges will be adjusted to correct for transformation and line losses.

C. VOLTAGE AND FREQUENCY CONTROL

1. CUSTOMER SERVICE VOLTAGES

a. Under all normal load conditions, the Utility's distribution circuits will be operated so as to maintain secondary service voltage levels to Customers within the service voltage ranges specified below:

Nominal Two-Wire and Multi-Wire Service Voltage	Minimum Voltage to All Services	Maximum Service Voltage on All Services
120	114	126
208	197	218
240	228	252
277	263	291
480	456	504

The Utility's distribution voltage will be regulated to the extent practicable to maintain service voltage on distribution circuits within the minimum and maximum voltages specified above.

b. Exceptions to Voltage Limits. Voltage may be outside the limits specified when the variations:

1) Arise from the temporary action of the elements.

2) Are infrequent momentary fluctuations of a short duration

3) Arise from service interruptions.

4) Arise from temporary separation of parts of the system from the main system.

5) Are from causes beyond the control of the Utility, and which may be sustained duration.

c. Where the operation of the Applicant's equipment requires unusually stable voltage regulation or other stringent voltage control beyond that supplied by the Utility in the normal operation of its system, the Applicant, at his own expense, is responsible for installing, owning, operating, and maintaining any special or auxiliary equipment on the load side of the service delivery point as deemed necessary by the Applicant.

d. The Applicant shall be responsible for designing and operating his service facilities between the Point of Delivery and the utilization equipment to maintain proper utilization voltage at the line terminals of the utilization equipment.

2. CUSTOMER UTILIZATION VOLTAGES

a. All Customer-owned utilization equipment must be designed and rated in accordance with the following utilization voltages specified by the American National Standard Institute C84.1 if Customer equipment is to give fully satisfactory performance:

Nominal Utilization Voltage	Minimum Utilization Voltage	Maximum Utilization Voltage
120	110	125
208	191	216
240	220	250
277	254	289
480	440	500

Minimum utilization voltages from ANSI C84.1 are shown for Customer information only as the Utility has no control over voltage drop in Customer's wiring.

D. GENERAL LOAD LIMITATIONS

1. SINGLE-PHASE SERVICE

Single-phase service normally will be three-wire, 120/240 volts where the size of any single motor does not exceed 7.5 horsepower (10 horsepower at the option of the Utility). For any single-phase service, the maximum demand as determined by the Utility is limited to the capability of a 100-kVA transformer and 400 amp main disconnect unless otherwise approved by the Utility. If the load requires a transformer installation in excess of 100 kVA, the standard service will be three-phase.

2. THREE-PHASE SERVICE (LESS THAN 600 VOLTS)

a. Secondary service from underground primary distribution systems (where the Utility maintains existing 3-phase primary circuits):

Nominal Voltage	Minimum Load	Maximum Demand
208Y/120, 4-wire	Demand load justifies a 75 kVA transformer	1,500 kVA
480Y/277, 4-wire	Demand load justifies a 75 kVA transformer	3,000 kVA

b. Where three-phase service is supplied, the Utility reserves the right to use single-phase transformers connected open-delta or closed-delta, or three-phase transformers.

c. Three-phase service will be supplied on request for installations aggregating less than the minimums listed above where existing transformer capacity is available and approved by the Utility.

d. Three-phase metering for one service voltage supplied to installations on one premise at one delivery location normally is limited to a maximum of a 4,000 ampere service rating. Metering for larger installations, or installations having two (2) or more service switches with a combined rating in excess of 4,000 amperes, or service for loads in excess of the maximum demand load permitted, may be installed provided approval of the Utility has been first obtained as to the number, size, and location of switches, circuits, transformers and related facilities. Service supplied to such approved installations in excess of one 4,000 ampere switch or breaker at one service delivery point may be totalized for billing purposes.

3. THREE-PHASE SERVICE (OVER 600 VOLTS)

a. The following are three-phase voltages that may be transformed from higher existing primary distribution voltages and provided only as isolated services for a single Applicant where the Applicant's demand load justifies, as determined by the Utility, the installation of the minimum size transformer bank used by the Utility:

Nominal Voltage	Minimum Size Bank Installed	Maximum Demand Load Permitted
4,160*	500 kVA	5,000 kVA
12,000	500 kVA	12,000 kVA

***Limited Availability.**

b. For its operating convenience and necessity, the Utility may elect to supply an Applicant whose demand load is in excess of 2,000 kVA from a substation on the Applicant's Premises supplied from a transmission source.

c. City reserves the right to change its distribution or transmission voltage to another standard service voltage when, in its judgment, it is necessary or advisable for economic reasons or for proper service to its Customers. Where a Customer is receiving service at the voltage being changed, the Customer then has the option to:

(1) accept service at the new voltage,

(2) accept service at the secondary side of an additional stage of transformation to be supplied by the Utility at a location on the Customer's Premises in accordance with the Utility's requirements, or

(3) contract with the Utility for an additional stage of transformation to be installed as Special Facilities (including any fees as determined by the Utility) under the provisions of Section I, below, whereby the Customer will be considered as accepting service at the primary side of the additional stage of transformation. Metering not relocated to the primary side of the additional stage of transformation will be subject to a transformer loss adjustment as determined by the Utility.

The option to contract with the Utility for an additional stage of transformation (option 3, above) is available only once in conjunction with a change in standard voltage by the Utility.

4. LOAD BALANCE

The Applicant must balance his demand load as nearly as practicable between the two sides of a three-wire single-phase service and between all phases of a three-phase service. Loads on three-phase service must be balanced between phases in accordance with good engineering practice.

E. PROTECTIVE DEVICES

1. It shall be the Applicant's responsibility to furnish, install, inspect and keep in good and safe condition at his own risk and expense, all appropriate protective devices of any kind or character, which may be required to properly protect the Applicant's facilities. The Utility shall not be responsible for any loss or damage occasioned or caused by the negligence, or wrongful act of the Applicant or of any of its agents, employees or licensees in omitting, installing, maintaining, using, operating or interfering with any such protective devices.

2. It shall be the Applicant's responsibility to select and install such protective devices as may be necessary to coordinate properly with the Utility's protective devices to avoid exposing other Customers to unnecessary service interruptions.

3. It shall be the Applicant's responsibility to equip their three-phase motor installations with appropriate protective devices, or use motors with inherent features, to completely disconnect each such motor from its power supply, in accordance with the National Electrical Code, giving particular consideration to the following:

a. Protection in each set of phase conductors to prevent damage due to overheating in the event of overload.

b. Protection to prevent automatic restarting of motors or motor driven machinery, which has been, subjected to a service interruption and, because of the nature of the machinery itself or the product it handles, cannot safely resume operation automatically.

c. Open-phase protection to prevent damage due to overheating in the event of loss of voltage on one phase.

d. Reverse-phase protection where appropriate to prevent uncontrolled reversal of motor rotation in the event of accidental phase reversal. (Appropriate installations would include, but are not limited to, motors driving elevators, hoists, tramways, cranes, pumps, conveyors, etc.)

4. The available short-circuit currents vary from one location to another, and also depends on available generation, condition of the system loads, and the ultimate design characteristics of the Utility's supply and service facilities. Consult the Utility for the ultimate maximum short-circuit current at each service termination point.

5. Where an Applicant proposes to use a ground-fault sensing protective system which would require special Utility-owned equipment, such a system may be installed only where feasible and with written approval of the Utility.

6. Any non-Utility-owned emergency standby or other generation equipment that can be operated to supply power to facilities that are also designed to be supplied from the Utility's system shall be controlled with suitable protective devices by the Applicant to prevent parallel operation with the Utility's system in a fail-safe manner, such as the use of a double-throw transfer switch to disconnect all conductors, except where there is a written agreement or service contract with the Utility permitting such parallel operation.

F. INTERFERENCE WITH SERVICE

1. GENERAL

The Utility reserves the right to refuse to serve new loads or to discontinue supply to existing loads of a size or character that may be detrimental to the Utility's operations or to the service of its Customers. Any Customer who operates or plans to operate any equipment such as, but not limited to, pumps, welders, saw mill apparatus, furnaces, compressors or other equipment where the use of electricity is intermittent, causes intolerable voltage fluctuations, or otherwise causes intolerable service interference, must reasonably limit such interference or restrict the use of such equipment upon request by the Utility. The Customer is required either to provide and pay for whatever corrective measures are necessary to limit the interference to a level established by the Utility as reasonable, or avoid the use of such equipment, whether or not the equipment has previously caused interference.

2. HARMFUL WAVE FORM

Customer shall not operate equipment that superimposes a current of any frequency or waveform upon the Utility's system, or draws current from the Utility's system at a harmful waveform, which causes interference with the Utility's operations, or the service to other Customers, or inductive interference to communication facilities.

3. CUSTOMER'S RESPONSIBILITY

Any Customer causing service interference to others must diligently pursue and take corrective action after being given notice and a reasonable time to do so by the Utility. If the Customer does not take corrective action in the time set, or continues to operate the equipment causing the interference without restriction or limit, the Utility may, without liability, after giving five (5) days written notice to Customer, either install and activate control devices on its facilities that will temporarily prevent the detrimental operation, or discontinue electric service until a suitable permanent solution is provided by the Customer and it is operational.

4. MOTOR STARTING CURRENT LIMITATIONS

a. The starting of motors shall be controlled by the Customer as necessary to avoid causing voltage fluctuations that will be detrimental to the operation of the Utility's distribution or transmission system, or to the service of any of the Utility's Customers.

Nominal Voltage and Phase	Maximum Rated Motor Size
120V 1Ø	1 HP
208V 1Ø	7.5 HP
240V 1Ø	7.5 HP
208V 3Ø	40 HP
240V 3Ø	40 HP
480V 3Ø	75 HP

For motors rated over 75 HP the Customer needs to consult with the Utility.

b. If the starting current for a single motor installation exceeds the value listed for Class C or better (per National Electrical Code Section 430) and the resulting voltage disturbance causes or is expected to cause detrimental service to others, reduced voltage starters or other suitable means must be employed, at the Customer's expense, to limit the voltage fluctuations to a level equivalent to a Class C motor.

c. Where service conditions permit, subject to the Utility's approval, motor starters may be deferred in the original installation. The Utility may later order the installation of a suitable starter or other devices when it has been determined that the operation of the Customer's motors interfere with service to others. Also, the Utility may require starting current values lower than those set forth herein where conditions at any point on its system require such reduction to avoid interference with service to other Customers.

d. Starters may be omitted on the smaller motors of a group installation when their omission will not result in a starting current in excess of the allowable starting current of the largest motor of the group. Where motors start simultaneously, they will be treated as a single unit equal to the sum of their individual starting currents.

e. The Utility may limit the maximum size and type of any motor that may be operated at any specific location on its system to that which will not be detrimental to the Utility's system operations or to the service of its Customers, as determined by the Utility.

f. For installations of motors where the equipment is started automatically by means of float, pressure, or thermostat devices, such as with pumps or wind machines for frost protection, irrigation pumps or other similar installations, the Utility may require the Customer to install, at his own expense and in accordance with the Utility's operating requirements, suitable preset time-delay devices to stagger the

automatic connection of load to the supply system and to prevent simultaneous start-up for any reason.

G. POWER FACTOR

The Utility may require the Customer to provide, at their own expense, equipment to increase the operating power factor of their equipment, as seen at the Point of Delivery, to not less than 90%, lagging or leading.

I. SPECIAL FACILITIES

1. The Utility normally installs only those standard facilities, which it deems are necessary to provide regular service in accordance with the Electric Rules. Where the Applicant requests the Utility to install Special Facilities and the Utility agrees to make such an installation, the additional costs thereof shall be borne by the Applicant, including such continuing ownership costs as may be applicable.

2. Special Facilities are: (a) facilities requested by an Applicant which are in addition to or in substitution for standard facilities which the Utility would normally provide for delivery of service at one point, through one meter, at one voltage class under its Electric Rules, or (b) a pro rata portion of the facilities requested by an Applicant, allocated for the sole use of such Applicant, which would not normally be allocated for such sole use. Unless otherwise provided by the Utility's rate schedules, Special Facilities will be installed, owned and maintained by the Utility as an accommodation to the Applicant only if acceptable for operation by the Utility, and the reliability of service to the Utility's other Customers is not impaired and Applicant funds construction and pays incremental costs.

3. Special Facilities will be installed under the terms and conditions of a contract in the form on file with the Utility. Such contract will include, but is not limited to, the following terms and conditions:

a. Where new facilities are to be installed for Applicant's use as Special Facilities, the Applicant shall advance to the Utility the estimated additional installed cost of the Special Facilities over the estimated cost of standard facilities. At the Utility's option, the Utility may finance the new facilities.

J. WELDER SERVICE

1. RATING OF WELDERS

Electric welders will be rated for billing purposes as follows:

a. MOTOR-GENERATOR ARC WELDERS - The horsepower rating of the motor driving a motor-generating type arc welder will be taken as the horsepower rating of the welder.

b. TRANSFORMER ARC WELDERS - Nameplate maximum kVA input (at rated output amperes) will be taken as the rating of transformer type arc welders.

c. RESISTANCE WELDERS - Resistance welder ratings will be determined by multiplying the welder transformer nameplate rating (at 50 percent duty cycle) by the appropriate factor listed below:

TYPE OF WELDER	TRANSFORMER NAMEPLATE RATING @ 50% Duty Cycle**	FACTOR Utility Owned Distribution Transformer
1. Rocker Arm, Press or Projection Spot	20 kVA or less	0.60
2. Rocker Arm, Press Spot Project Spot Flash or Butt Seam or Portable Gun	Over 20 kVA 21 to 75 kVA, inclusive 100 kVA or over All sizes	0.80
3. Flash or Butt	67 to 100 kVA, inclusive	***
4. Projection Spot Flash or Butt	Over 75 kVA 66 kVA or less	1.20

** *The kVA rating of all resistance welders to which these rating procedures are applied must be at or equivalent to 50 percent duty cycle operation. Duty cycle is the percent of the time welding current flows during a given operating cycle. If the operating kVA nameplate rating is for some other operating duty cycle, then the thermally equivalent kVA rating at 50 percent duty cycle must be calculated.*

*** *Each flash or butt welder in this group will be rated at 80 kVA.*

d. Ratings prescribed by a, b, and c above normally will be determined from nameplate data or from data supplied by the manufacturer. If such data are not available or are believed by either the Utility or Customer to be unreliable, the rating will be determined by test at the expense of the Customer.

e. If established by seals approved by the Utility, the welder rating may be limited by the sealing of taps, which provide capacity greater than the selected tap, and/or by the interlocking lockout of one or more welders with other welders.

f. When conversion of units is required for rate application, one welder kVA will be taken as one horsepower for rules stated on a horsepower basis and one welder kVA will be taken as one kilowatt for rates stated on a kilowatt basis.

2. BILLING OF WELDERS

Welders will be billed at the regular rates and conditions of the rules on which they are served, subject to the following provisions:

a. CONNECTED LOAD TYPE OF SCHEDULE. Welder load will be included as part of the connected load with ratings as determined under Section 1, above,

based on the maximum load that can be connected at any one time, and no allowance will be made for diversity between welders.

b. DEMAND METERED TYPE OF SCHEDULE. Where resistance welders are served on these schedules, the computation of diversified resistance welder load shall be made as follows:

Multiply the individual resistance welder ratings, as prescribed in Sections 1.c. to 1.f. inclusive (above) by the following factors, and add to the results thus obtained:

1.0 times the rating of the largest welder

0.8 times the rating of the next largest welder

0.6 times the rating of the next largest welder

0.4 times the rating of the next largest welder

0.2 times the ratings of all additional welders

If this computed, diversified, resistance welder load is greater than the metered demand, the diversified resistance welder load will be used in lieu of the metered demand for rate computation purposes.

K. RESALE, SUBMETERING, AND REDISTRIBUTION

Electric service provided by Moreno Valley Utility (MVU) is strictly for the sole and exclusive use of the customer associated with the MVU account for a specific service location. The following activities are expressly prohibited:

1. **Resale of Power:** Customers may not resell electric power obtained from MVU to any other person, business, unit, or entity under any circumstances.

2. **Submetering:** Customers are prohibited from installing or operating submeters to allocate or charge for electricity usage among occupants, tenants, or units.

Violation of this rule constitutes a breach of MVU's service terms and may result in immediate disconnection of service.

ELECTRIC RULE 3—APPLICATION FOR SERVICE

B. APPLICATIONS

The Utility may require each Customer to sign an application for the service desired, and also to establish credit. Generally, applications for service will be taken over the telephone, but may be taken in person or received by U.S. mail or e-mail.

Application form shall set forth:

1. Legal name of Applicant.

2. Date of application

3. Location of Premises to be served.

4. Date Applicant will be ready for service.

a. Service restoration: When the Customer's service has been terminated either because of a determination by the Utility that an unsafe apparatus or condition exists on the Premises, or because the Customer has threatened to create a hazardous condition, service will not be restored until the Utility determines the Customer's electrical wiring or equipment or the use of either, has been made safe. When service is denied or terminated solely under these sections, the Customer may seek remedies before the City Council.

b. When the Customer's service has been terminated because of an order of termination issued to the Utility by a governmental agency, service will not be restored until the Utility has received authorization to restore the service from the appropriate governmental agency.

5. Whether electric service was previously supplied to the Premises.

6. Purpose for which service is to be used, with description of appliances.

7. Customer's Mailing Address to which bills are to be sent, e-mailed or delivered.

8. Whether Applicant is owner, agent, or tenant of Premises.

9. Rate schedule desired where an optional rate is available.

10. Information to establish credit-worthiness of the applicant. (see Rule 6)

11. Information necessary to the design, installation, maintenance, and operation of the Utility's facilities.

12. Such other information as the Utility may reasonably require for service.

The application is merely a request for service, and does not in itself bind the Utility to serve except under reasonable conditions, nor does it bind the Customer to take service for a longer period than the minimum requirements of the rate. The Utility may disconnect or refuse to provide service to the Applicant if the acts of the Applicant or the conditions upon the Premises indicate that false, incomplete, or inaccurate information was provided to the Utility. The Utility shall provide the Applicant the reason for such refusal.

C. INDIVIDUAL LIABILITY FOR JOINT SERVICE

Where two or more persons join in one application or contract for service, they shall be jointly and severally liable thereunder and shall be billed by means of a single periodic bill sent to the person designated on the application to receive the bill. Whether or not the Utility obtained a joint application, where two (2) or more adults occupy the same premises, they shall be jointly and severally liable for bills for energy supplied.

D. CHANGE OF CUSTOMER'S APPARATUS OR EQUIPMENT

In the event that the Customer shall make any material change either in the amount or character of the loads, protective equipment, or characteristic apparatus changes (reactive vs. inductive loads) installed upon the Premises to be supplied with electric energy by the Utility, the Customer shall immediately give the Utility written notice of this fact.

E. E-MAIL AS MEANS OF CUSTOMER CONTACT

When a Customer provides an e-mail address to the Utility as a means of contact, the Utility may use such e-mail address to communicate with the Customer, absent instructions to the contrary.

F. PHONE AS MEANS OF CUSTOMER CONTACT

When a Customer provides a phone number to the Utility, the Utility may use such phone number to communicate with the Customer, absent instructions to the contrary. The Customer of record is presumed to be an authorized user of such phone number. By providing a mobile number, absent instructions to the contrary, the Customer expressly consents to receiving calls or text messages (texts) from the Utility to such mobile number, including an automatic dialing system and/or an artificial voice or prerecorded message, for:

a. Emergency Purposes

   This includes without limitation calls or tests providing notice of and status updates on planned and unplanned outages, calls or texts providing 24 or 48 hour notice of credit or non-credit related service disconnections, and other types of calls or texts made necessary in any situation affecting the health and safety of consumers; and

b. Informational Purposes

This includes without limitation calls or texts regarding credit or non-credit related service disconnections outside the 24 or 48 hour emergency window, non-emergency outage related calls or texts, calls or texts providing information on new rates, rate changes or available rate options, service related account matters, or income-qualified programs and services, and surveys for Customer opinion research purposes.

c. Opt-out

The Utility will honor requests to opt-out of receiving calls or texts from the Utility at such mobile number, except under certain emergency circumstances (at the Utility's discretion) or as otherwise authorized under the Utility's Electric Rules.

ELECTRIC RULE 4—CONTRACTS

Contracts will not be required as a condition precedent for service except:

1. As may be required by conditions set forth in the regular schedule of rates approved or accepted by the Utility.

2. In the case of electric extensions, temporary service, or service to speculative projects, in which case a contract may be required.

3. Where a person, whether or not a Customer, desires to have the Utility modify, rearrange, relocate, or remove any of its facilities, the Utility, if it agrees to make such changes, may require the person at whose request the changes are made, to agree to pay in advance or otherwise, the cost to the Utility of making the changes.

ELECTRIC RULE 5—SPECIAL INFORMATION REQUIRED ON FORMS

A. CONTRACTS

Each contract for electric service will contain the following provisions: "This contract shall at all times be subject to such changes or modification by the City Council as may, from time to time, direct in the exercise of its jurisdiction."

B. CUSTOMERS' BILLS

Each bill for electric service will include the following statements: "This bill is now due and payable. Customers who believe their utility bill is in error must first contact Customer Services by telephone, in writing, or in person within 30 days from the bill date and initiate a complaint or request an investigation concerning the bill. Utility services will not be discontinued for nonpayment of a disputed bill pending the outcome of a timely filed investigation. The City may require that an amount equal to an average bill for a comparable period of time be deposited with Moreno Valley Utility pending outcome of the investigation. Failure to make the deposit if requested when due shall constitute abandonment of the complaint or request for investigation. Subsequent utility bills, which are not disputed, must be paid within the time allowed to avoid discontinuance of service in accordance with Rule 9 and Rule 11. If, after contact with the Customer Services, the Customer believes the bill is still incorrect, the Customer may, within 10 days from the date of determination, contact the Manager of Customer Service by phone or submit a written statement regarding the billing dispute to the Manager of Customer Service, Moreno Valley Utility, 14225 Corporate Way., Moreno Valley, CA 92553. The Manager of Customer Service will conduct an investigation of the dispute and send his or her determination in writing to the Customer." See Rule 10.

C. DISCONTINUANCE OF SERVICE NOTICE

Each Discontinuance of Service Notice for nonpayment of bills will include the following information:

1. The name and address of the Customer whose account is delinquent.

2. The amount of the delinquency.

3. The date by which payment (or arrangements for payment) is required, or the date by which the dispute must be documented in order to avoid termination.

4. The procedure by which the Customer may initiate a complaint or request an investigation concerning service or charges as defined herein.

5. The telephone number of a representative of the Utility who can provide additional information or institute arrangements for payment.

6. The telephone number to which inquiries by the Customer may be directed.

ELECTRIC RULE 6—ESTABLISHMENT AND RE-ESTABLISHMENT OF CREDIT

An Applicant for Utility service may be required to establish credit. A Customer whose Utility service has been terminated for nonpayment of an energy bill or whose payments have been past due, as set forth below, may be required to re-establish credit.

A. ESTABLISHMENT OF CREDIT

When, for Applicant's convenience, the Utility provides service to the Applicant before credit is established and the Applicant fails to establish credit in accordance with this rule, service may be terminated after notice is given in accordance with these regulations.

Credit can be established if the Applicant:

a. is the owner with a substantial equity, of value satisfactory to the Utility, in the Premises to be served; or

b. makes a deposit to secure payment of bills as prescribed in Electric Rule 7; or

c. furnishes a qualified guarantor to secure payment of Applicant's Utility bills; or

d. has been a Customer of the Utility for a similar type of service within the past two years, and during the last twelve consecutive months of that prior service, Customer has had not more than two past due bills as defined in Rules 8 and 11. The periodic bill for such previous service must equal at least 50 percent of the estimated bill amount(s) for the new service, and provided further, that the credit of Applicant is unimpaired in the opinion of the Utility; or

e. otherwise establishes credit to the satisfaction of the Utility; and

f. has paid all bills for nonresidential electric service previously supplied to Applicant by the Utility.

B. RE-ESTABLISHMENT OF CREDIT

1. An Applicant who previously has been a Customer of the Utility, and whose electric service has been discontinued by the Utility during the last twelve (12) months of that prior service because of nonpayment of bills, may be required to re-establish credit.

a. A Customer who fails to pay bills before they become past due and who further fails to pay such bills within five days after presentation of a discontinuance of service notice for nonpayment of bills, may be required to pay said bills and re-establish credit by depositing the amount established by the Utility in accordance with Electric Rule 7. A deposit may be required regardless of whether or not service has been discontinued for such nonpayment.

ELECTRIC RULE 7—DEPOSITS

A. AMOUNT OF DEPOSIT

1. ESTABLISHMENT OF CREDIT

a. Residential accounts: The amount of deposit required to establish credit shall be twice the average monthly bill as estimated by the Utility.

b. Nonresidential accounts: The amount of deposit required to establish credit shall be twice the maximum monthly bill as estimated by the Utility.

c. Residential and nonresidential accounts: The amount of deposit taken to establish credit shall be subject to adjustment upon request by the Customer or upon review by the Utility.

d. Residential solar accounts are eligible for a special metering and billing option called Net Energy Metering (NEM). Under this billing option, each NEM Customer is billed monthly for their total bill but is not required to pay for the consumed energy until the end of each 12-month period. Therefore, if a deposit is required, the amount of the deposit taken to establish credit shall be the annual total billed amount plus twice the average monthly bill as estimated by the Utility.

2. RE-ESTABLISHMENT OF CREDIT

Should the Customer's payment history with the Utility warrant it, the Utility may require the Customer to re-establish credit by paying a re-establishment deposit. The amount of deposit required to re-establish credit for residential and nonresidential accounts will be twice the maximum monthly bill as determined by City. For residential solar accounts, the amount will be the annual total billed amount plus twice the maximum monthly bill as determined by the Utility.

B. RETURN OF DEPOSIT

1. The Utility may refund a Customer's deposit by draft or by applying the deposit to the Customer's account. If the Customer establishes service at a new location, the Utility may retain the deposit for such new account, subject to the conditions of Sections B.3 and B.4 below.

2. Upon discontinuance of service, the Utility will refund the Customer's deposit or the balance thereof that is in excess of unpaid bills for service furnished by the Utility.

3. When the Customer's credit is otherwise established, the Utility will refund the deposit either upon the Customer's request for return of the deposit or upon review by the Utility.

4. For residential and nonresidential accounts, the Utility will review the Customer's account at the end of the first twelve- (12) months that the deposit is held and each month thereafter. After the Customer has not had more than two past due bills during the twelve (12) months prior to any such review and has not had service temporarily or permanently discontinued for nonpayment of bills during such period, the deposit will be refunded in accordance with this section. For residential solar accounts billed on Net Energy Metering (NEM), if a deposit is required to establish or re-establish credit on the account, the deposit shall be held on the account for the life of the account or until the Utility determines that a deposit is no longer required.

5. Deposits cannot be used to offset past due bills or to avoid or delay discontinuance of service.

ELECTRIC RULE 8—NOTICES

Any notice pursuant to the Utility's rules may be given to the Customer in writing. Written notice is effective when it is either: (1) presented to the Customer, or (2) sent to the Customer via U.S. Mail at the address where the Customer is receiving service, or (3) sent to the Customer via U.S. Mail at the Customer's Mailing Address provided by the Customer, (4) sent via electronic mail (e-mail) to the Customer at the e-mail address on file, or (5) delivered by door hanger at the address where the Customer is receiving service. The Utility may also provide the Customer with verbal notice in person or by telephone. Any notice pursuant to the Utility's rules from the Customer or the Customer's authorized agent may be given to the Utility by telephone, in person, or in writing. Verbal notice is acceptable unless written notice is requested by the Utility or required by the rules.

A. NOTICES OF TERMINATION OF SERVICE FOR NONPAYMENT

Monthly bills for residential service are due and payable upon presentation and will be considered past due if payment is not received by the Utility within fifteen (15) days after the bill is sent to the Customer. Deposit requests are due and payable when request for service is made. When a deposit is billed, it will be considered past due if payment is not received by the Utility within fifteen (15) days after the deposit request is sent. If the past due amount is not paid, service may be terminated for nonpayment in accordance with Electric Rule 11. A field notification charge may appear on your next bill if the Utility posts a collection notice at your Premises. If a termination order is processed for your account due to nonpayment, payment of the balance in full, plus a Collection Processing Fee and deposit may be required prior to restoration of service. The Collection Processing Fee may be charged whether or not electric service is actually terminated if the arrears balance is paid after the payment deadline has passed. Unpaid closing bills may be reported or forwarded to a credit reporting agency.

1. 10-DAY NOTICE

When a bill for service or deposit request has become past due, the Utility will send the Customer a notice that service may be terminated for nonpayment in 10 calendar days.

2. 48-HOUR NOTICE

When the past due balance on a 10-day notice is unpaid, the Utility will make a reasonable attempt to contact an adult residing at the service address either by telephone including calls or text messages to mobile phones or by e-mail, or in person at least 48 hours prior to terminating service.

3. NOTICE OF TERMINATION OF SERVICE FOR NONPAYMENT OF PAYMENT ARRANGEMENT AGREEMENT

When the Utility and the Customer enter into a payment arrangement agreement and the Customer does not abide by the terms of the agreement, in whole or in part, the Utility will give the Customer at least 48 hours notice by telephone including calls or

text messages to mobile phones or by e-mail, or in person prior to terminating service for nonpayment.

B. NOTICES FOR UNPAID CLOSING BILLS

Closing bills are due and payable upon presentation and will be considered past due if payment is not received by the Utility within fifteen (15) days after the closing bill is sent to the Customer. When the Utility determines that the Customer has an open account for Utility service at one location and an unpaid closing bill in the Customer's name for Utility service at another location, the Utility may transfer the unpaid closing bill to the open account, except that the unpaid closing bills for nonresidential service may not be transferred to a residential account. Before the Customer's open account may be terminated for nonpayment of the closing bill, the Customer will be given notices in accordance with Section A of this Rule.

ELECTRIC RULE 9—RENDERING AND PAYMENT OF BILLS

A. BILLS PREPARED AT REGULAR INTERVALS

Bills for electric service will be rendered at regular intervals. All bills will be based on meter registration, except as provided in Section C below, or as may otherwise be provided in the Utility's rules. Meters will be read as nearly as possible at regular intervals. Except as otherwise stated, the regular billing period will be once each month. Due to Sundays and holidays and other factors, it is not always possible to read meters on the same day of each month.

B. PRO RATA CORRECTION

Opening and closing bills rendered will be computed in accordance with the rate schedule applicable to that service, unless otherwise provided in this rule, or in the applicable rate schedule. The basic charge, Customer charge, the amount of energy blocks, demand blocks, etc., and the service charge, demand charge, or minimum charge will be prorated on the basis of the number of days in the period in question to the total number of days in the subject month. However, where daily equivalents are used, there will be no pro rata correction. Instead, the calculation shall use the number of days in the billing period multiplied by the daily equivalent charge.

When one or more regularly scheduled meter readings have been missed, the proration factor for the next regularly scheduled meter reading shall be 1.000 times the number of monthly billing cycles in the period. When an interim bill based on a special reading for a period other than 27 to 33 days has been issued during the interval since the last regularly scheduled meter reading, the proration factor for the regularly scheduled bill shall be the factor derived above, less the proration factor applied to the interim bill. However, where daily equivalents are used, there will be no pro rata correction. Instead, the calculation shall use the number of days in the billing period by the daily equivalent charge.

C. ESTIMATED BILLS

If, because of unusual conditions or for reasons beyond its control, the Utility is unable to read the Customer's meter on the scheduled reading date, the Utility may bill the Customer for estimated consumption during the billing period and make any necessary corrections when a reading is obtained. Estimated consumption for this purpose will be calculated considering the Customer's prior usage, the Utility's experience with other Customers of the same class in that area, and the general characteristics of the Customer's operations. Adjustments for any underestimate or overestimate of a Customer's consumption will be reflected on the first regularly scheduled bill rendered and based on an actual reading following the period of inaccessibility.

D. READINGS OF SEPARATE METERS NOT COMBINED

For the purpose of making charges, each meter upon the Customer's Premises will be considered separately, and the readings of two or more meters will not be combined, except as follows:

1. Where combinations of meter readings are specifically provided for in rate schedules; or

2. Where the Utility's operating convenience or necessity shall require the installation of two or more meters upon the Customer's Premises instead of one meter.

E. BILLS DUE ON PRESENTATION

Bills for electric service are due and payable upon presentation. Payments shall be received at the office of the Utility, or by an authorized agent of the Utility.

F. CLOSING BILL PAYABLE ON PRESENTATION

Removal bills, special bills, bills rendered on vacation of Premises, or bills rendered to persons discontinuing the service, shall be due and payable upon presentation. Bills for connection or reconnection of service and payments for deposits or to re-establish credit as required under the rules of the Utility shall be paid before service will be connected or reconnected.

G. RETURNED CHECK CHARGE

If a check, tendered in payment of amounts owing the Utility, is not honored by a bank and is returned to the Utility unpaid, the Utility will add to the Customer's bill a charge for processing each such returned check consistent with these rules. Where service is subject to discontinuance under Electric Rule 11, the returned check charge shall be included in the total amount due and payable.

H. FIELD NOTIFICATION AND COLLECTION PROCESSING FEES

The Utility will require payment of a Collection Processing Fee when an authorized Utility representative makes a field call to a Customer's Premises to discontinue electric service in accordance with Electric Rule 11 for nonpayment of a past due billing. The Utility will also assess the Collection Processing Fee when an authorized Utility representative makes a field call to discontinue electric service for nonpayment of a deposit that was requested in accordance with Electric Rule 6.

Where service is discontinued under the provisions of Electric Rule 11, the Utility will require payment of the balance in full, the balance of any unpaid closed accounts, plus any assessed field notification charges, Collection Processing Fees and Deposits prior to restoration of service.

If the Customer makes payment in full or makes acceptable payment arrangements in order to avoid discontinuance of service, the Utility may still assess the Collection Processing Fee.

The Utility may assess a Field Notification Charge when notification must be made due to nonpayment. Generally, these notifications are in the form of a door hanger left at the Customer's Premises. The Field Notification Charge is in addition to any Collection Processing Fees that may apply.

I. LATE PAYMENT CHARGE

A late payment charge of 0.9% per month will be applied to the total unpaid balance of a Customer Account if the Customer's payment is not received by the date indicated on the Customer Account billing.

J. ACCUMULATIVE AMOUNT DUE

The Utility reserves the right to accumulate bills until the total amount due exceeds $2.00.

ELECTRIC RULE 10—DISPUTED BILLS

A. CORRECTNESS OF BILL

If the correctness of a bill is questioned or disputed by a Customer, an explanation should be promptly requested from Customer Services. If the bill is determined to be incorrect, a corrected bill will be issued.

B. BILL REVIEW PROCEDURE

1. REVIEW BY CUSTOMER SERVICE

Customers who believe their utility bill is in error must first contact Customer Services by telephone, in writing, or in person within 30 days from the bill date and initiate a complaint or request an investigation concerning the bill. Utility services will not be discontinued for nonpayment of a disputed bill pending the outcome of a timely filed investigation. The Utility may require that an amount equal to an average bill for a comparable period of time be deposited with Moreno Valley Utility pending outcome of the investigation. Failure to make the deposit if as requested when due shall constitute abandonment of the complaint or request for investigation. Subsequent utility bills, which are not disputed, must be paid within the time allowed to avoid discontinuance of service in accordance with Electric Rule 9 and Electric Rule 11.

2. REVIEW BY CUSTOMER SERVICE MANAGER.

If, after contact with the Customer Services, the Customer believes the bill is still incorrect, the customer may, within 10 days from the date of determination, contact the Manager of Customer Services by phone or submit a written statement regarding the billing dispute to the Manager of Customer Services, Moreno Valley Utility, 14225 Corporate Way., Moreno Valley, CA 92553. The Manager of Customer Services will conduct an investigation of the dispute and send his or her determination in writing to the Customer.

3. APPEAL TO ELECTRIC UTILITY DIVISION MANAGER.

If a Customer disagrees with the decision of the of Customer Service Manager, or designee, the Customer may appeal that decision to the Electric Utility Division Manager. Any such appeal must be filed in writing with the Electric Utility Division Manager within (10) days after written notice of the decision of the Manager of Customer Services, or designee, is given to the Customer. The Electric Utility Division Manager, or a designated representative , may review the accuracy of the amount billed , but will not review appeals under this procedure concerning the general level of rates, pending rate changes, source of energy and similar matters. All decisions of the Electric Utility Division Manager will be final.

4. DISCONTINUANCE OF SERVICE FOR FAILURE TO PAY.

Electric service will be discontinued if a bill has not been paid in full and a timely and proper appeal has not been filed or an appeal has been denied and the appeal is final. All other bills not in dispute are due and payable in accordance with Electric Rule 9 and Electric Rule 11.

5. NOTICE

Under this review and appeal procedure, notice by the Utility is deemed to be given when (1) personally given to the Customer, (2) left at the premises where the service was given, (3) enclosed in an envelope addressed to the Customer with postage prepaid and deposited in the U.S. mail or (4) sent via electronic means to the electronic mailing (e-mail) address provided by the Customer as their Customer's address.

ELECTRIC RULE 11—DISCONTINUANCE AND RESTORATION OF SERVICE

If the Utility terminates or refuses to restore service to a Customer or any other person for any of the reasons or upon any of the grounds stated herein, the Utility shall incur no liability whatsoever to said Customer or person or to any other Customers or persons.

A. CUSTOMER REQUEST TO TERMINATE LIABILITY FOR PAYMENT FOR SERVICE

When a Customer wants to terminate liability for payment for service, the Customer shall give the Utility not less than two days notice and state the date on which the termination is to become effective. The Customer may be held responsible for service furnished at the Premises until two days after receipt of such notice by the Utility, or until the date of termination specified in the notice, whichever date is later.

B. TERMINATION OF SERVICE FOR NONPAYMENT—WEEKENDS AND HOLIDAYS

Service will not be terminated for nonpayment of bills or deposit requests on Saturdays, Sundays, legal holidays or on days when the offices of the Utility are closed to the public.

C. TERMINATION OF SERVICE FOR NONPAYMENT OF BILLS OR DEPOSIT REQUESTS

Monthly bills are due and payable upon presentation and will be considered past due if payment is not received by the Utility within 15 days after the bill is sent to the Customer. Deposit requests are due and payable when request for service is made. When a deposit is billed, it will be considered past due if payment is not received by the Utility within 15 days after the deposit request is sent to the Customer. Customers who fail to pay their bills within this time period are subject to service disconnection.

D. FAILURE TO ESTABLISH OR RE-ESTABLISH CREDIT

When the Utility provides service to an Applicant before credit is established or continues service to a Customer pending re-establishment of credit, and the Applicant/Customer fails to establish or re-establish credit, any and all services the Customer is receiving may be terminated after notice has been given. The Utility will not restore the Customer's service until the Customer has complied with the requirements to establish or re-establish credit.

E. TERMINATION OF SERVICE FOR NONPAYMENT OF BILLS AT OTHER LOCATIONS

Any and all services the Customer is receiving may be terminated for nonpayment of a bill for service previously supplied by the Utility to the same Customer at another location after the Customer has been given notices of termination, except that residential service shall not be terminated for nonpayment of a bill for any other class of service. Nonresidential service may be terminated for nonpayment of a bill for any class of service. Service shall not be terminated for nonpayment within 15 days after establishment of service at the new

location. If the Customer is receiving service at more than one location, any or all services may be terminated with proper notice for nonpayment of any bill at any location for Utility service.

F. TERMINATION OF SERVICE—RETURNED CHECKS

When the Customer has received notice of termination and a check tendered in payment of the past due bill or deposit request for service is returned unpaid, the Utility may terminate service. When the Customer has received a 10-day notice of termination, the notice will remain in effect, and collection action will continue. When the Customer has received a 24-hour notice of termination, the notice will remain in effect, and service may be terminated without further notice.

G. UNSAFE APPARATUS OR CONDITION

The Utility may deny or terminate service to the Customer immediately and without notice when:

a. The Utility determines that the Premises wiring, or other electrical equipment, or the use of either, is unsafe, or endangers the Utility's service facilities; or

b. The Customer threatens to create a hazardous condition; or

c. Any governmental agency, authorized to enforce laws, ordinances or regulations involving electric facilities and/or the use of electricity, notifies the Utility in writing that the Customer's facilities and/or use of electricity is unsafe or not in compliance with applicable laws, ordinances, or regulations. The Utility does not assume the responsibility of inspecting or repairing the Customer's facilities, appliances or other equipment for receiving or using service, or any part thereof. In the event the Customer has knowledge that the service is in any way defective, it is the Customer's responsibility to notify the Utility at once. The Utility shall not be liable or responsible for any plumbing, appliances, facilities, or apparatus beyond the Point of Delivery, which it does not own or maintain in accordance with these rules.

H. SERVICE DETRIMENTAL TO OTHER CUSTOMERS

The Utility will not supply service to a Customer operating equipment, which is considered by the Utility to be detrimental to either the service of other Utility Customers or to the Utility. The Utility will terminate service and refuse to restore service to any Customer who continues to operate such equipment after receiving notification from the Utility to cease.

I. UNAUTHORIZED USE

1. The Utility may terminate service without notice for unauthorized use of service as defined in Electric Rule 17.2. When the Customer's service has been terminated under this section, the Utility may refuse to restore service until:

a. the unauthorized use has ceased, and

b. The Utility has received full compensation for all charges authorized in Electric Rule 17.2.

2. The Utility may terminate and refuse to restore service if the acts of the Customer or conditions on the Premises indicate intent to deny the Utility full compensation for services rendered, including, but not limited to, any act which may result in a denial of service. The Utility shall provide the Customer with the reasons for such termination and/or refusal to restore service. When the Customer's service has been terminated under this section, the Utility may refuse to restore service until:

a. the acts and/or the conditions described above have ceased or have been corrected to the Utility's satisfaction, and

b. The Utility has received full compensation for all charges resulting from the Customer's acts or the conditions on the Premises.

J. NONCOMPLIANCE WITH UTILITY'S RULES

Unless otherwise specifically provided, the Utility may terminate service to a Customer for noncompliance with any of the Utility's rules if the Customer fails to comply within five days after the Utility's presentation of written notification of noncompliance to the Customer. The Customer shall comply with the Utility's rules before service will be restored.

K. REVOCATION OF PERMISSION TO USE PROPERTY

If the Utility's service facilities and/or a Customer's wiring to the meter are installed on property other than the Customer's property and the owner of such property revokes permission to use it, the Utility will have the right to terminate service upon the date of such revocation. If service is terminated under these conditions, the Customer may have service restored under the provisions of the Utility's line and service extension rules.

L. CHARGES FOR TERMINATION AND/OR RESTORATION OF SERVICE

1. The Utility may require payment of the entire amount due, including the past due amount and current charges, payment of a deposit or additional deposit in accordance with Electric Rule 7, and payment of other charges indicated herein, prior to restoring service to accounts which have been terminated for nonpayment.

2. The Utility will require a returned check charge for processing a check, which is returned to the Utility unpaid.

3. The Utility will require payment of a Collection Processing Fee when a Utility representative makes a field call to a Customer's Premises to terminate service for nonpayment of bills or deposit.

4. The Utility will require payment of a Collection Processing Fee per connection before restoring service that has been terminated for nonpayment of bills, to prevent fraud, or for failure to comply with the Utility's rules. If the Customer requests that service be restored outside of regular business hours, an additional charge per connection may apply. Refer to the Chart of Charges and Fees for amounts of applicable charges.

5. In addition, the Utility may charge and collect any unusual costs incidental to the termination or restoration of service, which have resulted from the Customer's action or negligence.

6. Service wrongfully terminated will be restored without charge.

ELECTRIC RULE 12—RATES AND OPTIONAL RATES

A. EFFECTIVE RATES

The rates to be charged by and paid to the Utility for electric service will be the rates legally in effect, approved by the City Council, and on file with the Electric Utility Division, Department of Public Works. Complete schedules of all rates in effect will be kept at all times in the Utility's local office, where they will be available for public inspection. Unless stated otherwise on the rate schedules themselves, the Utility's rate schedules are only applicable for service supplied entirely by the Utility.

B. ESTABLISHING RATE SCHEDULES FOR NEW CUSTOMERS

At the time of application for service, the Utility will, based on information provided by the Applicant, ensure that the Applicant is placed on an applicable rate schedule approved by the City Council. Thereafter, the Utility will take such measures as may be practical to provide the Customer with information regarding rate schedules or options applicable to the Customer's class of service.

C. CHANGING RATE SCHEDULES

The Utility may not be required to make more than one change in rate schedules within a twelve-month period unless a new rate schedule is approved or the Customer's operating conditions have changed sufficiently to warrant a change in rate schedule.

Changes in rate schedules will take effect starting with the next regular meter reading date or meter change date following receipt of the Customer's request to change the rate schedule, unless (1) the rate schedule states otherwise, (2) a written agreement between the Utility and the Customer specifies another date, or (3) the required metering equipment is unavailable. In those cases, the change of schedule will take effect on the date stated in the schedule or agreement, or the date the metering equipment is available. It is the Customer's responsibility to request another schedule or option if the Customer's connected load, hours of operation, type of business or type of service have changed. Where the Customer changes equipment or operation without notifying the Utility, the Utility assumes no responsibility for advising the Customer of other rate options available to the Customer as a result of the Customer's equipment/operation changes.

D. NOTIFYING CUSTOMERS OF NEW RATE SCHEDULES

Where the Utility establishes new rate schedules, the Utility shall take such measures as may be practical to advise affected Customers of the availability of the new rate schedules.

ELECTRIC RULE 13—TEMPORARY SERVICE

A. ESTABLISHMENT OF TEMPORARY SERVICE

The Utility shall, if no undue hardship to its existing Customers will result therefrom, furnish temporary service under the following conditions:

1. The Applicant shall pay, in advance or otherwise as required by the Utility, the estimated cost installed plus the estimated cost of removal, less the estimated salvage of the facilities necessary for furnishing service.

2. The Applicant shall establish credit as required by Electric Rule 6, except that the amount of deposit prescribed in Electric Rule 7 shall not exceed the estimated bill for the duration of service.

B. CHANGE TO PERMANENT STATUS & REFUNDS

1. If service to the electrical machinery or apparatus as originally installed, or its equivalent, is supplied to a temporary Customer on a continuous, intermittent or seasonal basis for a period of 36 consecutive months from the date electric service first was delivered under this rule, the Customer shall be classified as permanent. The payment made in excess of that required for permanent service or under the line extension rule for permanent Customers shall be refunded, provided the Customer then complies with all of the rules applicable to electric service.

2. If at any time the character of a temporary Customer's operations changes so that, in the opinion of City, the Customer may be classified as permanent, the amount of payment made in excess of that required for permanent service immediately shall be refunded to the Customer under the provisions of this section.

ELECTRIC RULE 14—SHORTAGE OF SUPPLY AND INTERRUPTION OF DELIVERY

The Utility will exercise reasonable diligence and care to furnish and deliver a continuous and sufficient supply of electric energy to the Customer, but does not guarantee continuity or sufficiency of supply. The Utility will not be liable for interruption or shortage or insufficiency of supply, or any loss or damage of any kind of character occasioned thereby the Utility will not be liable for interruption or shortage or insufficiency of supply. If same is caused by inevitable accident, act of God, fire, strikes, riots, war, or any other cause except that arising from its failure to exercise reasonable diligence. The Utility, whenever it shall find it necessary for the purpose of making repairs or improvements to its system, will have the right to suspend temporarily the delivery of electric energy. In case of shortage of supply and during the period of such shortage, The Utility will make such apportionment of its available supply of energy among its Customers as shall be ordered or directed from time to time by the State of California, acting either directly or by a power administrator or other official appointed by it for that purpose. In the absence of such order or direction, the Utility will, in times of shortage, apportion its available supply of energy among all Customers in the most reasonable manner possible.

ELECTRIC RULE 15—DISTRIBUTION LINE EXTENSIONS

APPLICABILITY: This rule is applicable to extension of electric distribution lines of the Utility's standard voltages (less than 50 kV) necessary to furnish Permanent electric service to Applicants and will be made in accordance with the following provisions:

A. GENERAL

1. EXTENSION BASIS

a. Design: The Utility will be responsible for planning, designing, and engineering extensions using the Utility's standards for material, design, and construction. The Applicant will furnish all necessary plot plans, utility plans, street improvement plans, tract maps and electric loads for the design of the system.

The Applicant may design the electrical Distribution Lines using qualified design firms approved by the Utility. The system will be designed in accordance with the Utility's standards and the final design will be approved by the Utility. Ownership of Applicant's final design and as-built documents shall be transferred to the Utility upon completion of work.

b. Ownership: The facilities installed under the provisions of this rule, shall be owned, operated, and maintained by the Utility, except for substructures and enclosures that are on, under, within, or part of a building or structure.

c. Private Lines: The Utility shall not be required to serve any Applicant from extension facilities that are not owned, operated, and maintained by the Utility.

2. EXTENSION LOCATIONS

a. Rights of Way: The Utility will own, operate and maintain extension facilities only;

1) along public streets, alleys, roads, highways and other publicly dedicated ways and places which the Utility has the legal right to occupy, and

2) along public lands and private property across which rights of way and permits satisfactory to the Utility may be obtained without cost to or condemnation by the Utility.

b. Normal Route of Line: The length and normal route of an extension will be determined by the Utility and shall be considered as the distance along the shortest, most practical, available, and acceptable route which is clear of obstructions from the Utility's nearest permanent and available distribution facility to the point from which the service facilities will be connected.

3. UNDERGROUND EXTENSIONS

Underground extensions shall be installed where required to comply with applicable laws and ordinances or similar requirements of governmental authorities having jurisdiction and where the Utility maintains or desires to maintain underground distribution facilities.

4. OVERHEAD EXTENSIONS

Overhead extensions may be installed only where underground extensions are not required by other jurisdictions and as approved by the Utility.

5. SPECIAL OR ADDED FACILITIES

Any special or added facilities the Utility agrees to install at the request of Applicant will be installed at Applicant's expense in accordance with Electric Rule 2—Description of Service.

6. TEMPORARY SERVICE

Facilities installed for temporary service or for operations of speculative character or questionable permanency shall be made in accordance with the fundamental installation and ownership provisions of this rule, except that all charges shall be made under the provisions of Electric Rule 13—Temporary Service.

7. SERVICES

Service facilities connected to the Distribution Lines to serve an Applicant's Premises will be installed, owned and maintained as provided in Electric Rule 16—Service Extensions.

8. STREET LIGHTS AND AREA LIGHTS

Streetlights, area lights, and other associated facilities shall be installed in accordance with the service provisions of the applicable street light schedule.

No written contracts will be required under this Rule. All provisions of the Rule shall apply and obligate all parties.

B. INSTALLATION RESPONSIBILITIES

1. UNDERGROUND EXTENSIONS

a. Applicant Responsibility: In accordance with the Utility's design, specifications, and requirements, Applicant is responsible for;

1) Excavation: All necessary trenching, backfilling, compaction and other digging as required as well as any pavement cutting or repair.

2) Substructures and Conduits: Furnishing, installing, and upon acceptance by the Utility, conveying to the Utility the ownership of all necessary installed Substructures and Conduits, including Feeder and Service Conduits and related Substructures required to extend to and within subdivisions and developments.

3) Protective Structures: Furnishing, installing, and upon acceptance by the Utility, conveying to the Utility the ownership of all necessary Protective Structures.

4) Safety Barriers and Measures: Applicant is responsible for providing safety barriers, signs, and other suitable means to protect public from potential injuries arising from construction of underground extension.

b. The Utility Responsibility: The Utility is responsible for installing cables, switches, transformers, and other distribution facilities as required to complete the extension.

The Applicant may install the system in accordance with the Utility's design and construction standards using qualified electrical contractors approved by the Utility.

2. OVERHEAD EXTENSIONS

The Utility is responsible for installing all facilities required for a pole line extension at the Applicants expense and only where underground extensions are not required.

3. PERFORMED WORK

Where requested by Applicant and mutually agreed upon, the Utility may perform that portion of the new extension work normally installed by Applicant, provided Applicant pays the Utility its total estimated installed cost. Upon completion of the work, the difference between the estimated and actual cost of the work will be refunded or billed to the Applicant as appropriate.

C. CONTRIBUTIONS OR ADVANCES BY APPLICANT

1. CASH ADVANCE

A cash advance will be required from every Applicant. If the scope of the work lends itself to progress payments in the sole judgment of the Utility, such progress payments will be considered by the Utility. The cash advance will be equal to the Utility's total estimated installed cost to complete an extension including transformers and meters. Upon completion of the work, the difference between the estimated and actual cost of the work will be refunded or billed to the Applicant as appropriate.

Applicant shall contribute or advance, before the start of Utility's construction, the following;

a. Underground Non-Refundable Amount: Applicant's contribution is the portion of the Utility's total estimated installed cost, to complete the underground extension including transformers and meters for;

   1) Cabling: The estimated installed cost of any necessary cabling installed by the Utility to complete the underground extension. This includes the cost of conversion of existing single-phase lines to three-phase lines, if required; plus

   2) Substructures: The Utility's estimated value of substructures installed by Applicant and deeded to the Utility as required.

   3) The cost of cabling and substructures installed and/or paid for by a previous Customer or developer in anticipation of providing service to the current Customer or development.

b. Underground Refundable Amount:

   1) The cost of cabling and substructures in anticipation of providing service to a future Customer or developer. Such costs will be refunded at the time they are collected from the future Customer or developer in accordance with this Rule.

c. Overhead Non-Refundable Amount: Applicant's contribution is the portion of the Utility's total estimated installed cost to complete the overhead extension including transformers and meters;

   1) Pole Line; All necessary facilities required for an overhead extension and, if required, the conversion of existing single-phase lines to three-phase lines; plus

   2) Transmission Underbuilds; Utility's total estimated installed cost of the underbuild, where all or a portion of an overhead extension is to be constructed on existing poles.

d. Other Non-Refundable Amounts: Applicant's non-refundable amount includes the Utility's estimated value of excavation, conduits, and protective structures required by the Utility for the extension. The applicant will pay the Utility for the cost of inspection of any facilities installed by the applicant.

4. JOINT APPLICANTS

The total contribution or advance from a group of Applicants will be apportioned among the members of the group in such manner as they may mutually agree. A signed agreement describing this apportionment will be required by the Utility as part of the application for service.

5. PAYMENT ADJUSTMENTS

Excess Facilities: If the loads provided by Applicant(s) result in the Utility having installed facilities which are in excess of those needed to serve the actual loads, and the Utility elects to reduce such excess facilities, Applicant shall pay the Utility its estimated total costs to remove, abandon, or replace the excess facilities, less the estimated salvage of any removed facilities.

D. SPECIAL CONDITIONS

1. FACILITY RELOCATION OR REARRANGEMENT

Any relocation or rearrangement of the Utility's existing facilities, at the request of, or to meet the convenience of an Applicant or Customer, and agreed upon by the Utility, normally shall be performed by the Utility. In all instances, the Utility shall abandon or remove its existing facilities, at the option of the Utility. Applicant or Customer shall be responsible for the costs of all related relocation, rearrangement and removal work.

ELECTRIC RULE 16—SERVICE EXTENSIONS

APPLICABILITY: This rule is applicable to both (1) Utility service facilities that extend from the Utility's distribution line facilities to the service delivery point, and (2) service related equipment required of Applicant on Applicant's Premises to receive electric service.

A. GENERAL

1. DESIGN

The Utility will be responsible for planning, designing, and engineering its Service Extension using the Utility's standards for design, materials and construction. The Utility will allow Applicant's design with the Utility's approval.

2. SERVICE FACILITIES

The Utility's service facilities shall consist of (a) primary or secondary underground or overhead service conductors, (b) poles conduits, sleeves, pedestals, pads, or structures to support service conductors, and service transformers, (c) Utility-owned metering equipment, and (d) other Utility-owned service related equipment.

3. OWNERSHIP OF FACILITIES

Service facilities installed under the provisions of this rule shall be owned, operated, and maintained by the Utility if they are (a) located in the street, road or franchise area of the Utility, (b) installed by the Utility under and or on the Applicant's Premises for the purpose of the delivery of electric energy to Applicant, or installed by Applicant under the provisions of this rule, and conveyed to the Utility.

4. PRIVATE LINES

The Utility shall not be required to connect service facilities to or serve any Applicant from electric facilities that are not owned, operated, and maintained by the Utility.

5. SPECIAL OR ADDED FACILITIES

Any special or added facilities the Utility installs at the request of Applicant, will be installed at Applicant's expense in accordance with Rule 2-Description of Service.

6. TEMPORARY SERVICE FACILITIES

Service facilities installed for temporary service or for operations of speculative character or questionable permanency shall be made in accordance with the fundamental installation and ownership provisions of this rule, except that all charges shall be made under the provisions of Rule 13-Temporary Service.

7. STREET LIGHTS AND AREA LIGHTS

Streetlight and area light services and other associated facilities shall be installed in accordance with the service provisions of the applicable street light schedule.

8. DISTRIBUTION LINE EXTENSIONS

Whenever the Utility's distribution system is not complete to the point designated by the Utility where the service extension is to be connected to the Utility's distribution system, the extension of distribution line facilities will be installed in accordance with Rule 15-distribution line extensions.

9. RIGHTS-OF-WAY

Rights-of-way or easements may be required by the Utility to install service facilities on Applicant's property to serve only Applicant.

a. Service Facilities: If the service facilities must cross property owned by a third party to serve Applicant, the Utility may, at its option, install such service facilities after appropriate rights-of-way or easements, satisfactory to the Utility, are obtained without cost to the Utility; or

b. Distribution Line Extensions: If the Utility's facilities installed on Applicants property or third-party property, will be or are designed to serve adjacent property, then the Utility may, at its option, install its facilities under Rule 15, after appropriate rights-of-way or easements, satisfactory to the Utility, are obtained without cost to the Utility.

c. Clearances: Any necessary rights-of-way or easements for the Utility's facilities shall have provisions to maintain legal and operational clearances from adjacent structures.

B. METERING FACILITIES

For revenue billing, electric service shall be individually metered to each tenant in a building or group of buildings or other development on a single Premises with multiple tenants or enterprises (such as, but not limited to a commercial business, a school campus, or shopping center complex). Alternative metering arrangements as determined by the Utility may be allowed only as specified in these rules and applicable rate schedules.

C. SERVICE EXTENSIONS

1. GENERAL LOCATION

The location of the service extension facilities shall be approved by the Utility as follows:

a. Franchise Area: From the point of connection at the distribution line to Applicant's nearest property line abutting upon any street, highway, road, or right-of-way, along which it already has, or will install distribution facilities; and,

b. Private Property: On private property, along the shortest, most practical and available route (clear of obstructions) as necessary to reach a service delivery point designated by the Utility.

2. NUMBER OF SERVICE EXTENSIONS

City will not normally provide more than one service extension, including associated facilities, either overhead or underground, for any one building or group of buildings, for a single enterprise on a single Premises, except;

a. Electric Rules: Where otherwise allowed or required under City's Electric Rules; or,

b. City Convenience: At the option of and as determined by the Utility, for its operating convenience, consistent with engineering design for different voltage and phase classification, or when replacing an existing service; or,

c. Ordinance: Where required by ordinance or other applicable law, for such things as fire pumps, fire alarm systems, etc.; and,

d. Other: The Utility may charge for additional services provided under this paragraph, as special or added facilities.

3. UNDERGROUND INSTALLATIONS

Underground Service Extensions will be installed;

a. Underground Required: Underground service extensions (1) shall be installed where required to comply with applicable Electric Rules, laws, ordinances, or similar requirements of governmental authorities having jurisdiction, and (2) may be necessary as determined by the Utility where Applicant's load requires a separate transformer installation of 75 kVA or greater.

b. Underground Optional: An underground service extension may be installed in an area where it is not otherwise required and when requested by Applicant and agreed upon by the Utility.

4. UNUSUAL SITE CONDITIONS

In cases where Applicant's building is located a considerable distance from the available distribution line or where there is an obstruction or other deterrent obstacle or hazard such as plowed land, ditches, or inaccessible security areas between the Utility's distribution line and Applicant's building or facility to be served that would prevent the Utility from prudently installing, owning, and maintaining its service

facilities, the Utility may, at its discretion, waive the normal service delivery point location. In such cases, the service delivery point will be at such other location on Applicant's property as may be mutually agreed upon; or, alternatively, the service delivery point may be located at or near Applicant's property line as close as practical to the available distribution line.

D. RESPONSIBILITIES FOR NEW SERVICE EXTENSIONS

1. APPLICANT RESPONSIBILITY

In accordance with the Utility's design, specifications, and requirements for the installation of service extensions, and subject to the Utility's inspection and approval, Applicant is responsible for;

a. Clear Route: Providing (or paying for) a route on any private property that is clear of obstructions which would inhibit the construction of either underground or overhead service extensions.

b. Excavation: All necessary trenching, backfilling, and other digging as required including permit fees.

c. Conduit and Substructures:

   1) Furnishing and installing all conduits (including pull wires) and substructures on Applicant's Premises.

   2) Installing (or paying for) any Conduits and Substructures in the Utility's franchise area (or rights-of-way, if applicable) as necessary to install the service extension.

   3) Conveying ownership to the Utility upon acceptance of those conduits and substructures not on Applicant's Premises.

d. Protective Structures: Furnishing, installing, owning, and maintaining all necessary protective structures as specified by the Utility for the Utility's facilities on Applicant's Premises

e. Applicant's Facility Design and Operation: Applicant shall be solely responsible to plan, design, install, own, maintain, and operate facilities and equipment beyond the service delivery point (except for the Utility's metering facilities) in order to properly receive and utilize the type of electric service available from the Utility. Refer to Rule 2 for a description, among other things, of;

   1) Available service delivery voltages and the technical requirements and conditions to qualify for them,

   2) Customer utilization voltages,

3) Load balancing requirements,

4) Requirements for installing electrical protective devices,

5) Loads that may cause service interference to others, and

6) Motor starting limitations.

f. Required Service Equipment: Applicant shall, at its sole liability, risk, and expense, be responsible to furnish, install, own, maintain, inspect, and keep in good and safe condition, all facilities of any kind or character on Applicant's Premises that are not the responsibility of the Utility but are required by the Utility for Applicant to receive service. Such facilities shall include but are not limited to the overhead or underground termination equipment, conduits, service entrance conductors from the service delivery point to the location of the Utility's metering facilities, connectors, meter sockets, meter and instrument transformer housing, service switches, circuit breakers, fuses, relays, wireways, metered conductors, machinery and apparatus of any kind or character. Detailed information on the Utility's service equipment requirements will be furnished by the Utility. The Applicant shall provide all service conduit (s) from the Utility's franchise area to the Utility's metering facilities.

g. Coordination of Electrical Protective Devices: When, as determined by the Utility, Applicant's load is of sufficient size as to require coordination of response time characteristics between Applicant's electrical protective devices (circuit breakers, fuses, relays, etc.) and those of the Utility's, it shall be Applicant's responsibility to provide such coordination in accordance with Rule 2.

h. Liability: the Utility shall incur no liability whatsoever, for any damage, loss or injury occasioned by;

1) Applicant-owned equipment or Applicant's transmission and delivery of energy; or,

2) The negligence, omission of proper protective devices, want of proper care, or wrongful act of Applicant, or any agents, employees, or licensees of Applicant, on the part of Applicant in installing, maintaining, using, operating, or interfering with any such conductors, lines, machinery, or apparatus.

i. Facility Tampering: Applicant shall provide a suitable means acceptable to the Utility for placing its seals on meter rings and covers of service enclosures and instrument transformer enclosures which protect unmetered energized conductors installed by Applicant. All Utility-owned meters and enclosure covers will be sealed only by the Utility's authorized employees or agents and such seals shall be broken only by the Utility's authorized employees or agents. However, in an emergency, the Utility may allow a public authority or other appropriate party to break the seal. Any unauthorized tampering with Utility-owned seals or

connection of Applicant-owned facilities to unmetered conductors at any time is prohibited and is subject to the provisions of Rule 11 - Discontinuance and Restoration of Service for unauthorized use.

j. Transformer Installations on Applicant's Premises: Transformer installations on Applicant's Premises shall be as specified by the Utility and in accordance with the following applicable provisions;

1) Space For Transformers: Applicant shall provide space on Applicant's Premises at a location approved by the Utility for a standard transformer installation (including any necessary equipment access for operation, and ancillary equipment such as switches, capacitors, and electric protective equipment, where required) if (a) in an overhead area, the Utility determines that the load to be served is such that a separate transformer installation is required, or (b) if the Utility determines that the installation of a padmounted or subsurface transformer of any size is required on Applicant's Premises to serve only Applicant.

2) Padmounted Equipment: In the Utility's standard installation, Applicant shall furnish, install and convey ownership to the Utility for substructures and any required protective structures specified by the Utility for the proper installation of the transformer, switches, capacitors, and other equipment as determined by the Utility.

3) Single Utility-Owned Customer Substation: When the Utility elects, for its operating convenience, to supply Applicant from a transmission line and install a Utility-owned substation on Applicant's Premises, Applicant shall furnish, install and convey ownership to the Utility the necessary site improvements as specified by the Utility for the proper installation of the transformer. Such improvements shall include but are not limited to a concrete pad or foundation and grounding system. Applicant shall own and maintain all facilities not specifically conveyed to the Utility yet associated with the service, such as fences and gates, access road, grading, and paving as required. Detailed information on the Utility's requirements for a single Customer substation will be furnished by the Utility.

k. Transformer Room or Vault: Where Applicant requests and the Utility approves the installation of the transformer(s) in a vault or room on Applicant's Premises, rather than the Utility's standard padmounted installation;

1) The room or vault on Applicant's Premises shall be furnished, installed, owned, and maintained by Applicant and shall meet the Utility's specifications for such things as access, operational and safety clearances ventilation, drainage, grounding system, etc.

2) If space cannot be provided on Applicant's Premises for the installation of a transformer on either a pad or in a room or vault, a vault will be installed at

Applicant's expense in the street near the property line. It shall be Applicant's responsibility to install (or pay for) such vault if not restricted by governmental authority having jurisdiction and Applicant shall convey ownership of the vault to the Utility upon its acceptance. The additional facilities shall be treated as special or added facilities under the provisions of Rule 2.

3) All the additional costs as well as ongoing maintenance shall be paid by Applicant for special or added facilities.

l. Transformer Lifting Requirements: Where the Utility has installed or agrees to install, transformers at locations where the Utility cannot use its standard transformer lifting equipment and special lifting facilities are required to install or remove the transformers on Applicant's Premises, Applicant shall, at its expense, (a) furnish, install, own, and maintain permanent lifting facilities and be responsible for lifting the transformer to and from its permanent position, or (b) provide (or pay for) portable lifting facilities acceptable to the Utility for installing or removing the transformers. Rights-of-way and space provisions shall be provided by Applicant such that access and required clearances from adjacent structures can be maintained. The Utility may require a separate contract for transformer lifting requirements.

m. Overhead Transformers: In remote areas or in areas not zoned for residential or commercial use or for underground services, pad-mounted transformers are preferred for installation on Applicant's Premises. However, where the Utility determines that it is not practical to install a transformer on a pad, in a room or vault, the Utility may furnish a pole-type structure for an installation not exceeding 500 kVA.

2. BUILDING CODE REQUIREMENTS

Any service equipment and other related equipment owned by Applicant, as well as any vault, room, enclosure, or lifting facilities for the installation of transformers shall conform with applicable laws, codes, and ordinances of all governmental authorities having jurisdiction.

3. REASONABLE CARE

Applicant shall exercise reasonable care to prevent the Utility's Service Extensions, other Utility facilities, and meters owned by the Utility or others, on the Applicant's Premises from being damaged or destroyed, and shall refrain from interfering with the Utility's operation of the facilities and shall notify the Utility of any obvious defect. Applicant may be required to provide and install suitable mechanical protection (barrier posts, etc.) as required by the Utility.

4. UTILITY RESPONSIBLITY

a. Meter and Service: The Utility will install, own, and maintain the following service facilities as applicable after Applicant meets all requirements to receive service:

1) Underground Service: A set of service conductors to supply permanent service from the distribution line source to the service delivery point approved by the Utility.

2) Riser Material: Any necessary pole riser material for connecting underground services to an overhead distribution line.

3) Overhead Service: A set of overhead service conductors to supply permanent service from a distribution line source to a suitable support at the service delivery point approved by the Utility. Support shall be of a type and located such that service wires may be installed in accordance with good engineering practice and in compliance with all applicable laws, ordinances, rules, and regulations including those governing clearances and points of attachment.

4) Metering: When the meter is owned by the Utility, the Utility will be responsible for the necessary instrument transformers where required, test facilities, meters and associated metering equipment. Additionally the Utility will be responsible for the metering enclosures when the Utility elects to locate metering equipment at a point that is not accessible to Applicant.

b. Special Conduit Installations: The Utility shall own and maintain service conduits only if: (1) they are located in the same trench with distribution facilities, and (2) when it is necessary to locate Conduits on property other than that owned by Applicant, as determined by the Utility, or as may be required by local authorities.

c. Government Inspection: The Utility will establish electric service to Applicant following notice from the governmental authority having jurisdiction that the Applicant-owned facilities have been installed and inspected in accordance with any applicable laws, codes, ordinances, rules, or regulations, and are safe to energize.

5. UTILITY-PERFORMED WORK

a. Where requested by Applicant and mutually agreed upon, the Utility may perform that portion of the new service extension work normally the responsibility of Applicant provided Applicant pays the Utility its estimated installed cost.

E. PAYMENTS BY APPLICANT

1. PAYMENTS

Applicant is responsible to pay the Utility the following non-refundable costs as applicable under this rule and in advance of the Utility commencing its work:

a. Pole Riser: The Utility's estimated installed costs of any riser materials on its poles.

b. The Utility's total estimated installation cost (including appurtenant facilities, such as connectors, service conductors, service transformers and metering equipment.).

c. Other: The Utility's total estimated cost of any work it performs that is Applicant's responsibility or performs for the convenience of the Applicant.

F. EXISTING SERVICE FACILITIES

1. SERVICE REINFORCEMENT

a. Utility–Owned: When the Utility determines that its existing service facilities require replacement, the existing service facilities shall be replaced as new service facilities under the provisions of this rule.

b. Applicant-Owned: When the Utility determines that existing Applicant-owned service facilities require replacement; such replacement or reinforcement shall be accomplished under the provisions for a new service installation.

2. SERVICE RELOCATION OR REARRANGEMENT

a. Utility Convenience: When, in the judgment of the Utility, the relocation or rearrangement of a service, including Utility-owned transformers, is necessary for the maintenance of adequate service or for the operating convenience of the Utility, the Utility normally will perform such work at its own expense, except for Applicant convenience or damage.

b. Applicant Convenience: Any relocation or rearrangement of the Utility's existing service facilities at the request of Applicant (aesthetics, building additions, remodeling, etc.) and agreed upon by the Utility shall be performed in accordance with this rule except that Applicant shall pay the Utility its total estimated costs. In all instances, the Utility shall abandon or remove its existing facilities at the option of the Utility rendered idle by the relocation or rearrangement.

3. IMPAIRED ACCESS AND CLEARANCES

Whenever the Utility determines that access or clearance to service facilities is impaired, correction action consistent with this section shall be enforced.

a. Access: Its existing service facilities have become inaccessible for inspecting, operating, maintenance, meter reading, or testing.

b. Clearances: A hazardous condition exists or any of the required clearances between the existing service facilities and any object becomes impaired under

any applicable laws, ordinances, rules, or regulations of the Utility or public authorities, then the following applies;

Corrective Action: Applicant or owner shall, at Applicant's or owner's expense, either correct the access or clearance infractions or pay the total estimated cost to relocate its facilities to a new location which is acceptable to the Utility. Applicant or owner shall also be responsible for the expense to relocate any equipment, which Applicant owns and maintains. Failure to comply with corrective measures within a reasonable time may result in discontinuance of service.

4. OVERHEAD TO UNDERGROUND SERVICE CONVERSIONS

Applicant's Convenience: Where overhead services are replaced by underground services for Applicant's convenience, Applicant shall perform all excavation, furnish and install all substructures, and pay the Utility its total estimated installed cost to complete the new service and remove the overhead facilities.

5. DAMAGED FACILITIES

When the Utility's facilities are damaged by others, the repair will be made by the Utility at the expense of the party responsible for the damage. Applicants are responsible for repairing their own facilities.

6. SUBDIVISION OF PREMISES

When the Utility's service facilities are located on private property and such private property is subsequently subdivided into separate Premises with ownership divested to other than Applicant or Customer, the subdivider is required to provide the Utility with adequate rights-of-way satisfactory to the Utility for its existing facilities and to notify property owners of the subdivided Premises of the existence of the rights-of-way. When adequate rights-of-way are not granted as a result of the property subdivision, the Utility shall have the right, upon written notice to Applicant, to discontinue service without obligation or liability. The existing owner, Applicant, or Customer shall pay to the Utility the total estimated cost of any required relocation or removal of the Utility's facilities. A new electric service will be re-established in accordance with the provisions of this Rule for new service and the provisions of any other applicable Utility rules.

7. EXCEPTIONAL CASES

When the application of this rule appears impractical or unjust to either party, or ratepayers, the Utility or Applicant may refer the matter to the Utility for a special ruling or for approval of special conditions, which may be mutually agreed upon.

ELECTRIC RULE 17—METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

A. METER TESTS

Any Customer may, upon not less than five (5) working days notice, request that the Utility test the Customer's electric meter. No payment or deposit will be required from the Customer for such tests except when a Customer requests a meter test within six months after the date of installation of the meter, or more often than once each six months thereafter. A deposit to cover the reasonable cost of the test will be required of the Customer.

The deposit will be returned to the Customer if the meter is found to register more than two percent fast or slow under conditions of normal operation as a result of the test. A Customer shall have the right to request the Utility conduct the test in the Customer's presence or in the presence of an expert or other representative appointed by the Customer. A report giving the result of the test will be supplied to the Customer within a reasonable time after completion of the test. All electric meters will be tested at the time of their installation. No meter will be placed in service or allowed to remain in service which has an error in registration in excess of two percent under conditions of normal operation. On newly purchased single-phase meters, the manufacturer's test may be used as the installation test when the Utility's random tests indicate satisfactory test results for a particular manufacturer and for a particular shipment.

B. ADJUSTMENT OF BILLS FOR METER ERROR

Meter error is the incorrect registration of energy usage resulting from a malfunctioning or defective meter. It does not include incorrect registration attributable to billing error or unauthorized use. Where, as the result of a meter test, a meter is found to be non-registering or incorrectly registering, the Utility may render an adjusted bill to the Customer for the amount of any undercharge without interest. The Utility shall issue a refund or credit to the Customer for the amount of any overcharge, without interest, computed back to the date that is determined to be when the meter error commenced, except that the period of adjustment shall not exceed the limits set forth in this Rule. Such adjusted bill shall be computed as follows:

1. FAST METER

If a meter, for either residential or nonresidential service, is found to be registering more than two percent fast, the Utility will calculate the amount of the overcharge for refund to the Customer based on the corrected usage for a period of up to 6 months. When it is known that the period of meter error was less than six months, the overcharge will be calculated for only those months during which the meter error occurred.

2. SLOW METER

If a meter, for either residential or nonresidential service is found to be registering more than two percent slow, the Utility may bill the Customer for the amount of the undercharge based on the corrected usage or based upon the Utility's estimate of the energy usage for a period of up to three years. However, if it is known that the period of meter error was less than three years, the undercharge will be calculated for only those months during which the meter error occurred.

3. NONREGISTERING METER

If a meter, for either residential or nonresidential service is found to be non-registering, the Utility may bill the Customer for the amount of the undercharge based on the Utility's estimate of the electricity used, but not registered, for a period of up to three years. However, if it is known that the period the meter was non-registering was less than three years, the undercharge will be calculated for only those months the meter was non-registering. Where the condition of the meter renders it un-testable (no-test), the Utility may bill the Customer based upon the Utility's estimate of the unmetered energy. Nothing herein is intended to limit the Utility's authority to bill the Customer for unauthorized use.

4. NO-TEST METERS

Where the condition of the meter renders it untestable (no-test), the Utility may bill the Customer based upon the Utility's estimate of the unmetered energy. Nothing herein is intended to limit the Utility's authority to bill the Customer for unauthorized use.

5. ESTIMATED USAGE

When regular, accurate meter readings are not available or when the electric usage has not been accurately measured, the Utility may estimate the Customer's energy usage for billing purposes on the basis of information including, but not limited to, the physical condition of the metering equipment, available meter readings, records of historical use, and the general characteristics of the Customer's load and operation.

ELECTRIC RULE 17.1 – ADJUSTMENTS OF BILLING ERROR

A. BILLING ERROR DEFINED

Billing error is the incorrect billing of an account due to an error by the Utility or the Customer, which results in incorrect charges to the Customer. Billing error includes, but is not limited to, incorrect meter reads or clerical errors, wrong daily billing factor, incorrect voltage discount, wrong connected load information, crossed meters, incorrect billing calculation, incorrect meter multiplier, incorrect rate, or the Utility's failure to provide the Customer with notice of rate options. Field error, including, but not limited to, installing the meter incorrectly and failure to close the meter potential or test switches, is also considered billing error. Billing error which does not entitle the Customer to a credit adjustment includes failure of the Customer to notify the Utility of changes in the Customer's connected load, equipment or operation or failure of the Customer to take advantage of any noticed rate option or condition of service for which the Customer becomes eligible subsequent to the date of application for service.

B. ADJUSTMENT OF BILLS FOR BILLING ERROR

Where the Utility overcharges or undercharges a Customer as the result of a billing error, the Utility may render an adjusted bill to the Customer for the amount of any undercharge, without interest, and shall issue a refund or credit to the Customer for the amount of any overcharge, without interest, in accordance with the procedures and limitations set forth below.

1. BILLING ERROR RESULTING IN OVERCHARGES TO THE CUSTOMER

If either a residential or nonresidential service is found to have been overcharged due to billing error, the Utility will calculate the amount of the overcharge, for refund to the Customer, for a period of up to three years. However, if it is known that the period of billing error was less than three years, the overcharge will be calculated for only those months during which the billing error occurred.

2. BILLING ERRORS RESULTING IN UNDERCHARGES TO THE CUSTOMER

If either residential or nonresidential service is found to have been undercharged due to a billing error, the Utility may bill the Customer for the amount of the undercharge for a period of up to three years. However, if it is known that the period of billing error was less than three years, the undercharge will be calculated for only those months during which the billing error occurred.

ELECTRIC RULE 17.2—ADJUSTMENT OF BILLS FOR UNAUTHORIZED USE

A. UNAUTHORIZED USE DEFINED

Unauthorized use includes, but is not limited to:

1. Unmetered use of electricity resulting from unauthorized connections, alterations or modifications to electric supply lines and/or electric meters;

2. Placing conductive material in the meter socket to allow energy to flow from the line side of the service to the load side of the service without a meter (cut in flat);

3. Installing an unauthorized electric meter in place of the meter assigned to the account;

4. Inverting or otherwise repositioning the meter, thereby altering registration;

5. Damaging the meter to stop registration, thereby rendering it untestable;

6. Using the Utility service without compensation to the Utility in violation of applicable rules and/or statutes.

Where the Utility determines there has been unauthorized use, the Utility shall have the legal right to recover, from any Customer or other person who caused or benefited from such unauthorized use, the estimated undercharges for the full period of such unauthorized use. The estimated bill shall indicate unauthorized use for the most recent three years and, separately, unauthorized use beyond the three-year period for collection as provided by law. Nothing in this rule shall be interpreted as limiting the Utility's rights under any provisions of any applicable civil or criminal law.

B. INVESTIGATION OF UNAUTHORIZED USE

Where unauthorized use is suspected by the Utility, the Utility shall promptly conduct an investigation.

Whenever possible, the Utility shall collect and preserve evidence in the matter, test the meter, and obtain connected load information from the Customer or other person to be charged for the unauthorized energy use. If the meter cannot be tested or connected load data cannot be obtained, the Utility will document the reasons why such information could not be obtained. Whenever possible, upon completion of the Utility's investigation, the Customer or other person being billed will be advised of the Utility's claim and shall be given an opportunity to respond to the claim. Notwithstanding any provisions herein, the Utility reserves all evidentiary privileges and rights.

C. ADJUSTMENT OF BILLS FOR UNAUTHORIZED USE

1. ACTUAL USAGE

If accurate meter readings are available for the unauthorized use period, they will be used for billing purposes.

2. ESTIMATED USAGE

If accurate meter readings are not available or the electric usage has not been accurately measured, the Utility may estimate the energy usage for billing purposes. The basis for the estimate may include, without limitation and for illustrative purposes only, the physical condition of the metering equipment, available meter readings, records of historical use, or the general characteristics of the load and operation of the service being billed, with consideration of any appropriate seasonal adjustment. Estimated bills for the unauthorized use period may be determined by the Utility based on one or more of the following, without limitation and for illustrative purposes only:

a. Accurately metered use from a remote check meter;

b. The known percent error in metering attributable to the unauthorized use condition as determined by the Utility;

c. Accurately metered use prior to the onset of the unauthorized use;

d. The equipment and hours of operation of the service being billed;

e. Accurately metered subsequent use of 30 days or more (if available);

f. Annual use profile of at least five Customers with similar connected load, Premises load profiles, hours of energy use, etc. (percent of annual use); or

g. Other reasonable and supportable billing methodology when none of the aforementioned billing techniques is appropriate under the circumstances.

D. INTEREST ON BILLS FOR UNAUTHORIZED USE

1. The Utility may bill and collect interest at a rate of 10 percent per annum on unauthorized use billings from the date the unauthorized use commenced, and/or

2. The Utility may bill and collect interest at a rate of 10 percent per annum on amortized repayment agreements.

E. RECOVERY OF ASSOCIATED COSTS

The Utility may recover the associated costs resulting from the unauthorized use including, but not limited to, investigative and equipment damage costs.

F. DISCONTINUANCE OF SERVICE

In accordance with the provisions of Electric Rule 11, where the Utility determines unauthorized use is occurring, the Utility may refuse service or discontinue service. If any part of the Customer's wiring or any other equipment, or the use thereof, is determined by the Utility or any other authorized public agency to be unsafe or in violation of applicable laws, ordinances, rules or regulations of public authorities, or is in such condition as to endanger the Utility's service facilities, the Utility may discontinue service. The Utility may also discontinue service in accordance with the provisions of its rules, for nonpayment of a delinquent billing for unauthorized use, and for associated costs, including nonpayment under an amortization agreement.

ELECTRIC RULE 21—GENERATING FACILITY INTERCONNECTIONS

A. APPLICABILITY

Applicability: This Rule describes the Interconnection, operating and Metering requirements for Generating Facilities to be connected to Moreno Valley Utility's ("MVU") Distribution System. Subject to the requirements of this Rule, MVU will allow the Interconnection of Generating Facilities with its Distribution System.

Definitions: Capitalized terms used in this Rule, and not defined in MVU's other rules, shall have the meaning ascribed to such terms in Section H of this Rule. The definitions set forth in Section H of this Rule shall only apply to this Rule and may not apply to MVU's other rules.

In the event of any conflict between this rule and any of the standards listed herein, the requirements of this rule shall take precedence.

B. DEFINITIONS

The definitions in this Section are applicable only to this Rule, the Application and Interconnection Agreements.

Anti-Islanding: A control scheme installed as part of the Generating Facility or Interconnection Facilities that senses and prevents the formation of an Unintended Island.

Applicant: The entity submitting an Application for Interconnection pursuant to this Rule.

Application: A standard MVU provided form submitted to MVU for Interconnection of a Generating Facility**.**

Certification Test: A test pursuant to this Rule that verifies conformance of certain equipment with MVU-approved performance standards in order to be classified as Certified Equipment. Certification Tests are performed by NRTLs.

Certification; Certified; Certificate: The documented results of a successful Certification Testing.

Certified Equipment: Equipment that has passed all required Certification Tests.

Commissioning Test: A test performed during the commissioning of all or part of a Generating Facility to achieve one or more of the following:

- Verify specific aspects of its performance;
- Calibrate its instrumentation; and
- Establish instrument or Protective Function set-points.

Customer: The entity that receives or is entitled to receive Distribution Service through the MVU's Distribution System.

Dedicated Transformer; Dedicated Distribution Transformer: A transformer that provides electricity service to a single Customer. The Customer may or may not have a Generating Facility.

Device: A mechanism or piece of equipment designed to serve a purpose or perform a function. The term may be used interchangeably with the terms "equipment" and "function" without intentional difference in meaning. See also Function and Protective Function.

Distribution Service: All services required by, or provided to, a Customer pursuant to the approved rate schedules and rules of MVU.

Distribution System: All electrical wires, equipment, and other facilities owned or provided by MVU, by which MVU provides Distribution Service to its Customers.

Emergency: An actual or imminent condition or situation, which jeopardizes MVU's Distribution System Integrity.

Field Testing: Testing performed in the field to determine whether equipment meets MVU's requirements for safe and reliable Interconnection.

Function: Some combination of hardware and software designed to provide specific features or capabilities. Its use, as in Protective Function, is intended to encompass a range of implementations from a single-purpose device to a section of software and specific pieces of hardware within a larger piece of equipment to a collection of devices and software.

Generating Facility: All Generators, electrical wires, equipment, and other facilities owned or provided by Producer for the purpose of producing electric power.

Generator: A device converting mechanical, chemical or solar energy into electrical energy, including all of its protective and control Functions and structural appurtenances. One or more Generators comprise a Generating Facility.

Gross Nameplate Rating; Gross Nameplate Capacity: The total gross generating capacity of a Generator or Generating Facility as designated by the manufacturer(s) of the Generator(s).

Host Load: The electrical power, less the Generator auxiliary load, consumed by the Customer, to which the Generating Facility is connected.

Initial Review: The review by MVU, following receipt of an Application, to determine the following: (a) the Generating Facility qualifies for Simplified Interconnection; or (b) if the Generating Facility can be made to qualify for Interconnection with a Supplemental Review determining any additional requirements.

In-rush Current: The current determined by the In-rush Current Test.

Interconnection Agreement: An agreement between MVU and the Producer that gives certain rights and obligations to effect or end Interconnection.

Interconnection; Interconnected: The physical connection of a Generating Facility in accordance with the requirements of this Rule so that Parallel Operation with MVU's Distribution System can occur (or 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 a 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 Study: A study to establish the requirements for Interconnection of a Generating Facility with MVU's Distribution System.

Island; Islanding: A condition on MVU's Distribution System in which one or more Generating Facilities deliver power to Customers using a portion of MVU's Distribution System that is electrically isolated from the remainder of MVU's Distribution System.

Line Section: That portion of MVU's Distribution System connected to a Customer bounded by automatic sectionalizing devices or the end of the distribution line.

Load Carrying Capability: The maximum electrical load that may be carried by a section of MVU's Distribution System consistent with reliability and safety under the circumstances being evaluated.

Metering: The measurement of electrical power in kW and/or energy in kWh, and, if necessary, reactive power in kVAR at a point, and its display to MVU, as required by this Rule.

Metering Equipment: All equipment, hardware, software including meter cabinets, conduit, etc., that are necessary for Metering.

Momentary Parallel Operation: The interconnection of a Generating Facility to the Distribution System for one second (60 cycles) or less.

Nationally Recognized Testing Laboratory (NRTL): A laboratory accredited to perform the Certification Testing requirements under this Rule.

Net Energy Metering: Metering for the receipt and delivery of electricity between the Producer and MVU over a timeframe established per the applicable NEM rate, the difference between these two values yields either net consumption or surplus over the given time period.

Net Generation Output Metering: Metering of the net electrical power output in kW or energy in kWh, from a given Generating Facility. 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. For a Generator with no Host Load and/or Public Utilities Code Section 218 Load (Section 218 Load), Metering that is located at the Point of Common Coupling. For a Generator with Host Load and/or Section 218 Load, Metering that is located at the Generator but after the point of auxiliary load(s) and prior to serving Host Load and/or Section 218 Load.

Net Nameplate Rating: The Gross Nameplate Rating minus the consumption of electrical power of a Generator or Generating Facility as designated by the manufacturer(s) of the Generator(s).

Network Service: More than one electrical feeder providing Distribution Service at a Point of Common Coupling.

Non-Export; Non-Exporting Scheme: Designed to prevent the transfer of electrical energy from the Generating Facility to MVU's Distribution System.

Non-Islanding: Designed to detect and disconnect an Unintended Island with matched load and generation. Reliance solely on under/over voltage and frequency trip is not considered sufficient to qualify as Non-Islanding.

Parallel Operation: The simultaneous operation of a Generator with power delivered or received by MVU while Interconnected. For the purpose of this Rule, Parallel Operation includes only those Generating Facilities that are Interconnected with MVU's Distribution System for more than 60 cycles (one second).

Paralleling Device: An electrical device, typically a circuit breaker, operating under the control of a synchronization function or by a qualified operator to connect an energized generator to an energized electric power system or two energized power systems to each other.

Periodic Test: A test performed on part or all of a Generating Facility/Interconnection Facilities at pre-determined time or operational intervals to achieve one or more of the following:

- Verify specific aspects of its performance
- Calibrate instrumentation
- Verify and re-establish instrument or Protective Function set-points.

Point of Common Coupling (PCC): The transfer point for electricity between the electrical conductors of MVU and the electrical conductors of the Producer.

Point of Common Coupling Metering: Metering located at the Point of Common Coupling. This is the same Metering as Net Generation Metering for Generating Facilities with no Host Load and/or Section 218 Load.

Point of Interconnection: The electrical transfer point between a Generating Facility and MVU's Distribution System. This may or may not be coincident with the Point of Common Coupling.

Producer: The entity that executes an Interconnection Agreement with MVU. The Producer may or may not own or operate the Generating Facility but is responsible for the rights and obligations related to the Interconnection Agreement.

Production Test: A test performed on each device coming off the production line to verify certain aspects of its performance.

Protective Function(s): The equipment, hardware and/or software in a Generating Facility (whether discrete or integrated with other functions) whose purpose is to protect against Unsafe Operating Conditions.

Prudent Electrical Practices: Those practices, methods, and equipment, as changed from time to time, that are commonly used in prudent electrical engineering and operations to design and operate electric equipment lawfully and with safety, dependability, efficiency and economy.

Scheduled Operation Date: The date specified in the Interconnection Agreement when the Generating Facility is, by the Producer's estimate, expected to begin operation pursuant to this Rule.

Secondary Network: A network supplied by several primary feeders suitably interlaced through the area in order to achieve acceptable loading of the transformers under emergency conditions and to provide a system of extremely high service reliability. Secondary networks usually operate at 600 V or lower.

Section 218 Load: Electrical power that is supplied in compliance with California Public Utilities Code Section 218. Public Utilities Code Section 218 defines an "Electric Corporation" and provides conditions under which a transaction involving a Generating Facility would not classify a Producer as an Electric Corporation. These conditions relate to "over-the-fence" sale of electricity from a Generating Facility without using MVU's Distribution System.

Short Circuit (Current) Contribution Ratio (SCCR): The ratio of the Generating Facility's short circuit contribution to the short circuit contribution provided through MVU's Distribution System for a three-phase fault at the high voltage side of the distribution transformer connecting the Generating Facility to MVU's system.

Simplified Interconnection: Interconnection conforming to the Initial Review requirements under this Rule, as determined by Section I.

Single Line Diagram; Single Line Drawing: A schematic drawing, showing the major electric switchgear, Protective Function devices, wires, Generators, transformers and other devices, providing sufficient detail to communicate to a qualified engineer the essential design and safety of the system being considered.

Special Facilities: As defined in MVU's Rules governing Special Facilities.

Starting Voltage Drop: The percentage voltage drop at a specified point resulting from In-rush Current. The Starting Voltage Drop can also be expressed in volts on a particular base voltage, (e.g., 6 volts on a 120-volt base, yielding a 5% drop).

Supplemental Review: A process wherein MVU further reviews an Application that fails one or more of the Initial Review Process steps. The Supplemental Review may result in one of the following: (a) approval of Interconnection; (b) approval of Interconnection with additional requirements; or (c) required modifications for interconnection.

System Integrity: The condition under which MVU's Distribution System is deemed safe and can reliably perform its intended functions in accordance with the safety and reliability rules of MVU.

Telemetering: The electrical or electronic transmittal of Metering data in real-time to MVU.

Transfer Trip: A Protective Function that trips a Generating Facility remotely by means of an automated communications link controlled by MVU.

Type Test: A test performed on a sample of a particular model of a device to verify specific aspects of its design, construction and performance.

Unintended Island: The creation of an island, usually following a loss of a portion of MVU's Distribution System, without the approval of MVU.

Unsafe Operating Conditions: Conditions that, if left uncorrected, could result in hard to personnel, damage to equipment, loss of System Integrity or operation outside pre-established parameters required by the Interconnection Agreement.

Visible Disconnect: An electrical switching device that can separate the Generating Facility from the Distribution System and is designed to allow visible verification that separation has been accomplished. This requirement can be met by opening the enclosure to observe the contact separation.

C. GENERAL REQUIREMENTS

1. Authorization Required to Operate:

A Producer must comply with this Rule and receive MVU's express written permission before Parallel Operation of its Generating Facility with MVU's Distribution System. MVU shall apply this Rule in a non-discriminatory manner and shall not unreasonably withhold its permission for Parallel Operation of Producer's Generating Facility with MVU's Distribution System**.**

2. Access to Premises:

MVU may enter Customer's premises without prior notice (a) to inspect, at all reasonable hours, Customer's protective devices and read or test any meter for the Facility and (b) to

disconnect, at any time, without notice, the Facility if, in MVU's sole opinion, a hazardous condition exists and that immediate action is necessary to protect persons, or MVU's facilities, or property of others from damage or interference caused by (1) Customer's Facility, or (2) Customer's failure to comply with the requirements of this Rule.

3. Separate Agreements Required for Other Services:
Producer requiring other electric services from MVU including, but not limited to, Distribution Service during periods of curtailment or interruption of the Producer's Generating Facility, will comply with these Rules and agrees to abide by all requirements as set forth by MVU for such services in accordance with MVU's City Council-approved Electric Rules.

4. Transmission Service Not Provided with Interconnection:
Interconnection with MVU's Distribution System under this Rule does not provide a Producer any rights to utilize MVU's System for the transmission, distribution, or wheeling of electric power.

5. Design Reviews and Inspections:
MVU shall have the right to review the design of a Producer's Generating and/or Interconnection Facilities and to inspect a Producer's Generating and/or Interconnection Facilities prior to the commencement of Parallel Operation with MVU's Distribution System. MVU may require a Producer to make modifications as necessary to comply with the requirements of this Rule. MVU's review and authorization for Parallel Operation shall not be construed as confirming or endorsing the Producer's design or as warranting the Generating and/or Interconnection Facilities' safety, durability or reliability. MVU shall not, by reason of such review or lack of review, be responsible for the strength, adequacy or capacity of such equipment**.**

6. Design Requirements:

a. Customer's Facility, and all portions of it used to provide or distribute electrical power and parallel interconnection with MVU's distribution equipment shall be designed, installed, constructed, operated, and maintained in compliance with this Rule. Compliance with this section is mandatory.
b. Customer shall conform to all applicable solar or wind electrical generating system safety and performance standards established by this rule, the National Electrical Code (NEC), the Institute of Electrical and Electronics Engineers (IEEE), and accredited testing laboratories such as Underwriters Laboratories, and where applicable, rules of the Public Utilities Commission regarding safety and reliability, and applicable building codes.

7. Testing and Compliance:
Generating facilities must meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories. All generating facilities must have a warranty of at least 10 years for all equipment and the associated installation from the system provider (not from MVU). All major solar system components (including

PV panels and other generation equipment, inverters and meters) must be on the verified equipment list maintained by the CEC. Any other equipment, as determined by MVU, must be verified as having safety certification from a Nationally Recognized Testing Laboratory.

8. Sized to offset all or part of load:

The Customer's generating facilities must be sized to offset part or all of the customer's own electrical requirements and cannot be oversized.

9. Transferability of Generating Facility:

A new Customer of record who owns, rents, or leases a premise that includes a generating facility that was approved by MVU for parallel operation prior to the new Customer moving in and/or taking electric service with MVU will take service under this Schedule as long as the requirements of this Schedule are met. This provision also applies to premises where the developer/contractor establishes the interconnection.

10. System Modifications:

Existing generating facilities currently under a legacy NEM Schedule that are modified such that: (1) the generating capacity or output increases by 10% or more; or (2) adding battery storage will be placed under the most recent NEM Schedule.

11. NEM Schedule Agreement:

Existing Customers under a legacy NEM schedule will remain under their legacy Schedule for a period of fifteen (15) years from the original year in which their generating facility was interconnected to MVU's grid as determined from the date the Customer received the permission to operate (PTO), and then will be switched to the most recent NEM schedule or any otherwise applicable rate schedule. Existing Customers under Schedule NEM can request to be placed under the most recent NEM Schedule at any time; the Customer's account will be trued up at the time of the request. This means that any outstanding balance due or credit due will be applied to the next regular billing.

12. Interruption or Reduction of Deliveries:

a. MVU shall not be obligated to accept, and MVU may require Customer to interrupt or reduce, deliveries of energy to MVU: (a) when necessary in order to construct, install, maintain, repair, replace, remove, investigate, or inspect any of MVU's equipment or part of the MVU system; or (b) if MVU determines that curtailment, interruption, or reduction of receipt of energy from Customer's Facility is necessary because of emergencies, forced outages, force majeure, or compliance with prudent electrical practices.

b. Notwithstanding any other provision of this Rule, if at any time MVU, in its sole discretion, determines that either (a)the Facility may endanger MVU personnel or members of the general public, or (b) the continued operation of Customer's Facility may impair the integrity of MVU's electric distribution system, MVU shall have the right to disconnect Customer's Facility from MVU's electric distribution system. Customer's Facility shall remain disconnected until such time as MVU is satisfied that the condition(s) referenced in (a) or (b) of this paragraph have been corrected, and MVU shall

not be obligated to compensate Customer for any loss of use of generation or energy during any and all periods of such disconnection.

13. Maintenance and Permits:

Customer shall: (a) 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, requirements of Section 5 above, and (b) to the extent that future requirements may require, obtain any governmental authorizations or permits required for the operation of the Facility. Customer shall reimburse MVU for any and all losses, damages, claims, penalties, or liability MVU 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.

14. Indemnity and Liability by Customer:

a. Customer shall indemnify and hold MVU, its directors, officers, agents and employees harmless against all loss, damages expense and liability to third persons for injury to or death of persons or injury to property caused by the Customer's engineering design, construction, installation, ownership, maintenance or operations of the Facility in connection with this Agreement by reason of omission or negligence, whether active or passive. Customer shall, on MVU's request, defend any suit asserting a claim covered by this indemnity. Customer shall pay all costs that may be incurred by MVU in enforcing this indemnity.
b. Neither MVU, its officers, agents nor employees shall be liable for any claims, demands, costs, losses, causes of action, or any other construction, ownership, maintenance or operation of, or making of replacements, additions or betterment to, Customer's Facility except to the extent actually caused by the sole and gross negligence of the MVU.
c. Neither MVU, its officers, agents nor employees shall be liable for damages of any kind to the Facility caused by any electrical disturbance of the MVU system or on the system of another, whether or not the electrical disturbance results from the negligence of MVU.

D. PROTECTION REQUIREMENTS

1. General Interconnection and Protective Function Requirements

The Protective Functions and requirements of this Rule are designed to protect MVU's Distribution System and not the Generating Facility. A Producer shall be solely responsible for providing adequate protection for its Generating Facility and Interconnection Facilities. The Producer's Protective Functions shall not impact the operation of other Protective Functions utilized on MVU's Distribution System in a manner that would affect MVU's capability of providing reliable service to its Customers.

a. Protective Functions Required Generating Facilities operating in parallel with MVU's Distribution System shall be equipped with the following Protective Functions to sense abnormal conditions on MVU's Distribution System and cause the Generating Facility to be automatically disconnected from MVU's Distribution System or to prevent the Generating Facility from being connected to MVU's Distribution System inappropriately:

1) Over and under voltage trip functions and over and under frequency trip functions;

2) 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 the Generating Facility from reconnecting with MVU's Distribution System unless MVU's Distribution System service voltage and frequency is within the Voltage Range of 106V to 127V (on a 120V basis), inclusive, and a frequency range of 59.3 Hz to 60.5 Hz, inclusive, and are stable for at least 60 seconds; and

3) A function to prevent the Generating Facility from contributing to the formation of an Unintended Island and cease to energize the MVU's Distribution System within two seconds of the formation of an Unintended Island.

The Generating Facility shall cease to energize MVU's Distribution System for faults on MVU's Distribution System circuit to which it is connected. The Generating Facility shall cease to energize MVU's Distribution circuit prior to re-closure by MVU' Distribution System equipment.

b. Momentary Paralleling Generating Facilities. With MVU's approval, the transfer switch or scheme used to transfer the Producer's loads from MVU's Distribution System to Producer's Generating Facility may be used in lieu of the Protective Functions required for Parallel Operation.

c. Purpose of Protective Functions. The Protective Functions and requirements of this Rule are designed to protect MVU's Distribution System and not the Generating Facility. A Producer shall be solely responsible for providing adequate protection for its Generating Facility and Interconnection Facilities. The Producer's protective devices utilized on the Distribution System in a manner that would affect MVU's capability of providing reliable service to its Customers.

d. Suitable Equipment Required. Circuit breakers or other interrupting equipment located at the Point of Common Coupling 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. Producer's Generating Facility 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 MVU's Distribution System.

e. Visible Disconnect Required. When required by MVU's operating practices, the Producer shall furnish and install a ganged, manually-operated isolating switch (or a comparable device mutually agreed upon by MVU and the Producer) near the Point of Interconnection to isolate the Generating Facility from MVU's Distribution System. The device does not have to be rated for load break nor provide over-current protection.

The device must:

1) allow visible verification that separation has been accomplished. (This requirement may be met by opening the enclosure to observe contact separation.)

2) include markings or signage that clearly indicate open and closed positions.

3) be capable of being reached quickly and conveniently 24 hours a day by MVU personnel for construction, operation, maintenance, inspection, testing or reading, without obstacles or requiring those seeking access to obtain keys, special permission, or security clearances.

4) be capable of being locked in the open position.

5) be clearly marked on the submitted single line diagram and its type and location approved by the MVU prior to installation. If the device is not adjacent to the Point of Common Coupling, permanent signage must be installed at an MVU-approved location providing a clear description of the location of the device.

Generating Facilities with Non-Islanding inverters totaling one (1) kilovolt-ampere (kVA) or less are exempt from this requirement.

f. Drawings Required. Prior to Parallel Operation or Momentary Parallel Operation of the Generating Facility, MVU shall approve the Producer's Protective Function and control diagrams. Generating Facilities equipped with Protective Functions and a control scheme previously approved by MVU for system-wide application or only Certified Equipment may satisfy this requirement by reference to previously approved drawings and diagrams.

g. Generating Facility Conditions Not Identified. In the event this Rule does not address the Interconnection conditions for a particular Generating Facility, MVU and Producer may agree upon other arrangements.

2. Prevention of Interference:

The Producer shall not operate Generating or Interconnection Facilities that superimpose a voltage or current waveform upon MVU's Distribution System that interferes with MVU operations, service to MVU Customers, or communication facilities. If such interference occurs, the Producer must diligently pursue and take corrective action at its own expense after being given notice and reasonable time to do so by MVU. If the Producer does not take corrective action in a timely manner, or continues to operate the facilities causing interference without restriction or limit, MVU may, without liability, disconnect the Producer's facilities from MVU's Distribution System. To eliminate undesirable interference caused by its operation, each Generating Facility shall meet the following criteria:

a. **Voltage Regulation**: The Generating Facility shall not actively regulate the voltage at the Point of Common Coupling while in parallel with MVU's Distribution System.

b. **Operating Voltage Range**: The voltage ranges in Table D.1 define protective trip limits for the Protective Function and are not intended to define or imply a voltage regulation Function. Generating Facilities shall cease to energize MVU's Distribution System within the prescribed trip time whenever the voltage at the Point of Common Coupling deviates from the allowable voltage operating range. The Protective Function shall detect and respond to voltage on all phases to which the Generating Facility is connected.

1) Generating Facilities (30 kVA or less). Generating Facilities with a Gross Nameplate Rating of 30 kVA or less shall be capable of operating within the voltage range normally experienced on MVU's Distribution System. The operating range shall be selected in a manner that minimizes nuisance tripping between 106 volts and 132 volts on a 120-volt base (88%-110% of nominal voltage). Voltage shall be detected at either the Point of Common Coupling or the Point of Interconnection.

2) Generating Facilities (greater than 30 kVA). MVU may require adjustable operating voltage settings. In the absence of such requirements, the Generating Facility shall operate at a range between 88% and 110% of the applicable interconnection voltage. Voltage shall be detected at either the Point of Common Coupling or the Point of Interconnection, with settings compensated to

account for the voltage at the Point of Common Coupling, Generating Facilities that are Certified Non-Islanding or that meet one of the options of the Export Screen (Section I.3.b) may detect voltage at the Point of Interconnection without compensation.

3) Voltage Disturbances. Whenever MVU's Distribution System voltage at the Point of Common Coupling varies from and remains outside normal (nominally 120 volts) for the predetermined parameters set forth in Table D-1, the Generating Facility's Protective Functions shall cause the Generator(s) to become isolated from MVU's Distribution System:

Table D.1 Voltage Trip Settings

Voltage at Point of Common Coupling		Maximum Trip Time* # of Cycles	
(Assuming 120 V Base)	% of Nominal Voltage	(Assuming 60Hz Nominal)	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 or equal to 106 volts but less than 132 volts	Greater than or equal to 88% but less than 110%	Normal Operation	
Greater than or equal to 132 volts but less than 144 volts	Greater than or equal to 110% but less than 120%	120 Cycles	2 Seconds
Greater than 144Volts	Greater than 120%	10 Cycles	0.16 Seconds

* *"Maximum Trip time" refers to the time between the onset of the abnormal condition and the Generating Facility ceasing to energize MVU's Distribution System. Protective Function sensing equipment and circuits may remain connected to MVU'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 Nameplate Rating greater than 30 kVA, set points shall be field adjustable and different voltage set points and trip times from those in Table D.1 may be negotiated with MVU.*

c. **Paralleling**. The Generating Facility shall parallel with MVU's Distribution System without causing a voltage fluctuation at the Point of Common Coupling greater than ±5% of the prevailing voltage level of MVU's Distribution System at the Point of Common Coupling.

d. **Flicker**. The Generating Facility shall not create objectionable flicker for other Customers on MVU's Distribution System. To minimize the adverse voltage effects experienced by other Customers (IEEE1547-4.3.2), flicker at the Point of Common Coupling caused by the Generating Facility should not exceed the limits defined by the "Maximum Borderline of Irritation Curve" identified in IEEE 519-1992 (IEEE Recommended Practices and Requirements for Harmonic Control in Electric Power Systems, IEEE STD 519-1992). This requirement is necessary to minimize the adverse voltage affects experienced by other Customers on MVU's Distribution System. Generators may be connected and brought up to synchronous speed (as an induction motor) provided these flicker limits are not exceeded.

e. **Integration with MVU's Distribution System Grounding**. The grounding scheme of the Generating Facility interconnection shall not cause over-voltages that exceed the rating of the equipment connected to the MVU's Distribution System and shall not disrupt the coordination of the ground fault protection on the MVU's Distribution System (IEEE1547-4.1.2) (See Section I.3.h).

f. **Frequency**: MVU controls system frequency, and the Generating Facility shall operate in synchronism with the MVU's Distribution System. Whenever MVU's Distribution System frequency at the Point of Common Coupling is outside of the acceptable operating range (59.3-60.5 Hertz) for more than ten cycles, the Generating Facility's Protective Functions shall cease to energize MVU's Distribution System.

g. **Harmonics.** Harmonic distortion shall be in compliance with IEEE 519.

h. **Direct Current Injection**. Generating Facilities should not inject direct current greater than 0.5% of rated output current into MVU's Distribution System.

i. **Power Factor**. Each Generator in a Generating Facility shall be capable of operating at some point within a power factor range from 0.9 leading to 0.9 lagging. Operation outside this range is acceptable provided the reactive power of the Generating Facility is used to meet the reactive power needs of the Host Loads or that reactive power is otherwise provided under Rate Schedule by MVU. The Producer shall notify MVU if it is using the Generating Facility for power factor correction. Unless otherwise agreed upon by the Producer and MVU, Generating Facilities shall automatically regulate power factor, not voltage, while operating in parallel with MVU's Distribution System.

j. **Unintended Islanding**. Generating Facilities must mitigate their potential contribution to an Unintended Island. This can be accomplished by one of the following options: (1) incorporating certified Non-Islanding control functions into the Protective Functions, or (2) installation of non-export

relays and protective equipment or (3) verifying that local loads always sufficiently exceed the Net Nameplate Rating of the Generating Facility.

k. **Fault Detection**. A Generating Facility shall be equipped with Protective Functions designed to detect Distribution System faults, both line-to-line and line-to-ground, and promptly cease to energize the Distribution System in the event of a fault. For a Generating Facility that cannot detect these faults within two seconds, a transfer trip or equivalent function may be required. Reclose-blocking of MVU's affected recloser(s) may also be required.

3. Technology Specific Requirements:

a. Three-Phase Synchronous Generators. For three-phase Generators, the Generating Facility circuit breakers shall be three-phase devices with electronic or electromechanical control. The Producer shall be responsible for properly synchronizing its Generating Facility with MVU's Distribution System by means of either manual or automatic synchronizing 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 D.2.d (Flicker) (IEEE1547-4.2.5). Unless otherwise agreed upon by the Producer and MVU, synchronous Generators shall automatically regulate power factor, not voltage, while operating in parallel with MVU's Distribution System. A power system stabilization function is specifically not required for Generating Facilities under 10 MW Net Nameplate 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 MVU's Distribution System's 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 the Producer's side of the Point of Common Coupling, MVU must review these measures. Additional equipment may be required as determined in a Supplemental Review or an Interconnection Study.

c. Inverters. Utility-interactive inverters do not require separate synchronizing equipment. Non-utility-interactive or "stand-alone" inverters shall not be used for Parallel Operation with MVU's Distribution System.

d. Single-Phase Generators**.** For single-phase Generators connected to a shared single-phase secondary system, the maximum Net Nameplate Rating of the Generating Facilities shall be 20 kVA. Generators connected to a center-tapped neutral 240-volt service must be installed such that no more than 6 kVA of imbalanced power is applied to the two "legs" of the 240-volt service. For Dedicated Distribution Transformer services, the maximum Net Nameplate

Rating of a single-phase Generating Facility shall be the transformer nameplate rating.

E.INTERCONNECTION FACILITIES AND DISTRIBUTION SYSTEM MODIFICATIONS

1. Scope and Ownership of Interconnection Facilities and Distribution System Modifications

a. **Scope**. Parallel Operation of Generating Facilities may require Interconnection Facilities or modifications to MVU's Distribution System ("Distribution System modifications"). The type, extent and costs of Interconnection Facilities and Distribution System modifications shall be consistent with this Rule and determined through the Supplemental Review and/or Interconnection Studies described in the application process.

b. **Ownership**. Interconnection Facilities installed on Producer's side of the Point of Common Coupling may be owned, operated and maintained by the Producer or MVU. Interconnection Facilities installed on MVU's side of the Point of Common Coupling and Distribution System modifications shall be owned, operated and maintained only by MVU.

2. Responsibility of Costs of Interconnecting a Generating Facility

a. **Review, Study, and Additional Commissioning Test Verification (pre-parallel inspections) Costs**. A producer shall be responsible for the reasonably incurred costs of the review's studies, and additional Commissioning Test verifications (pre-parallel inspections) conducted pursuant to the application section of this Rule. If the initial Commissioning Test verification (pre-parallel inspection) is not successful through no fault of MVU, MVU may impose upon the Producer a cost-based charge for subsequent Commissioning Test verifications (pre-parallel inspections). All Costs for additional Commissioning Test verifications (pre-parallel inspections) shall be paid by Producer within thirty days of receipt of MVU's invoice. Additional costs, if any, will be specified on the invoice. If the initial Commissioning test (pre-paralleling inspection) is not successful through the fault of the MVU, that visit will not be considered the initial Commissioning Test (pre-parallel inspection).

b. **Facility Costs**. A Producer shall be responsible for all costs associated with Interconnection Facilities owned by the Producer. The Producer shall also be responsible for any costs reasonably incurred by MVU in providing, operating, or maintaining the Interconnection Facilities and Distribution System modifications required solely for the Interconnection of the Producer's Generating Facility with MVU's Distribution System.

c. **Separation of Costs**. Should MVU combine the installation of Interconnection Facilities or Distribution System modifications required for the Interconnection of a Generating Facility with modifications to MVU's Distribution System to serve other Customers or Producers, MVU shall not include the costs of such separate or incremental facilities in the amounts billed to the Producer.

3. Installation of Interconnection Facilities and Distribution System Modifications

a. **Agreement Required**. The costs for Interconnection Facilities and Distribution System modifications shall be paid by the Producer pursuant to the provisions contained in the Interconnection Agreement. Where the type and extent of the Interconnection Facilities and Distribution System Improvements warrant additional detail, the detail shall be found in a separate agreement between the Producer and MVU, and MVU's applicable rate schedules and rules for Added Facilities.

b. **Interconnection Facilities and Distribution System Modifications**. Except as provided for in Section E.3.c. of this Rule, Interconnection Facilities connected to MVU's side of the Point of Common Coupling and Distribution System modifications shall be provided, installed, owned and maintained by MVU at Producer's expense.

c. **Third-Party Installations**. Subject to the approval of MVU, a Producer may at its option employ a qualified contractor to provide and install Interconnection Facilities or Producer paid Distribution System modifications, to be owned and operated by MVU, on MVU's side of the Point of Common Coupling. Such Interconnection Facilities and Distribution System modifications shall be installed in accordance with MVU's design and specifications. Upon final inspection and acceptance by MVU, the Producer shall transfer ownership of such Producer installed Interconnection Facilities or Distribution System modifications to MVU and such facilities shall thereafter be owned and maintained by MVU. The Producer shall pay MVU's reasonable cost of design, administration, and monitoring of the installation for such facilities to ensure compliance with MVU's requirements. The Producer shall also be responsible for all costs associated with the transfer of Producer installed Interconnection Facilities and Distribution System modifications to MVU.

F. METERING, MONITORING AND TELEMETRY

1. General Requirements: All Generating Facilities shall be metered in accordance with this Section F and shall meet all applicable standards of MVU contained in MVU's applicable rules and published MVU manuals dealing with specifications.

2. **Metering By Non-MVU** Parties: The ownership, installation, operation, reading and testing of revenue Metering Equipment for Generating Facilities shall be by MVU.

3. **Net Generation Output Metering (NGOM)**: Generating Facilities' Customers may be required to install NGOM for evaluation, monitoring and verification purposes, to satisfy applicable CAISO reliability requirements, and for Distribution System planning and operations.

   The relevant factors in determining the need for NGOM are as listed below:

   a. Data requirements in proportion to need for information;

   b. Producer's election to install equipment that adequately addresses MVU's operational requirements;

   c. Accuracy and type of required Metering consistent with purposes of collecting data;

   d. Cost of Metering relative to the need for and accuracy of the data;

   e. The Generating Facility's size relative to the cost of the Meter/monitoring;

   f. Other means of obtaining the data (e.g., Generating Facility logs, proxy data etc.);

   g. Requirements under any interconnection Agreement with the Producer.

   The requirements in this Section may not apply to Metering of Generating Facilities operating under MVU's Net Energy Metering Rate Schedule pursuant to the California Public Utilities Cod Section 2827, et seq. Nothing in this Section F.3 supersedes Section B.4.

4. **Point of Common Coupling Metering**: For purposes of assessing MVU charges for retail service, the Producer's PCC Metering shall be a bi-directional meter so that power deliveries to and from the Producer's site can be separately recorded. Alternately, the Producer may, at its sole option and cost, require MVU to install multi-metering equipment to separately record power deliveries to MVU's Distribution System and retail purchases from MVU. Where necessary, such PCC Metering shall be designed to prevent reverse registration.

5. **Telemetering**: If the nameplate rating of the Generating Facility is 1 MW or greater, Telemetering equipment at the Net Generator Output Metering location may be required at the Producer's expense. If the Generating Facility is Interconnected to a portion of MVU's Distribution System operating at a voltage below 10 kV, then Telemetering equipment may be required on Generating Facilities 250 kW or greater. MVU shall only require Telemetering to the extent

that less intrusive and/or more cost effective options for providing the necessary data in real time are not available.

6. **Location**: Where MVU-owned Metering is located on the Producer's premises, Producer shall provide, at no expense to MVU, a suitable location for all such Metering Equipment.

7. **Costs of Metering**: The Producer will bear all costs of the Metering required by this Rule, including the incremental costs of operating and maintaining the Metering Equipment.

G. DISPUTE RESOLUTION PROCESS

The following procedures will apply for disputes arising from this Rule:

1. The City Council shall have jurisdiction to interpret, add, delete or modify any provision of this Rule or of any agreements entered into between MVU and the Producer to implement this Rate Schedule ("The Implementing Agreements") and to resolve disputes regarding MVU's performance of its obligations under its rules, the applicable agreements, and requirements related to the Interconnection of the Producer's Generating or Interconnection Facilities pursuant to this Rule.

2. The dispute shall be submitted in writing by the Producer to MVU. Authorized representatives from both Parties shall meet and confer to try to resolve the dispute. If the Parties cannot resolve the dispute, the dispute will be submitted to the City Council for resolution. Their decision shall be final.

3. Pending resolution of any dispute under this Section, the Parties shall proceed diligently with the performance of their respective obligations under this Rule and the Implementing Agreements, unless the Implementing Agreements have been terminated. Disputes as to the application and implementation of this Section shall be subject to resolution pursuant to the procedures set forth in this Section.

H. SYSTEM SIZING REQUIREMENTS

1. Residential Systems

a. **12 Months of Usage Data Exists**
Residential Systems must be designed such that they do not produce more power than they consume on an annual basis. This means that the estimated output of the generating facility, using the CEC-AC nameplate rating for inverter-based generating facilities, must not exceed the Customer's previous annual usage in kWh.

b. **12 Months of Usage Data Does Not Exist**
In the event that there is less than 12 months of previous recorded usage data, the following equation will be used to determine the maximum allowable CEC-AC nameplate rating for the inverter-based generating facility in watts:

1692 x [Number of Dwelling Units] + 0.75 x [Dwelling conditioned floor area in square feet]

c. **Electric Vehicle Usage Calculation Proration**
If the Customer enrolls in the Electric Vehicle Off-Peak Charging Discount Program, they can prorate their calculated usage or maximum allowable system size as follows:

i. The number of months that will be used to estimate the prorated usage from the electric vehicle shall be calculated as:
Number of Months = 12 – [number of months the vehicle has been registered to the Customer at the address]
If the Number of Months is calculated to be negative, no proration will be allowed.

ii. If the Customer has 12 months of recorded usage data, the following equation will be used to determine their annual usage in kWh:

iii. [Customer's previous annual usage in kWh] + 500 kWh x Number of Months

iv. If the Customer has less than 12 months of recorded usage data, the following equation will be used to determine the maximum allowable CEC-AC nameplate rating for the inverter-based generating facility in watts:
1692 x [Number of Dwelling Units] + 0.75 x [Dwelling conditioned floor area in square feet] + 170 x Number of Months

2. Commercial or Industrial Systems

a. **Expedited Interconnection**

The estimated output of the Generating Facility measured by the CEC-AC Nameplate capacity of the proposed system must not exceed 50% of the Customer's verified annual minimum daytime load. If there are less than 12 months of previous recorded usage data, the maximum allowable size in watts will be determined by MVU through Supplemental Review.

b. Supplemental Review Required

Supplemental review will be required if the Customer intends to install a generating facility who's estimated output, measured by the CEC-AC Nameplate capacity of the proposed system, exceeds 50% of the Customer's verified annual minimum daytime load, or if there are less than 12 months of previous recorded usage data available. Supplemental review will follow the following process and requirements:

i. **Evaluation and Calculation of Minimum Daytime Load** - For customers who do not have at least 12 months of verified energy usage data, MVU will perform a calculation to determine the minimum daytime load. This value will be used to assess whether the proposed

generation system triggers the supplemental review threshold.

a. Determination Notification: MVU will provide the calculated minimum daytime load determination to the customer, who will then select which compliance path they wish to follow (non-export system or battery-supported system).
b. Compliance Paths: The customer must notify MVU of their selected compliance path before advancing further in the interconnection process. (i.e. 50% minimum daytime load, 100% minimum daytime load or up to 100% annual usage)

ii. **100% of Minimum Daytime Load with Non-Export Relays –** Customers can install solar generation systems up to 100% of their minimum daytime load with the installation of Non-Export Relays

a. Installation of Non-Export Relays
    1. Customers must install a utility-grade non-export relay system that ensures zero export of electricity to MVU's distribution grid at the point of interconnection.
    2. The non-export condition remains in place indefinitely unless the system is later modified to incorporate battery storage, subject to MVU review and approval.
b. Responsibilities
    1. Customer - Responsible for installing, testing, commissioning, and initially certifying both the solar PV system and the non-export relay system.
    2. MVU - Conducts a final inspection to verify correct non-export functionality.
        i. If the non-export relay is standalone, ownership is deeded to MVU at no cost after acceptance.
        ii. If non-export functionality is integrated within inverter equipment, ownership remains with the customer.
c. Enforcement
    1. If MVU identifies a malfunction or failure in non-export functionality, it will issue a written notice requiring corrective action within 20 business days.
    2. Failure to correct the issue within this window may result in MVU disconnecting and locking out the system until proper operation is restored and verified.

iii. **Up to 100% of Annual Usage with Battery Energy Storage System (BESS) –** Customers who wish to export energy up to 100% of their annual usage must follow one of two options under this section. These pathways ensure MVU can safely manage energy export while maintaining grid reliability.

a. Purchase, Install, and Transfer Ownership of BESS
    1. BESS Procurement and Installation - The customer must purchase, install, and commission a battery energy storage system (BESS) on their project site.
    2. Sizing Requirements - The BESS must be sized at a minimum of 50% of the CEC-AC nameplate capacity of

the proposed generating facility. The calculated size will be rounded up to the nearest 250 kW increment. For example, if the generating facility is sized at 720kW, the 50% calculation yields 360 kW, the customer must size the battery system to at least 500 kW.

3. Ownership Transfer - Once installed and commissioned, the batteries and the physical site they occupy, and a path to access must be deeded over to MVU at no cost. MVU will then take full ownership, operation, and maintenance responsibility for the BESS.

b. Install Non-Export Relays and Provide a Dedicated BESS Site

1. Non-Export Relay Installation - The customer must initially install utility-grade non-export relays that actively prevent export of electricity to MVU's grid. These must remain in operation until the BESS is installed, commissioned, and placed into service by MVU.
2. Dedicated BESS Site - The customer must deed a site to MVU, meeting the minimum size and access requirements outlined in the table below. MVU will then procure, install, and commission the BESS at that site.

Installed Solar Capacity	**Option A: Smaller Lots**	**Option B: Larger Lots**
Up to 1 MW	Two (2) lots of 40' × 40' each	One (1) lot of 50' × 50' or One (1) lot of 40' x 60'
Between 1 MW to 2 MW	Four (4) lots of 40' × 40' each	Two (2) lots of 50' × 50' or Two (2) lots of 40' × 60' or One (1) lot of 75' × 50'
Between 2 MW to 3 MW	Six (6) lots of 40' × 40' each	Three (3) lots of 50' × 50' or Three (3) lots of 40' × 60' or One (1) lot of 125' × 50'
Between 3 MW to 4 MW	Eight (8) lots of 40' × 40' each	Four (4) lots of 50' × 50' or Four (4) lots of 40' × 60' or One (1) lot of 150' × 50'
Between 4 MW to 5 MW	Ten (10) lots of 40' × 40' each	Five (5) lots of 50' × 50' or Five (5) lots of 40' × 60' or One (1) lot of 175' × 50'

3. Timing and Budget Constraints - MVU does not guarantee a specific timeframe for the installation and commissioning of the BESS associated with any given project.
4. Permission to Operate (PTO) Requirements – MVU will not grant PTO until it confirms completion of all of the following:

    i. A complete interconnection application, including all necessary supporting documentation;

ii. Payment of all applicable fees, including application review fees and supplemental review fees; and

iii. Finalized execution and recording of a utility easement deed or formal dedication of land to the City of Moreno Valley, allowing MVU to install, operate, and maintain the BESS and associated equipment required to interconnect the BESS with the distribution grid. Easement deeds will need to be reviewed and approved by MVU before filing to ensure they will meet the requirements of this rule.

5. Enforcement

   i. If MVU identifies a malfunction or failure in non-export functionality, it will issue a written notice requiring corrective action within 20 business days.

   ii. Failure to correct the issue within this window may result in MVU disconnecting and locking out the system until proper operation is restored and verified.

6. Post BESS Commissioning and Energy Export - After MVU has successfully installed, tested, commissioned, and placed the BESS into service, the customer will be authorized by MVU to remove or deactivate the non-export relay system. At that point, MVU will allow export of energy from the customer's generation system onto MVU's distribution grid. The customer's bill including compensation will be calculated based on MVU most current applicable rate schedule when the system received PTO.

c. Non-Export Relay, BESS Installation, Prioritization, and Energy Export Terms for Systems Requiring Supplemental Review

i. Installation and Initial Non-Export Requirement

The applicant must install a utility-grade **non-export relay system** ensuring **zero export** of electricity from the applicant's generation system to Moreno Valley Utility's (MVU) distribution grid at the point of interconnection. This non-export requirement shall remain fully effective until MVU installs, tests, commissions, and places into service the associated Battery Energy Storage System (BESS).

ii. Timing and Budget Constraints

MVU does not guarantee a specific timeframe for the installation and commissioning of the BESS associated with any given project. MVU's ability to install and commission a BESS is subject to available funding within its approved Capital Improvement Program (CIP) budget, which may vary by fiscal year.

iii. Project Prioritization and Requirements

MVU will prioritize projects requiring BESS installation based upon the date MVU receives and confirms completion of all of the following items:

- A complete interconnection application, including all necessary supporting documentation;
- Payment of all applicable fees, including application review fees and supplemental review fees; and
- Finalized execution and recording of a utility easement deed or formal dedication of land to the City of Moreno Valley, allowing MVU to install, operate, and maintain the BESS and associated equipment required to interconnect the BESS with the distribution grid. Easement deeds will need to be reviewed and approved by MVU before filing to ensure they will meet the requirements of this rule.

MVU will not begin engineering design for the BESS until all the above-listed conditions have been satisfied and formally approved.

iv. Customer and MVU Responsibilities

- The developer/customer shall be responsible for installation, commissioning, and initial certification of the solar PV system and the non-export relay system.
- MVU shall conduct a final inspection verifying correct operation of the non-export relay functionality.
- Upon MVU acceptance, ownership of the non-export relay system shall be deeded and transferred to MVU at no cost. If non-export functionality is integrated within inverter equipment, ownership shall remain with the customer. MVU reserves the right to verify and enforce proper functionality.

v. Enforcement of Non-Export Functionality

If MVU determines that the applicant's non-export relay or integrated inverter control is not functioning correctly, MVU will issue written notice requiring corrective action within **20 business days**. Should corrective action fail to occur within this timeframe, MVU reserves the right to disconnect and lock out the applicant's PV system until corrections are completed and successfully verified by MVU.

vi. Post-BESS Commissioning and Energy Export Terms

After MVU has successfully installed, tested, commissioned, and placed the BESS into service, the customer will be authorized by MVU to remove or

deactivate the non-export relay system. At that point, MVU will allow export of energy from the customer's generation system onto MVU's distribution grid.

The customer shall then be compensated for any excess generation exported to MVU's grid during each billing period in accordance with MVU's **Net Compensation Rate – Schedule B**.

d. **Battery Energy Storage System (BESS) Dedicated Area Requirements**

Applicants exceeding the 50% of minimum daytime load limitation must either provide a dedicated parcel of land or grant MVU a specific utility easement at the proposed project site to install a battery energy storage system. The area provided must meet all the following criteria:

- Clearly defined and dedicated via deed or easement specifically to MVU. Any parcel maps, lot line adjustments, or utility easements must be reviewed and approved by MVU, and filed with the County of Riverside.
- Pre-approved in writing by MVU before interconnection approval.
- Accessible directly from public streets without special permissions, keys, badges, or codes. If the area is behind any security gates, doors, or access points, MVU's staff must be granted 24/7 access to the site.
- Free from existing or planned major utilities or critical infrastructure (including but not limited to storm drains, Best Management Practices (BMPs), drainage courses, retention basins, water mains, gas pipelines, telecommunications infrastructure, and other major utility assets).
- MVU shall secure the provided area with appropriate security walls/fencing as needed.

e. **Minimum Dedicated Area per MW of Installed Solar PV Capacity:**

Applicants may select **one of the following two standard options** for providing dedicated land space to MVU for BESS

- Multiple lots must each independently meet accessibility and clearance requirements unless otherwise approved by MVU.
- Projects exceeding 5 MW will require customized spacing, reviewed and approved by MVU engineering staff.

Installed Solar Capacity	Option A: Smaller Lots	Option B: Larger Lots
Up to 1 MW	Two (2) lots of 40' × 40' each	One (1) lot of 50' × 50' or One (1) lot of 40’ x 60’
Between 1 MW to 2 MW	Four (4) lots of 40' × 40' each	Two (2) lots of 50' × 50' or Two (2) lots of 40' × 60' or One (1) lot of 75' × 50'
Between 2 MW to 3 MW	Six (6) lots of 40' × 40' each	Three (3) lots of 50' × 50' or Three (3) lots of 40' × 60' or One (1) lot of 125’ × 50'
Between 3 MW to 4 MW	Eight (8) lots of 40' × 40' each	Four (4) lots of 50' × 50' or Four (4) lots of 40’ × 60' or One (1) lot of 150' × 50'
Between 4 MW to 5 MW	Ten (10) lots of 40' × 40' each	Five (5) lots of 50' × 50' or Five (5) lots of 40' × 60' or One (1) lot of 175' × 50'

f. Responsibility and Ownership Clarification

- **MVU Responsibility**:
  MVU will procure, install, commission, operate, own, and maintain the battery energy storage system on the dedicated property provided by the developer/customer.
- **Customer/Developer Responsibility**:
  Customer/developer shall install, test, commission, and initially certify the solar PV system and non-export relay. After acceptance by MVU, ownership of the relay system shall be deeded to MVU at no cost.
- Customer/developer must also provide continuous, unrestricted access (including keys, badges, or electronic gate access) to locations containing PV system disconnects, meters, and non-export relays.

Non-Export Relay Operation and Timing for Battery Installation
The installed non-export relay must remain operational, actively preventing electricity export onto MVU’s distribution grid, until MVU completes installation, commissioning, and operational approval of the battery energy storage system. Following successful commissioning, MVU will adjust or remove operational restrictions as appropriate.

I. APPLICATION AND INTERCONNECTION PROCESS

1. Application Process

a. **Applicant Initiates Contact with MVU.** Upon request, MVU will provide information and documents (such as requirements, Application, technical information, listing of Certified Equipment, Initial and Supplemental Review deposit information, applicable tariff schedules, Metering requirements and

Rules) to a potential Applicant. Unless otherwise agreed upon, all such information shall normally be sent to an Applicant within three (3) business days following the initial request from the Applicant. MVU will establish an individual representative as the single point of contact for the Applicant but may allocate responsibilities among its staff to best coordinate the Interconnection of an Applicant's Generating Facility**.**

b. **Applicant Completes an Application**: All Applicants shall complete and file an Application and supply any relevant additional information requested by MVU. Application Fees will be determined in accordance with the fee schedule.

   i. Normally, within 10 business days of receiving the Application, MVU shall acknowledge its receipt and state whether the Application has been completed adequately. If defects are noted, MVU and Applicant shall cooperate in a timely manner to establish a satisfactory Application.

   ii. Fifty Percent of the deposit associated with the Initial Review will be returned to the Applicant if the Application is rejected by MVU exactly as submitted or the Applicant retracts the Application.

   iii. The Applicant may propose and MVU may negotiate specific costs for processing non-standard applications such as multi-units, multi-sites, or otherwise as conditions warrant. The fees for the Initial Review and Supplemental Review contained in the fee schedule do not apply in these situations.

   iv. Applications that are over one year old (from the date of MVU's acknowledgement) without a completed application, or a Generating Facility that has not been approved for parallel operation within one year of completion of all applicable review and/or studies are subject to cancellation by MVU; however, MVU may not cancel an Application if the Producer provides reasonable evidence that the project is still active.

c. **MVU Performs Expedited or Supplemental Review**

   i. Upon receipt of a satisfactorily completed Application and any additional information necessary to evaluate the Interconnection of a Generating Facility, MVU shall perform an Initial Review using the process defined in Section I. The Initial Review determines if: (a) the Generating Facility qualifies for Simplified Interconnection; or (b) the Generating Facility requires a Supplemental Review.

   ii. MVU shall complete its Initial Review, absent any extraordinary circumstances, within 10 business days after its determination that the Application is complete. If the Initial Review determines the proposed Generating Facility can be Interconnected by means of a Simplified Interconnection, MVU will provide the Applicant with an Interconnection Authorization.

iii. If the Generating Facility does not pass the Initial Review for Simplified Interconnection as proposed, MVU will notify the applicant and perform a Supplemental Review as described in Section I. Applicant shall pay an additional fee for the Supplemental Review, unless the Application is withdrawn. The Supplemental Review will result in MVU providing either: (a) Interconnection requirements beyond those for a Simplified Interconnection, and an Interconnection Authorization; or (b) a cost estimate and schedule for an Interconnection Study. The Supplemental Review shall be completed, absent any extraordinary circumstances, within 20 business days of receipt of a completed Application and fees.

2. Interconnection Process

a. Applicant shall comply with the Interconnection Requirements as stated in this Rule. MVU shall review with the Applicant all requirements for Interconnection and Net Energy Metering appropriate for the Applicant's Generating Facility and desired mode of operation. These requirements are detailed in Electric Rule 21A, Interconnection Rules, Terms & Conditions. Electric Rule 21A sets forth MVU's and the Applicant's responsibilities, completion schedules, and fixed price or estimated costs for the required work.

b. Where Applicable (for commercial systems greater than 1MW), MVU or Producer Installs Required Interconnection Facilities or Modifies MVU's Distribution System. After executing the applicable agreements, MVU or Producer will commence construction/ installation of MVU's Distribution System modifications or Interconnection Facilities which have been identified in the agreement and application. The parties will use good faith efforts to meet schedules and estimated costs as appropriate.

c. Producer Arranges for and Completes Commissioning Testing of Generating Facility and Producer's Interconnection Facilities. The Producer is responsible for testing new Generating Facilities and associated Interconnection Facilities according to Section J.5 to ensure compliance with the safety and reliability provisions of this Rule prior to being operated in parallel with MVU's Distribution System. For non-Certified Equipment, the Producer shall develop a written testing plan to be submitted to MVU for its review and acceptance. Alternatively, the Producer and MVU may agree to have MVU conduct the required testing at the Producer's expense. Where applicable, the test plan shall include the installation test procedures published by the manufacturer of the generation or Interconnection equipment. Facility testing shall be conducted at a mutually agreeable time, and depending on who conducts the test, MVU or Producer shall be given the opportunity to witness the tests.

d. MVU Authorizes Parallel Operation or Momentary Parallel Operation. MVU shall authorize the Producer's Generating Facility for Parallel Operation or

Momentary Parallel Operation with MVU's Distribution System, in writing, within 5 calendar days of satisfactory compliance with the terms of all applicable Rules. Compliance may include, but not be limited to, provision of any required documentation and satisfactorily completing any required inspections or tests as described herein or in the agreements formed between the Producer and MVU. A Producer shall not commence Parallel Operation of its Generating Facility with MVU's system unless it has received MVU's express written permission to do so.

e. For Net Energy Metering Generating facilities, MVU authorization for Parallel Operation shall normally be provided no later than 30 business days following MVU's receipt of 1) a completed Net Energy Metering Application including all supporting documents and required payments; 2) a completed signed Net Energy Metering Interconnection Agreement; and 3) evidence of the Producer's final inspection clearance from the governmental authority having jurisdiction over the Generating Facility. If the 30-day period cannot be met, the MVU shall notify the Applicant and the Commission.

J. REVIEW PROCESS FOR APPLICATIONS TO INTERCONNECT GENERATION FACILITIES

1. Introduction

This Review Process allows for rapid approval for the interconnection of those Generating Facilities that do not require an Interconnection Study. The review process includes a screening to determine if a Supplemental Review is required.

Note: Failure to pass any step of the review process means only that further review and/or studies are required before the Generating Facility can be approved for Interconnection with MVU's Distribution System. It does not mean that the Generating Facility cannot be Interconnected. Though not explicitly covered in the Initial Review Process the Generating Facility shall be designed to meet all of the applicable requirements in Section D.

2. Purpose

The review determines the following:

a. If a Generating Facility qualifies for Simplified Interconnection;

b. If a Generating Facility can be made to qualify for Interconnection with a Supplemental Review determining any additional requirements; or

c. If an Interconnection Study is required, the cost estimate and schedule for performing the Interconnection Study.

3. Review Process:

a. If the Application has sufficient data and the design meets the size restrictions for Residential Service, or Expedited Interconnection for Commercial or Industrial Service per Section H. The application qualifies for Simplified Interconnection.
b. If the Application is requesting service under any of the additional authorized uses, MVU will perform Supplemental Review to provide feedback to the Applicant for next steps to follow in the Interconnection Process.

K. CERTIFICATION AND TESTING CRITERIA

1. INTRODUCTION

This Section describes the test procedures and requirements for equipment used for the Interconnection of Generating Facilities to MVU's Distribution System. Included are Type Testing, Production Testing, Commissioning Testing and Periodic Testing. The procedures listed rely heavily on those described in appropriate Underwriters Laboratory (UL), Institute of Electrical and Electronic Engineers (IEEE), and International Electrotechnical Commission (IEC) documents—most notably UL 1741 and IEEE 929, as well as the testing described in *May 1999 New York State Public Services Commission Standardized*

Interconnection Requirements. As noted in Section A, this rule has been revised to be consistent with ANSI/IEEE 1547-2003 *Standard for Interconnecting Distributed Resources with Electric Power Systems.*

The tests described here, together with the technical requirements in Section D of this Rule, are intended to provide assurance that the Generating Facility's equipment will not adversely affect MVU's Distribution System and that a Generating Facility will cease providing power to MVU's Distribution System under abnormal conditions. The tests were developed assuming a low level of Generating Facility penetration or number of connections to MVU's Distribution System. At high levels of Generating Facility penetration, additional requirements and corresponding test procedures may need to be defined.

Section J also provides criteria for "Certifying" Generators or inverters. Once a Generator or inverter has been Certified per this Rule, it may be considered suitable for Interconnection with MVU's Distribution System. Subject to the exceptions described in Section J, MVU will not repeat the design review or require retesting of such Certified Equipment. It should be noted that the Certification process is intended to facilitate Generating Facility Interconnections. Certification is not a prerequisite to interconnect a Generating Facility.

The revisions made to this rule relative to IEEE 1547-2003 have resulted in changes in set points, test criteria, test procedures, and other requirements that will impact previously certified or listed equipment as well as equipment currently under evaluation. These changes were made to provide consistency with IEEE 1547. Equipment that is certified or that has been submitted to a Nationally Recognized Testing Laboratory (NRTL) for testing prior to the adoption of the revised Underwriters Laboratories (UL) 1741 titled Inverters, Converters, Controllers and Interconnection Systems Equipment for use with Distributed Energy Resources and that subsequently meet the provisions Rule 21 certification requirements will continue to be accepted as Certified Equipment for Interconnection Applications submitted through May 7, 2007, the effective date of the revised UL 1741. [this change will be incorporated by Advice Letter in Dec. 2005]

2. CERTIFIED AND NON-CERTIFIED INTERCONNECTION EQUIPMENT

a. Certified Equipment

Equipment tested and approved (e.g., "Listed") by an accredited NRTL as having met both the Type Testing and Production Testing requirements described in this document is considered to be Certified Equipment for purposes of Interconnection with MVU's Distribution System. Certification may apply to either a pre-packaged system or an assembly of components that address the necessary functions. Type Testing may be done in the manufactures' factory or test laboratory, or in the field. At the discretion of the testing laboratory, field-certification may apply only to the particular

installation tested. In such cases, some or all of the tests may need to be repeated at other installations.

When equipment is certified by a NRTL, the NRTL shall provide to the manufacturer, at a minimum, a Certificate with the following information for each device:

Administrative:

1) The effective date of Certification or applicable serial number (range or first in series), and/or other proof that Certification is current;

2) Equipment model number(s) of the Certified Equipment;

3) The software version utilized in the equipment, if applicable;

4) Test procedures specified (including date or revision number); and

5) Laboratory accreditation (by whom and to what standard).

Technical (as appropriate):

1) Device ratings (kW, kVA, Volts, Amps, etc.);

2) Maximum available fault current in Amps;

3) In-rush Current in Amps;

4) Trip points, if factory set (trip value and timing);

5) Trip point and timing ranges for adjustable settings;

6) Nominal power factor or range if adjustable;

7) If the equipment is Certified for Non-Exporting and the method used (reverse power or under power); and

8) If the equipment is Certified Non-Islanding.

It is the responsibility of the equipment manufacturer to ensure that Certification information is made publicly available by the manufacturer, the testing laboratory or by a third party.

b. Non-Certified Equipment

For non-Certified Equipment, some or all of the tests described in this Rule may be required by MVU for each Generating Facility and/or Interconnection Facilities. The manufacturer or a laboratory acceptable to

MVU may perform these tests. Test results for Non-Certified Equipment must be submitted to MVU for the Supplemental Review. Approval by MVU for equipment used in a particular Generating Facility and/or Interconnection Facilities does not guarantee MVU's approval for use in other Generating Facility and/or Interconnection Facilities.

3. TYPE TESTING

a. Type Tests and Criteria for Interconnection Equipment Certification

Type Testing provides a basis for determining that equipment meets the specifications for being designated as Certified Equipment under this Rule. The requirements described in this Section cover only issues related to Interconnection and are not intended to address equipment safety or other issues.

Table J.1. defines the test criteria by Generator or inverter technology. While UL 17411 was written specifically for inverters, the requirements are readily adaptable to synchronous Generators, induction Generators, as well as single/multi-function controllers and protection relays. Until a universal test standard is developed, MVU or NRTL shall adapt the procedures referenced in Table J.1 as appropriate and necessary for a Generating Facility and/or Interconnection Facilities or associated equipment performance and its control and Protective Functions. The tests shall be performed in the sequence shown in Table J.2 below.

Table J.1 Type Tests and Requirements for Interconnection Equipment Certification

Type Test	Reference (1)	Inverter	Synchronous Generator	Induction Generator
Utility Interaction	UL 1741 – 39	X	X	X
DC Isolation	UL 1741 – 40.1	X	-	-
Simulated PV Array (Input) Requirements	UL 1741 – 41.2	X	-	-
Dielectric Voltage Withstand	UL 1741 – 44	X	X	X
Power Factor	UL 1741 – 45.2.2	X	X	X
Harmonic Distortion	UL 1741 – 45.4	X	X	X
DC Injection	UL 1741 – 45.5	X	-	-
Utility Voltage and Frequency Variation	UL 1741 – 46.2	X	X	X
Reset Delay	UL 1741 – 46.2.3	X	X	X
Loss of Control Circuit	UL 1741 – 46.4	X	X	X
Short Circuit	UL 1741 – 47.3	X	X	X
Load Transfer	UL 1741 – 47.7	X	X	X
Surge Withstand Capability	J.3.e	X	X	X
Anti-Islanding	J.3.b	(2)	(2)	(2)
Non-Export	J.3.c	(3)	(3)	(3)
In-rush Current	J.3.d	-	-	(4)
Synchronization	J.3.f	(5)	X	(5)

Table Notes:

(1) References are to section numbers in either UL 1741 (Inverters, Converters and Charge Controllers for use in Independent Power Systems) or this Rule. References in UL 1741 to "photovoltaics" or "inverter" may have to be adapted to the other technologies by the testing laboratory to appropriately apply in the tests to other technologies.

(2) Required only if Non-Islanding designation

(3) Required only if Non-Export designation is desired.

(4) Required for Generators that use MVU power to motor to speed.

(5) Required for all self-excited induction Generators as well as Inverters that operate as voltage sources when connected to MVU's Distribution System.

X = Required , - = Not Required

Table J.2 Type Tests Sequence for Interconnection Equipment Certification

Test No.	**Type Test**
1	Utility Voltage and Frequency Variation
2	Synchronization
3	Surge Withstand Capability
4	Utility Voltage and Frequency Variation
5	Synchronization
6	Other Required and Optional Tests
Tests 1, 2, and 3, must be done first and in the order shown. Tests 4 and on follow in order convenient to the test agency.	

b. Anti-Islanding Test

Devices that pass the Anti-Islanding test procedure described in UL 1741 Section 46.3 will be considered Non-Islanding for the purposes of these

interconnection requirements. The test is required only for devices for which a Certified Non-Islanding designation is desired.

c. Non-Export Test

Equipment that passes the Non-Export test procedure described in Section J.7.a. will be considered Non-Exporting for the purposes of these Interconnection requirements. This test is required only for equipment for which a Certified Non-Export designation is desired.

d. In-rush Current Test

Generation equipment that utilizes MVU power to motor up to speed will be tested using the procedure defined in Section J.7.b. to determine the maximum current drawn during this startup process. The resulting In-rush Current is used to estimate the Starting Voltage Drop.

e. Surge Withstand Capability Test

The interconnection equipment shall be tested for the surge withstand requirement in D.1.c in all normal operating modes in accordance with IEEE Std C62.45-2002 for equipment rated less than 1000 V to confirm that the surge withstand capability is met by using the selected test level(s) from IEEE Std C62.41.2-2002. Interconnection equipment rated greater than 1000 V shall be tested in accordance with manufacturer or system integrator designated applicable standards. For interconnection equipment signal and control circuits, use IEEE Std C37.90.1-2002. These tests shall confirm the equipment did not fail, did not misoperate, and did not provide misinformation (IEEE1547- 5.1.3.2). The location/exposure category for which the equipment has been tested shall be clearly marked on the equipment label or in the equipment documentation. External surge protection may be used to protect the equipment in harsher location/exposure categories.

f. Synchronization Test

This test is applied to synchronous Generators, self-excited induction generators, and inverters capable of operating as voltage-source while connected to MVU's Distribution System. The test is also applied to the resynchronization Function (transition from stand-alone to parallel operation) on equipment that provides such functionality. This test may not need to be performed on both the synchronization and re-synchronization functions if the manufacturers can verify to the satisfaction of the testing organization that monitoring and controls hardware and software are common to both functions. This test is not necessary for induction generators or current-source inverters. Instead, the ln-rush Current test Section J.3.d shall be applied to those generators.

This test shall demonstrate that at the moment of the paralleling-device closure, all three synchronization parameters in Table J.3 are within the

stated limits.

This test shall also demonstrate that if any of the parameters are outside of the limits stated in the table, the paralleling-device shall not close (IEEE 1547- 5.1.2A). The test will start with only one of the three parameters: (1) voltage difference between Generating Facility and MVU's Distribution System; (2) frequency difference; or (3) phase angle outside of the synchronization specification. Verify that the Generating Facility is brought within specification prior to synchronization. Repeat the test five times for each of the three parameters. For manual synchronization with synch check or manual control with auto synchronization, the test must verify that paralleling does not occur until the parameters are brought within specifications.

Table J.3. Synchronization Parameter Limits *[1]*

Aggregate Rating of Generator Units (kVA)	Frequency Difference (Δf, Hz)	Voltage Difference (ΔV, %)	Phase Angle Difference (Δφ,□)
0-500 > 500-1,500 > 1,500-10,000	0.3 0.2 0.1	10 5 3	20 15 10

[1] – IEEE 1547-5.1.1B

g. Paralleling Device Withstand Test

The di-electric voltage withstand test specified in Section J.1 shall be performed on the paralleling device to ensure compliance with those requirements specified in Section D.1.c (IEEE 1547-5.1.3.3).

4. Production Testing

As a minimum, each interconnection system shall be subjected to the Utility Voltage and Frequency Variation Test procedure described in UL1741 under Manufacturing and Production Tests, Section 68 and the Synchronization test specified in Section J.3.f Interconnection systems with adjustable set points shall be tested at a single set of set points as specified by the manufacturer. This test may be performed in the factory or as part of a Commissioning Test (Section J.5.).

5. Commissioning Testing

a. Commissioning Testing, where required, will be performed on-site to verify protective settings and functionality. Upon initial Parallel Operation of a Generating Facility, or any time interface hardware or software is changed that may affect the functions listed below, a Commissioning Test must be performed. An individual qualified in testing protective equipment (professional engineer, factory–certified technician, or licensed electrician

with experience in testing protective equipment) must perform Commissioning Testing in accordance with the manufacturer's recommended test procedure to verify the settings and requirements per this Rule.

MVU may require written Commissioning test procedure be submitted to MVE at least 10 working days prior to the performance of the Commissioning Test. MVU has the right to witness Commissioning Test, MVU may also require written certification by the installer describing which tests were performed and their results. Protective Functions to be tested during commissioning, particularly with respect to non-Certified equipment, may consist of the following:

(1) Over and under voltage
(2) Over and under frequency
(3) Anti-Islanding function (if applicable)
(4) Non-Exporting function (if applicable)
(5) Inability to energize dead line
(6) Time delay on restart after utility source is stable
(7) Utility system fault detection (if used)
(8) Synchronizing controls (if applicable)
(9) Other Interconnection Protective Functions that may be required as part of the Interconnection Agreement

Commissioning Test shall include visual inspections of the interconnection equipment and protective settings to confirm compliance with the interconnection requirements.

b. Other checks and tests that may need to be performed include:
(1) Verifying final Protective Function settings
(2) Trip test (J.5.f)
(3) In-service tests (J.5.g)

6. Certified Equipment

Generating Facilities qualifying for Simplified Interconnection incorporate Certified Equipment that have, at a minimum, passed the Type Tests and Production Tests described in this Rule and are judged to have little or no potential impact on MVU's Distribution System. For such Generating Facilities,
it is necessary to perform only the following tests:

7. Protective Function settings that have been changed after Production Testing will require field verification. Tests shall be performed using injected secondary frequencies, voltages and currents, applied waveforms, at a test connection using a Generator to simulate abnormal utility voltage or frequency, or varying the set points to show that the device trips at the measured (actual) utility voltage or frequency.

8. The Non-Islanding function shall be checked by operating a load break disconnect switch to verify the Interconnection equipment ceases to energize MVU's Distribution System and does not re- energize it for the required time delay after the switch is closed.
9. The Non-Exporting function shall be checked using secondary injection techniques. This function may also be tested by adjusting the Generating Facility output and local loads to verify that the applicable Non-Exporting criteria (i.e., reverse power or underpower) are met.

The Supplemental Review or an Interconnection Study may impose additional components or additional testing.

L. Non-Certified Equipment

Non-certified Equipment shall be subjected to the appropriate tests described in Type Testing (Section J.3.) as well as those described in Certified Equipment Commissioning Tests (Section J.5.c.). With MVU's approval, these tests may be performed in the factory, in the field as part of commissioning, or a combination of both. MVU, at its discretion, may also approve a reduced set of tests for a particular Generating Facility or, for example, if it determines it has sufficient experience with the equipment.

M. Verification of Settings

At the completion of Commission testing, the Producer shall confirm all devices are set to MVU-approved settings. Verification shall be documented in the Commissioning Test Certification.

N. Trip Tests

Interconnection Protective Functions and devices (e.g. reverse power relays) that have not previously been tested as part of the Interconnection Facilities with their associated interrupting devices (e.g. contactor or circuit breaker) shall be trip tested during commissioning. The trip test shall be adequate to prove that the associated interrupting devices open when the protective devices operate. Interlocking circuits between Protective Function devices or between interrupting devices shall be similarly tested unless they are part of a system that has been tested and approved during manufacturing.

O. In-service Tests

Interconnection Protective Functions and devices that have not previously been tested as part of the Interconnection Facilities with their associated instrument transformers or that are wired in the field shall be given an in-service test during commissioning. This test will verify proper wiring, polarity, CT/PT ratios, and proper operation of the measuring circuits. The in-service test shall be made with the power system energized and carrying a known level of current. A measurement shall be made of the magnitude and phase angle of each

Alternating Current (AC) voltage and current connected to the protective device and the results compared to expected values. For protective devices with built- in Metering Functions that report current and voltage magnitudes and phase angles, or magnitudes of current, voltage, and real and reactive power, the metered values may be used for in-service testing. Otherwise, portable ammeters, voltmeters, and phase-angle meters shall be used.

1. Periodic Testing
   Periodic Testing of Interconnection-related Protective Functions shall be performed as specified by the manufacturer, or at least every four years. All Periodic Tests prescribed by the manufacturer shall be performed. The Producer shall maintain Periodic Test reports or a log for inspection by MVU. Periodic Testing conforming to MVU test intervals for the particular Line Section may be specified by MVU under special circumstances, such as high fire hazard areas. Batteries used to activate any Protective Function shall be checked and logged once per month for proper voltage.

   Once every four years, the battery must be either replaced or a discharge test performed.

2. Type Testing Procedures Not Defined in Other Standards
   This Section describes the additional Type Tests necessary to qualify a device as Certified under this Rule. These Type Tests are not contained in Underwriters Laboratories UL 1741 Standard *Inverters, Converters and Controllers for Use in Independent Power Systems,* or other referenced standards.

   a. Non-Exporting Test Procedures

   The Non-Exporting test is intended to verify the operation of relays, controllers and inverters designed to limit the export of power and certify the equipment as meeting the requirements of Screen 2, Options 1 and 2, of the review process. Tests are provided for discrete relay packages and for controllers and inverters with the intended Functions integrated.

   (1) Discrete Reverse Power Relay Test
   This version of the Non-Exporting test procedure is intended for discrete reverse power and underpower relay packages provided to meet the requirements of Options 1 and 2 of Screen 2. It should be understood that in the reverse power application, the relay will provide a trip output with power flowing in the export (toward MVU's Distribution System) direction.

   Step 1: Power Flow Test at Minimum, Midpoint and Maximum Pickup Level Settings

   Determine the corresponding secondary pickup current for the desired export power flow of 0.5 secondary watts (the minimum pickup setting, assumes 5 amp and 120V CT/PT secondary). Apply nominal voltage with minimum current setting at zero (0) degrees

phase angle in the trip direction. Increase the current to pickup level. Observe the relay's (LCD or computer display) indication of power values. Note the indicated power level at which the relay trips. The power indication should be within 2% of the expected power. For relays with adjustable settings, repeat this test at the midpoint, and maximum settings. Repeat at phase angles of 90, 180 and 270 degrees and verify that the relay does not operate (measured watts will be zero or negative).

Step 2: Leading Power Factor Test

Apply rated voltage with a minimum pickup current setting (calculated value for system application) and apply a leading power factor load current in the non-trip direction (current lagging voltage by 135 degrees). Increase the current to relay rated current and verify that the relay does not operate. For relays with adjustable settings, this test should be repeated at the minimum, midpoint, and maximum settings.

Step 3: Minimum Power Factor Test

At nominal voltage and with the minimum pickup (or ranges) determined in Step 1, adjust the current phase angle to 84 or 276 degrees. Increase the current level to pickup (about 10 times higher than at 0 degrees) and verify that the relay operates. Repeat for phase angles of 90, 180 and 270 degrees and verify that the relay does not operate.

Step 4: Negative Sequence Voltage Test

Using the pickup settings determined in Step 1, apply rated relay voltage and current at 180 degrees from tripping direction, to simulate normal load conditions (for three-phase relays, use Ia at 180, Ib at 60 and Ic at 300 degrees). Remove phase-1 voltage and observe that the relay does not operate. Repeat for phases-2 and 3.

Step 5: Load Current Test

Using the pickup settings determined in Step 1, apply rated voltage and current at 180 degrees from the tripping direction, to simulate normal load conditions (use Ia at 180, Ib at 300 and Ic at 60 degrees). Observe that the relay does not operate.

Step 6: Unbalanced Fault Test

Using the pickup settings determined in Step 1, apply rated voltage and 2 times rated current, to simulate an unbalanced fault in the non-trip direction (use Va at 0 degrees, Vb and Vc at 180 degrees, Ia at 180 degrees, Ib at 0 degrees, and Ic at 180 degrees). Observe that the relay, especially single phase, does operate properly.

Step 7: Time Delay Settings Test

Apply Step 1 settings and set time delay to minimum setting. Adjust the current source to the appropriate level to determine operating time, and compare against calculated values. Verify that the timer stops when the relay trips. Repeat at midpoint and maximum delay settings.

Step 8: Dielectric Test

Perform the test described in IMVU 414 using 2 kV RMS for 1 minute.

Step 9: Surge Withstand Test

Perform the surge withstand test described in IEEE C37.90.1.1989 or the surge withstand capability test described in J.3.e.

(2) Discrete Underpower Relay Test

This version of the Non-Exporting test procedure is intended for discrete underpower relay packages and meets the requirements of Option 2 of Screen 2. A trip output will be provided when import power (toward the Producer's load) drops below the specified level.

Note: For an underpower relay, pickup is defined as the highest power level at which the relay indicates that the power is less than the set level.

Step 1: Power Flow Test at Minimum, Midpoint and Maximum Pickup Level Settings

Determine the corresponding secondary pickup current for the desired power flow pickup level of 5% of peak load minimum pickup setting. Apply rated voltage and current at 0 (zero) degrees phase angle in the direction of normal load current. Decrease the current to pickup level. Observe the relay's (LCD or computer display) indication of power values. Note the indicated power level at which the relay trips. The power indication should be within 2% of the expected power. For relays with adjustable settings, repeat the test at the midpoint, and maximum settings. Repeat at phase angles of 90, 180 and 270 degrees and verify that the relay operates (measured watts will be zero or negative).

Step 2: Leading Power Factor Test

Using the pickup current setting determined in Step 1, apply rated voltage and rated leading power factor load current in the normal load direction (current leading voltage by 45 degrees). Decrease the current to 145% of the pickup level determined in Step 1 and verify that the relay does not operate. For relays with adjustable settings, repeat the test at the minimum, midpoint, and maximum settings.

Step 3: Minimum Power Factor Test

At nominal voltage and with the minimum pickup (or ranges) determined in Step 1, adjust the current phase angle to 84 or 276 degrees. Decrease the current level to pickup (about 10% of the value at 0 degrees) and verify that the relay operates. Repeat for phase angles 90, 180 and 270 degrees and verify that the relay operates for any current less than rated current.

Step 4: Negative Sequence Voltage Test

Using the pickup settings determined in Step 1, apply rated relay voltage and 25% of rated current in the normal load direction, to simulate light load conditions. Remove phase 1 voltage and observe that the relay does not operate. Repeat for Phases-2 and 3.

Step 5: Unbalanced Fault Test

Using the pickup settings determined in Step 1, apply rated voltage and two times rated current, to simulate an unbalanced fault in the normal load direction (use Va at 0 degrees, Vb and Vc at 180 degrees, Ia at 0 degrees, Ib at 180 degrees, and Ic at 0 degrees). Observe that the relay (especially single-phase types) operates properly.

Step 6: Time Delay Settings Test

Apply Step 1 settings and set time delay to minimum setting. Adjust the current source to the appropriate level to determine operating time, and compare against calculated values. Verify that the timer stops when the relay trips. Repeat at midpoint and maximum delay settings.

Step 7: Dielectric Test

Perform the test described in IEC 414 using 2 kV RMS for 1 minute.

Step 8: Surge Withstand Test

Perform the surge withstand test described in IEEE C37.90.1.1989 or the surge withstand test described in Section J.3.e.

(3) Tests for Inverters and Controllers with Integrated Functions

Inverters and controllers designed to provide reverse or underpower functions shall be tested to certify the intended operation of this function. Two methods are acceptable:

Method 1: If the inverter or controller utilizes external current/voltage measurement to determine the reverse or underpower condition, then the inverter or controller shall be functionally tested by application of appropriate secondary currents and potentials as described in the Discrete Reverse Power Relay Test, Section J.7.a.(1) of this Rule.

Method 2: If external secondary current or voltage signals are not used, then unit-specific tests must be conducted to verify that power cannot be exported across the PCC for a period exceeding two seconds. These may be factory tests, if the measurement and control points are integral to the unit, or they may be performed in the field.

b. In-rush Current Test Procedures

This test will determine the maximum In-rush Current drawn by the Generator.

(1) Locked-Rotor Method

Use the test procedure defined in NEMA MG-1 (manufacturer's data is acceptable if available).

(2) Start-up Method

Install and setup the Generating Facility equipment as specified by the manufacturer. Using a calibrated oscilloscope or data acquisition equipment with appropriate speed and accuracy, measure the current draw at the Point of Interconnection as the Generating Facility starts up and parallels with MVU's Distribution System. Startup shall follow the normal, manufacturer-specified procedure. Sufficient time and current resolution and accuracy shall be used to capture the maximum current draw within 5%. In-rush Current is defined as the maximum current draw from MVU during the startup process, using a 10-cycle moving average. During the test, the utility source, real or simulated, must be capable of maintaining voltage within +/- 5% of rated at the connection to the unit under test. Repeat this test five times. Report the highest 10-cycle current as the In-rush Current. A graphical representation of the time-current characteristic along with the certified In-rush Current must be included in the test report and made available to MVU.

CHART OF CHARGES AND FEES

Item	Charge
Service Initiation Charge	
Next Day, Normal Business Hours	$15.00
Identity Verification Fee	$5.00
Additional Charge for Same Day Turn On of Service	$30.00
Additional Charge for Weekends and After Hours Turn On of Service	$50.00
Deposits	
Residential Service – Single Family	Twice Average Monthly Bill, minimum $235
Residential Service – Multi-Family	Twice Average Monthly Bill, minimum $105
Non Residential Service	Twice Maximum Monthly Bill
Reestablishment of Credit	Twice Maximum Monthly Bill
Interest on Unauthorized Use Billings	10% Per Annum
Interest on Amortized Repayment Agreements	10% Per Annum
Return Check Charge	$31.00
Field Notification Charge	$10.00
Collection Processing Fee	$30.00
Meter Test Deposit – (Refunded if Meter Registers within Parameters)	
Meter Installed without Current or Potential Transformer	$20.00
Meter Installed with Current or Potential Transformer	$100.00
Late Charge	0.9% per Month of Unpaid Balance
Utility Users Tax	5.75%
Reconnection Charge	
Meter Panel – Next Day	$20.00
Meter Panel – Same Day During Working Hours	$30.00
Meter Panel – Weekends and After Hours	$50.00
Pole / Service Structure – Next Day	$60.00
Pole / Service Structure – Same Day During Working Hours	$75.00
Pole / Service Structure – Weekends and After Hours	$90.00
Transformer/Structure Due to Energy Theft	$150.00
Damaged Steel Lock-ring	$15.00
Damaged Aluminum Lock-ring	$5.00
Replaced Damaged Meter	Actual cost (time and material) $2,000

Rule 21 Application Fee	$75.00
Rule 21 Supplemental Review Fee	$800.00

PLAN CHECK, PLAN DEVELOPMENT, AND INSPECTION/TESTING FEES

Upon submittal of improvement plan(s) for a project's electrical distribution system, line extension facilities and/or structures for plan review, the submittal shall be accompanied with a plan check and inspection and testing fee payment according to the fee schedule below. If a developer wishes for MVU to develop the improvement plan(s) for a project, the request shall be accompanied with a plan development and inspection and testing fee payment according to the fee schedule below. Timespans provided below begin upon submission of invoice payment and submission of necessary project documents including but not limited to complete site plans, basemaps (including other associated utilities with the project), and load schedules/meter locations.

Plan Check for Improvement Plans (Review Completed within 4 Weeks)

(Total cost of construction)

Off-Site & On-Site

Submittals 1-3	3.5%
4th and subsequent submittals per sheet	$248.00/sheet or as directed by City Engineer

Expedited Plan Check for Improvement Plans (Review Completed within 2 Weeks)

(Total cost of construction)

Off-Site & On-Site 1-3 submittals

Submittals 1-3	4.5%
4th and subsequent submittals per sheet	$248.00/sheet or as directed by City Engineer

MVU Developed Improvement Plans (Plans Developed within 5 Weeks)

(Total cost of construction)

Off-Site & On-Site 4.0%

Expedited MVU Developed Improvement Plans (Plans Developed within 2 Weeks)

(Total cost of construction)

Off-Site & On-Site 5.0%

Inspection and Testing

(Total cost of construction)

Off-Site & On- Site 5.0%