

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
SAN FRANCISCO, CA 94102-3298



November 14, 2008

**Advice Letter 3353-E**

Brian K. Cherry  
Vice President, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

**Subject: Revisions to PG&E's Electric Rule 2**

Dear Mr. Cherry:

Advice Letter 3353-E is effective November 15, 2008.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Lewis".

Kenneth Lewis, Acting Director  
Energy Division



**Brian K. Cherry**  
Vice President  
Regulatory Relations

Pacific Gas and Electric Company  
77 Beale St., Mail Code B10C  
P.O. Box 770000  
San Francisco, CA 94177

415.973.4977  
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October 16, 2008

**Advice 3353-E**

(Pacific Gas and Electric Company ID U 39 E)

Public Utilities Commission of the State of California

**Subject: Revisions to PG&E's Electric Rule 2**

Pacific Gas and Electric Company (PG&E) hereby submits for filing revisions to its electric tariffs. The affected tariff sheets are included at Attachment 1.

**Purpose**

PG&E is updating its Electric Rule 2 to accurately reflect the typically available transformer sizes for both overhead and underground facilities to supply three-phase 120/240 volt four-wire, and 240 volt three-wire services.

**Background**

Three-phase loads are typically supplied at 120/208 or 277/480 volts. Three-phase 120/240 volt is most often used to supply a combination of single-phase 120/240 volt service and three-phase 240 volt service. Both three-phase 120/240 and three-phase 240 volt services are typically supplied by a bank of single-phase transformers. The largest industry standard subsurface (IEEE C57.12.23) and pad-mount (IEEE C57.12.38) single-phase transformer is 167 kVA. While the largest industry standard overhead (IEEE C57.12.20) single-phase transformer is 500 kVA, sizes above 167 kVA are rarely purchased. A bank of three 167 kVA transformers is equivalent to a 300 kVA three-phase transformer. The largest sized three-phase transformer purchased by PG&E with a 120/240 secondary is 300 kVA. Three-phase loads above 300 kVA can readily be served at 120/208 or 277/480 volts.

For many years, PG&E has only carried a small emergency stock of single-phase overhead transformers in sizes above 167 kVA and has not purchased single-phase pad-mounts above 167 kVA. PG&E continues to streamline processes and after reviewing standard industry transformer sizes and usage patterns for inventory sizing, PG&E proposes to lower the standard facility load limit for these

voltages from 500 kVA to 300 kVA. Southern California Edison's Electric Rule 2 already limits these voltages to 300 kVA.

PG&E will continue to maintain those facilities installed under previous tariff requirements and continue to do so until such time customers request changes to facilities under provisions of Rule 16.D, requiring installation under current rules. No customer will be forced to change voltages simply as a result of this rule change.

### **Tariff Revisions**

The text change will be in the maximum kVA rating column only, indicated below in italics.

#### Section D.2.a

240	5 hp, 3-phase connected	<i>300 kVA</i>
240/120	5 hp, 3-phase connected	<i>300 kVA</i>

#### Section D.2.b

240	10 hp, 3-phase connected	<i>300 kVA</i>
240/120	10 hp, 3-phase connected	<i>300 kVA</i>

In addition, PG&E makes corrections from kva to kVA through out the document. PG&E also corrects Section D.2.d to indicate more accurate connection of transformers.

### **Protests**

Anyone wishing to protest this filing may do so by letter sent via U.S. mail, by facsimile or electronically, any of which must be received no later than **November 5, 2008**, which is 20 days after the date of this filing. Protests should be mailed to:

CPUC Energy Division  
 Tariff Files, Room 4005  
 DMS Branch  
 505 Van Ness Avenue  
San Francisco, California 94102

Facsimile: (415) 703-2200  
 E-mail: [anj@cpuc.ca.gov](mailto:anj@cpuc.ca.gov) and [mas@cpuc.ca.gov](mailto:mas@cpuc.ca.gov)

Copies of protests also should be mailed to the attention of the Director, Energy Division, Room 4004, at the address shown above.

The protest also should be sent via U.S. mail (and by facsimile and electronically, if possible) to PG&E at the address shown below on the same date it is mailed or delivered to the Commission:

Brian K. Cherry  
Vice President, Regulatory Relations  
Pacific Gas and Electric Company  
77 Beale Street, Mail Code B10C  
P.O. Box 770000  
San Francisco, California 94177

Facsimile: (415) 973-7226  
E-mail: [PGETariffs@pge.com](mailto:PGETariffs@pge.com)

### **Effective Date**

PG&E requests that this advice filing become effective on regular notice, **November 15, 2008**, which is 30 calendar days after the date of filing.

### **Notice**

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list. Address changes to the General Order 96-B service list should be directed to Rose de la Torre at (415) 973-4716. Send all electronic approvals to [PGETariffs@pge.com](mailto:PGETariffs@pge.com). Advice letter filings can also be accessed electronically at: <http://www.pge.com/tariffs>



Vice President, Regulatory Relations

Attachments

# CALIFORNIA PUBLIC UTILITIES COMMISSION

## ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **Pacific Gas and Electric Company (ID U39 M)**

Utility type:

ELC       GAS  
 PLC       HEAT     WATER

Contact Person: Megan Lawson

Phone #: 415-973-1877

E-mail: mehr@pge.com

EXPLANATION OF UTILITY TYPE

ELC = Electric      GAS = Gas        
 PLC = Pipeline     HEAT = Heat    WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 3353-E

Tier: [2]

Subject of AL: Revisions to PG&E's Electric Rule 2

Keywords: rules

AL filing type:  Monthly  Quarterly  Annual  One-Time  Other \_\_\_\_\_

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: No

Summarize differences between the AL and the prior withdrawn or rejected AL:

Is AL requesting confidential treatment? If so, what information is the utility seeking confidential treatment for: No

Confidential information will be made available to those who have executed a nondisclosure agreement: N/A

Name(s) and contact information of the person(s) who will provide the nondisclosure agreement and access to the confidential information:

Resolution Required?  Yes  No

Requested effective date: November 15, 2008

No. of tariff sheets: 14

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: Electric Rule 2

Service affected and changes proposed:

Protests, dispositions, and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

**CPUC, Energy Division**

**Tariff Files, Room 4005**

**DMS Branch**

**505 Van Ness Ave., San Francisco, CA 94102**

**jn@cpuc.ca.gov and mas@cpuc.ca.gov**

**Pacific Gas and Electric Company**

**Attn: Brian K. Cherry, Vice President, Regulatory Relations**

**77 Beale Street, Mail Code B10C**

**P.O. Box 770000**

**San Francisco, CA 94177**

**E-mail: PGETariffs@pge.com**

**ATTACHMENT 1  
Advice 3353-E**

<b>Cal P.U.C. Sheet No.</b>	<b>Title of Sheet</b>	<b>Cancelling Cal P.U.C. Sheet No.</b>
27763-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 8	11264-E
27764-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 9	11498-E
27765-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 10	11266-E
27766-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 11	11267-E
27767-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 12	11499-E
27768-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 17	11273-E
27769-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 20	11276-E
27770-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 21	11277-E
27771-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 24	11280-E
27772-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 25	11281-E
27773-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 26	11282-E
27774-E	ELECTRIC RULE NO. 2 DESCRIPTION OF SERVICE Sheet 27	11283-E

**ATTACHMENT 1  
Advice 3353-E**

<b>Cal P.U.C. Sheet No.</b>	<b>Title of Sheet</b>	<b>Cancelling Cal P.U.C. Sheet No.</b>
27775-E	ELECTRIC TABLE OF CONTENTS Sheet 1	27754-E
27776-E	ELECTRIC TABLE OF CONTENTS RULES Sheet 10	27666-E



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 8

D. GENERAL LOAD LIMITATIONS

1. SINGLE-PHASE SERVICE

- a. Single-phase service normally will be three-wire, 120/240 volts (or three-wire 120/208 volts at certain locations as now or hereafter established by PG&E) where the size of any single motor does not exceed 7.5 horsepower (10 horsepower at the option of PG&E). For any single-phase service, the maximum demand as determined by PG&E is limited to the capability of a 100 kVa transformer unless otherwise approved by PG&E. If the load requires a transformer installation in excess of 100 kVa, the service normally will be three-phase. (T)  
(T)
- b. In locations where PG&E maintains a 120/208 volt secondary system, 3-wire single-phase service normally shall be limited to that which can be supplied by a main switch or service entrance rating of 200 amperes. Single-phase loads in these locations in excess of that which can be supplied by a 200 ampere main switch or service entrance rating normally will be supplied with a 208Y/120-volt, three-phase, 4-wire service.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 9

D. GENERAL LOAD LIMITATIONS (Cont'd.)

2. THREE-PHASE SERVICE (2,000 VOLTS OR LESS)

<u>Nominal Voltage</u>	<u>Minimum Load Requirements</u>	<u>Maximum Demand Load Permitted</u>	
a. Secondary service normally available from overhead primary distribution systems (this may require the installation of underground primary to supply a transformer at ground level.):			
208Y/120	Demand load justifies a 75 kVa transformer	1,000 kVa	(T)
240*	5 hp, 3-phase connected	300 kVa	
240/120	5 hp, 3-phase connected	300 kVa	
480	30 kVa, 3-phase demand	3,000 kVa	
480Y/277	30 kVa, 3-phase demand	3,000 kVa	(T)
b. Secondary service from underground primary distribution systems (where PG&E maintains existing 3-phase primary circuits):			
208Y/120	Demand load justifies a 75 kVa transformer	1,000 kVa	(T)
240	10 hp, 3-phase connected	300 kVa	
240/120	10 hp, 3-phase connected	300 kVa	
480Y/277	Demand load justifies a 75 kVa transformer	3,000 kVa	(T)
c. Secondary service from underground network systems (only in portions of downtown San Francisco and Oakland):			
208Y/120	None	2,000 kVa	(T)
480Y/277	1,200 kVa demand load	As required	(T)

\* Limited availability, consult PG&E.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 10

D. GENERAL LOAD LIMITATIONS (Cont'd.)

2. THREE-PHASE SERVICE (2,000 VOLTS OR LESS) (Cont'd.)

- d. Where three-phase service is supplied, PG&E reserves the right to use banks of single-phase transformers or three-phase transformers. (T)
- e. Three-phase service will be supplied on request for installations aggregating less than the minimums listed above but not less than 3 hp, three-phase, where existing transformer capacity is available. If three-phase service is not readily available, or for service to loads less than 3 hp, service shall be provided in accordance with either Section H or I of this rule regarding Connected Load Ratings and Special Facilities.
- f. 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 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 PG&E 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.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 11

D. GENERAL LOAD LIMITATIONS (Cont'd.)

3. THREE-PHASE SERVICE (OVER 2,000 VOLTS)

- a. Following are three-phase voltages that are 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 PG&E, the installation of the minimum size transformer bank used by PG&E:

Nominal Voltage	Minimum Size Bank Installed	Maximum Demand Load Permitted	
2,400 (See Note 1)	500 kVa	5,000 kVa	(T)
4,160 (See Note 1)	500 kVa	5,000 kVa	
12,000 (See Notes 1 and 2)	1,000 kVa	10,000 kVa	(T)

- b. Following are the standard primary voltages, one of which may be available without transformation from existing primary distribution lines in the area:

4,160	100 kVa	4,000 kVa	(T)
12,000 (See Note 1)	500 kVa	12,000 kVa	
17,200	500 kVa	15,000 kVa	
20,780	500 kVa	20,000 kVa	(T)

Note 1: Not available in the network areas in portions of downtown San Francisco and Oakland.

Note 2: Not available where existing primary is 17,200 volts.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 12

D. GENERAL LOAD LIMITATIONS (Cont'd.)

3. THREE-PHASE SERVICE (OVER 2,000 VOLTS) (Cont'd.)

- c. Applicants with minimum demand loads of 4,000 kVa may elect to take delivery at the available transmission voltage and provide their own substation facilities. The availability of transmission voltages shall be determined by PG&E. Where a substation on an applicant's property is supplied from a transmission voltage source, the metering may be installed, at PG&E's option, on the secondary side of the transformers and may be subject to a transformer loss adjustment in accordance with Section B.4 of this Rule. (T)
- d. For its operating convenience and necessity, PG&E 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. Refer to Rule 16 for additional information regarding transformers located on the applicant's premises. (T)
- e. Three-phase service outside the limits of Section D.3 may be available but only if feasible and approved by PG&E.
- f. PG&E 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 PG&E at a location on the customer's premises in accordance with PG&E's requirements, or (3) contract with PG&E for an additional stage of transformation to be installed as special facilities (including any applicable Contributions in Aid of Construction taxes) 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 in accordance with Section B.4 of this Rule. The option to contract with PG&E for an additional stage of transformation (option 3, above) is available only once in conjunction with a change in standard voltage by PG&E.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 17

F. INTERFERENCE WITH SERVICE (Cont'd.)

4. MOTOR STARTING CURRENT LIMITATIONS (Cont'd.)

- e. In the case of room and unitary air conditioners, heat pumps or other complete unit equipment on which the nameplate rating is expressed in kVa input and not in hp output, the nameplate kVa input rating shall be considered to be the hp rating for use of Table 1. If the nameplate does not show kVa input, then it may be determined for single-phase motors by taking the product of the running input line current in amperes times the input voltage rating divided by 1,000. For three-phase motors, multiply this product by the square root of three (1.73). (T)
- f. The starting current values in Table 1 apply only to the installation of a single motor. 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. (T)
- g. PG&E 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 PG&E's system operations or to the service of its customers, as determined by PG&E. (T)
- h. Where the design or operation of the customer's motor is such that unequal starting currents flow in PG&E's service conductors, the largest starting current in any one set of phase conductors shall be considered the motor starting current. (T)

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 20

**G. POWER FACTOR**

When lighting devices, such as neon, fluorescent, luminous gaseous, mercury vapor, and other lighting equipment having low power factors are served on street lighting or area lighting schedules, the customer shall provide, at his own expense, power factor corrective equipment to increase the power factor of each complete lighting device to not less than 90 percent.

**H. CONNECTED LOAD RATINGS**

1. The connected load is the sum of the rated capacities of all of the customer's electric utilization equipment that is served through one metering point and that may be operated at the same time, computed to the nearest one-tenth of a horsepower, kilowatt or kilovolt-ampere. Motors will be counted at their nameplate ratings in horsepower output and other devices at their nameplate input ratings in kw or kVa, except that resistance welders will be rated in accordance with the section of this rule regarding "Welder Service." Unless otherwise stated in the rate schedule, conversions between horsepower, kw and/or kVa ratings will be made on a one-to-one basis. (T)
2. The normal operating capacity rating of any motor or other device may be determined from the nameplate rating. Where the original nameplate has been removed or altered, the manufacturer's published rating may be used or the rating determined by test at the expense of the customer. (T)
3. Motor-generator sets shall be rated at the nameplate rating of the alternating-current drive motor of the set.
4. a. X-ray equipment shall be rated at the maximum nameplate kVa input operating at the highest rated output amperes. If the kVa input rating is not shown, it will be determined for single-phase loads by taking the product of the amperes input rating times the input voltage rating divided by 1,000. For three-phase equipment, multiply this product times the square root of three (1.73). (T)

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 21

H. CONNECTED LOAD RATINGS (Cont'd.)

4. (Cont'd.)

b. Where X-ray equipment is separately metered and supplied from a separate transformer installed by PG&E to serve the X-ray installation only, the kVa rating of PG&E's transformer or the total X-ray equipment input capacity, whichever is smaller, will be considered the load for billing purposes. (T)

5. Where a customer operates a complete unit of equipment connected for three-phase service but consisting of single-phase components which cannot be readily reconnected for single-phase service, PG&E shall consider the connected load of such a unit as three-phase load.

6. Where a customer has, or expects to have, permanently-connected, three-phase load that is used infrequently or for short durations, such as, but not limited to, equipment for fire pumps, frost protection, flood control, emergency sirens or other similar installations which make it impractical to record proper demands on a monthly basis for billing purposes, the customer may, for his own reasons and with PG&E's approval, guarantee an appropriate billing demand or connected three-phase load for billing purposes in order to reserve suitable capacity in PG&E's facilities.

I. SPECIAL FACILITIES

1. PG&E normally installs only those standard facilities which it deems are necessary to provide regular service in accordance with the tariff schedules. Where the applicant requests PG&E to install special facilities and PG&E 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.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 24

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. (T)
- 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:

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 25

J. WELDER SERVICE (Cont'd.)

1. RATING OF WELDERS (Cont'd.)

TYPE OF WELDER	TRANSFORMER NAMEPLATE RATING @ 50% Duty Cycle**	FACTOR		
		PG&E- Owned Distrib. Transf.	Customer Owned Distrib. Transf.	
1. Rocker Arm, Press or Projection Spot	20 kVa or less	0.60	0.50	(T)
2. Rocker Arm, Press Spot	Over 20 kVa	0.80	0.60	(T)
Project Spot	21 to 75 kVa, inclusive			(T)
Flash or Butt	100 kVa or over			(T)
Seam or Portable Gun	All sizes			(T)
3. Flash or Butt	67 to 100 kVa, inclusive	***	***	(T)
4. Projection Spot	Over 75 kVa	1.20	0.90	(T)
Flash or Butt	66 kiva or less			

\*\* 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. (T)

\*\*\* Each flash or butt welder in this group will be rated at 80 kVa where distribution transformer is owned by PG&E or 60 kVa where distribution transformer is owned by the customer. (T)

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 26

J. WELDER SERVICE (Cont'd.)

1. RATING OF WELDERS (Cont'd.)

- 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 PG&E 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 PG&E, 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 tariff application, one welder kVa will be taken as one horsepower for tariffs stated on a horsepower basis and one welder kVa will be taken as one kilowatt for tariffs stated on a kilowatt basis. (T)

2. BILLING OF WELDERS

Welders will be billed at the regular rates and conditions of the tariffs 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.

(Continued)



**ELECTRIC RULE NO. 2**  
 DESCRIPTION OF SERVICE

Sheet 27

J. WELDER SERVICE (Cont'd.)

2. BILLING OF WELDERS (Cont'd.)

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 adding 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.

3. USE OF WELDERS THROUGH RESIDENTIAL SERVICE

Any welder exceeding three kVa capacity at 50 percent duty cycle supplied through a residential service requires advance approval by PG&E. (T)



**ELECTRIC TABLE OF CONTENTS**

Sheet 1

**TABLE OF CONTENTS**

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**PG&E Gas and Electric  
Advice Filing List  
General Order 96-B, Section IV**

Aglet	Department of the Army	Northern California Power Association
Agnews Developmental Center	Dept of General Services	Occidental Energy Marketing, Inc.
Alcantar & Kahl	Division of Business Advisory Services	OnGrid Solar
Ancillary Services Coalition	Douglas & Liddell	PPL EnergyPlus, LLC
Anderson & Poole	Douglass & Liddell	Pinnacle CNG Company
Arizona Public Service Company	Downey & Brand	Praxair
BART	Duke Energy	R. W. Beck & Associates
BP Energy Company	Duncan, Virgil E.	RCS, Inc.
Barkovich & Yap, Inc.	Dutcher, John	RMC Lonestar
Bartle Wells Associates	Ellison Schneider & Harris LLP	Recon Research
Blue Ridge Gas	Energy Management Services, LLC	SCD Energy Solutions
Braun & Associates	FPL Energy Project Management, Inc.	SCE
C & H Sugar Co.	Foster Farms	SESCO
CA Bldg Industry Association	Foster, Wheeler, Martinez	SMUD
CAISO	Franciscan Mobilehome	SPURR
CLECA Law Office	G. A. Krause & Assoc.	Santa Fe Jets
CSC Energy Services	GLJ Publications	Seattle City Light
	Goodin, MacBride, Squeri, Schlotz & Ritchie	Sempra Utilities
California Cotton Ginners & Growers Assn	Green Power Institute	Sequoia Union HS Dist
California Energy Commission	Hanna & Morton	Sierra Pacific Power Company
California League of Food Processors	Heeg, Peggy A.	Silicon Valley Power
California Public Utilities Commission	Hitachi	Smurfit Stone Container Corp
Calpine	Hogan Manufacturing, Inc.	Southern California Edison Company
Cameron McKenna	Imperial Irrigation District	St. Paul Assoc.
Cardinal Cogen	Innercite	Sunshine Design
Casner, Steve	International Power Technology	Sutherland, Asbill & Brennan
Cerox	Intestate Gas Services, Inc.	TFS Energy
Chamberlain, Eric	J. R. Wood, Inc.	Tabors Caramanis & Associates
Chevron Company	JTM, Inc.	Tecogen, Inc.
Chris, King	Los Angeles Dept of Water & Power	Tioga Energy
City of Glendale	Luce, Forward, Hamilton & Scripps LLP	TransCanada
City of Palo Alto	MBMC, Inc.	Turlock Irrigation District
City of San Jose	MRW & Associates	U S Borax, Inc.
Clean Energy Fuels	Manatt Phelps Phillips	United Cogen
Coast Economic Consulting	Matthew V. Brady & Associates	Utility Cost Management
Commerce Energy	McKenzie & Associates	Utility Resource Network
Commercial Energy	Meek, Daniel W.	Utility Specialists
Constellation	Merced Irrigation District	Vandenberg Air Force
Constellation New Energy	Mirant	Verizon
Consumer Federation of California	Modesto Irrigation District	Wellhead Electric Company
Crossborder Energy	Morgan Stanley	Western Manufactured Housing Communities Association (WMA)
		White & Case
Davis Wright Tremaine LLP	Morrison & Foerster	eMeter Corporation
Day Carter Murphy	New United Motor Mfg., Inc.	
Defense Energy Support Center	Norris & Wong Associates	
Department of Water Resources	North Coast SolarResources	