



GAS RULE NO. 17
METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 1

A. METER TESTS

Any Customer may, upon not less than five working days notice, require PG&E to test the Customer's gas meter. No payment or deposit will be required from the Customer for such tests except when a Customer whose average monthly bill for gas service is less than \$50.00 requests a meter test within six months after 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, in accordance with the following:

- 1. For meters of rated capacities not exceeding
 250 cubic feet per hour \$1.00 per meter
- 2. For meters of rated capacities exceeding
 250 cubic feet per hour but not exceeding
 400 cubic feet per hour \$2.00 per meter
- 3. For meters of rated capacities exceeding
 400 cubic feet per hour but not exceeding
 4,000 cubic feet per hour \$4.00 per meter

Fees for tests of meters of greater rated capacity than 4,000 cubic feet per hour or for testing meters under extraordinary conditions will be set by the Public Utilities Commission of the State of California, upon request.

The deposit will be returned to the Customer if the meter is found, upon testing, to register more than two percent fast or slow under conditions of normal operation. (T)

Meter tests will be conducted in accordance with the gas standard requirements of the Public Utilities Commission.

A Customer shall have the right to require PG&E to 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. (T)

(Continued)



GAS RULE NO. 17
METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 2

A. METER TESTS (Cont'd.)

Every gas meter, when installed for the use of any Customer, shall be in good order and shall have been adjusted to register within one percent over or two percent under the proper registration when passing gas at a rate which will cause a pressure drop in the meter not to exceed one-half inch of water column. The meter shall be adjusted so that the open flow test agrees with the check flow test within one percent, provided however, that no meter shall be put in service which on any test proves in excess of one percent over the proper registration.

B. ADJUSTMENT OF BILLS FOR METER ERROR

(T) (L)

Meter error is the incorrect registration of the Customer's energy usage resulting from a malfunctioning or defective meter. It does not include incorrect registration attributable to billing error or unauthorized use.

(N)
 |
 (N)

Where, as the result of a meter test (except for "Meters Other Than Displacement Gas Meters," as described in Section C), a meter is found to be nonregistering or incorrectly registering, PG&E may render an adjusted bill to the Customer for the amount of any undercharge, without interest. PG&E shall issue a refund or credit to the Customer for the amount of any overcharge, without interest, computed back to the date that PG&E determines the meter error commenced, except that the period of adjustment shall not exceed the limits set forth below. Such adjusted bill shall be computed as follows:

(T)
 (T)
 (T)
 (T)

1. FAST METER

a. RESIDENTIAL AND NONRESIDENTIAL SERVICE

(N)

If a meter for either residential or nonresidential service is found to be registering more than two percent fast, PG&E will calculate the amount of the overcharge for refund to the Customer based on the corrected meter readings or PG&E's estimate of the natural gas usage for a period of six months. However, if 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.

(T)
 |
 |
 |
 |
 (T) (L)

(Continued)



GAS RULE NO. 17
METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 3

- | | | | |
|----|---|-----|--|
| B. | ADJUSTMENT OF BILLS FOR METER ERROR (Cont'd) | (L) | |
| | 2. SLOW METER | | |
| | a. RESIDENTIAL SERVICE | (N) | |
| | If a meter for residential service is found to be registering more than 25 percent slow, PG&E may bill the Customer for the amount of the undercharge based on the corrected usage or PG&E's estimate of the gas usage for a period of three months. However, if it is known that the period of meter error was less than three months, the undercharge will be calculated for only those months during which the meter error occurred. | (T) | |
| | | (T) | |
| | b. NONRESIDENTIAL SERVICE | (N) | |
| | If a meter for nonresidential service is found to be registering more than two percent slow, PG&E may bill the Customer for the amount of the undercharge based on the corrected usage or PG&E's estimate of the gas usage for a period of 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. | (T) | |
| | | (T) | |
| | 3. NONREGISTERING METER | | |
| | a. RESIDENTIAL SERVICE | (N) | |
| | If a meter for residential service is found to be nonregistering, PG&E may bill the Customer for the amount of the undercharge based on PG&E's estimate of the gas used, but not registered, for a period of three months. However, if it is known that the period the meter was nonregistering was less than three months, the undercharge will be calculated for only those months the meter was nonregistering. | (T) | |
| | | (T) | |
| | b. NONRESIDENTIAL SERVICE | (N) | |
| | If a meter for nonresidential service is found to be nonregistering, PG&E may bill the Customer for the amount of the undercharge based on PG&E's estimate of the gas used, but not registered, for a period of three years. However, if it is known that the period the meter was nonregistering was less than three years, the undercharge will be calculated for only those months the meter was nonregistering. | (T) | |
| | | (T) | |

(Continued)



GAS RULE NO. 17
METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 4

B. ADJUSTMENT OF BILLS FOR METER ERROR (Cont'd)

4. NO-TEST METERS

Where the condition of the meter renders it untestable (no-test), PG&E may bill the Customer for PG&E's estimate of the unmetered gas usage in accordance with Section 3, above. Nothing herein is intended to limit PG&E's authority to bill the Customer for unauthorized use in accordance with Rule 17.2.

5. ESTIMATED USAGE

When regular, accurate meter readings are not available or the gas usage has not been accurately measured, PG&E 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.

Unless estimated bills result from inability to access and change the existing meter to the SmartMeter™ system, inaccessible roads, the customer, the customer's agent, other occupant, animal or physical condition of the property preventing access to PG&E's facilities on the customer's premises, other causes within control of the customer, or a natural or man-made disaster such as a fire, earthquake, flood, or severe storms, the issuance of estimated bills shall be considered "billing error" for the purposes of applying Rule 17.1.

(T)
 (T)

C. METERS OTHER THAN DISPLACEMENT GAS METERS

For other than displacement gas meters, if the Customer or PG&E shall at any time have reason to doubt the accuracy of any gauge, measuring device, other appliance, data, or method used in measuring or computing the amount of gas delivered, notification shall be given to the other party and, within a reasonable time, the accuracy of such gauge, measuring device, appliance, data, or method shall be determined (upon request, jointly in the presence of both parties) and if any of them shall be found inaccurate, the proper correction in billing shall be made as follows:

1. In the case of computation errors or inaccurate data, where the date can be fixed or agreed upon, such correction in billing shall begin starting with the date of initial error.

(Continued)



GAS RULE NO. 17
METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 5

C. METERS OTHER THAN DISPLACEMENT GAS METERS (Cont'd) (T) (L)

2. In the case of gauge, measuring device, or appliance found to be out of tolerance sufficient to cause a volume error greater than \pm two percent, such correction in billing shall begin on a mutually acceptable date. In the absence of such mutual acceptance, the correction shall begin on a date equivalent to 50 percent of the elapsed period since the last valid calibration or test. (T) (T)

In all cases where corrections are to be made, the amount of gas delivered during the established period of inaccuracy shall be recalculated and corrected. Thereafter, measurements shall be made in accordance with correct data, and any inaccurate devices shall be recalibrated within published manufacturer's tolerances. (L)

D. ADJUSTMENTS FOR UNDER OR OVER DELIVERY OF CUSTOMER-OWNED GAS (T)

Any adjustments of billing for imbalances in delivery of natural gas will be made in accordance with Rule 21, Section B.3. (T)

E. MEASUREMENT OF CUSTOMER-OWNED GAS (T)

1. METERS (T)

PG&E or its agent shall own and maintain suitable measuring devices and necessary related instrumentation at each Point of Receipt and Point of Delivery for the purpose of measuring all gas deliveries. Orifice meters will be installed to comply with the version of American National Standards Institute Report ANSI/API 2530 most recent at the time of the meter installation. Other types of measuring devices will be installed to comply with manufacturers' recommendations and all applicable American Gas Association standards in effect at the time.

2. DEVICES FOR MEASURING HEATING VALUE AND SPECIFIC GRAVITY

The heating value and specific gravity of the gas delivered into the PG&E system shall be measured by PG&E or its agent. The heating value and specific gravity shall be determined from readouts of continuously operating measuring instruments or from analysis of gas collected by composite samplers.

(Continued)



GAS RULE NO. 17
METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 6

E. MEASUREMENT OF CUSTOMER-OWNED GAS (Cont'd.) (T)

2. DEVICES FOR MEASURING HEATING VALUE AND SPECIFIC GRAVITY (Cont'd.)

The heating value shall be determined by gas chromatograph or other instruments approved by the California Public Utilities Commission. The specific gravity shall be determined by gas chromatograph or other instruments acceptable to both parties. Analysis of gas with gas chromatographs shall comply with the standards set forth in ASTM D 1945-81 or any subsequent revision. Gas-sampling apparatus and techniques shall comply with the standards set forth in ASTM D 1145-80 or any subsequent revision. (L) (T)

PG&E or its agent shall calibrate and maintain heating-value measurement, specific-gravity measurement, and gas-sampling devices at intervals specified by PG&E. The Customer shall have access to PG&E's devices and shall be allowed to inspect the devices and all charts or other records of measurement at any reasonable time.

3. UNITS

Gas delivered to PG&E for transportation-only service will be measured in standard cubic feet. Gas-volume calculations for orifice meters will be performed in accordance with the most recent version of ANSI/API 2530. If other types of measuring devices are used, PG&E will correct values to standard conditions using the Ideal Gas Law and a compressibility factor which is the square of the supercompressibility factor presented in ANSI/API 2530 or any subsequent revision.

The unit of gas for billing purposes is therms (one therm equals 100,000 Btu). The number of therms to be billed shall be determined in accordance with Rule 2. (T)

(Continued)



GAS RULE NO. 17
 METER TESTS AND ADJUSTMENT OF BILLS FOR METER ERROR

Sheet 7

E. MEASUREMENT OF CUSTOMER-OWNED GAS (Cont'd.) (T)

4. PROVISION FOR CORRECTING ERRORS

PG&E or its agent shall calibrate and maintain meters and related equipment at intervals specified by PG&E. The Customer shall have access to PG&E's meters and shall be allowed to inspect the meters and charts or other records of measurement at any reasonable time. If any inaccuracy is discovered, it will be handled as follows: (L)

- a. When the inaccuracy is a result of PG&E's having used incorrect constant values in the orifice-meter evaluation, PG&E will correct the error for the extent of time it caused the inaccuracy. If this extent of time cannot be determined, PG&E will make an adjustment for one-half of the time since the last meter and instrument inspection. Incorrect constant values might result from PG&E having based calculations on the incorrect orifice plate size, the incorrect orifice tube size, the incorrect differential pressure range, or the incorrect static pressure range, among other things.
- b. When the inaccuracy is a result of errors in the calibration of flow computers, specific gravity or heating-value measuring devices, or flow recorders that result in an error of more than two percent of rated full-scale meter capacity, PG&E will recalculate the quantity of gas delivered, correcting it for the magnitude of the inaccuracy and the extent of time it existed. If the extent of time cannot be determined or agreed upon, PG&E will correct the quantity for a period deemed appropriate by PG&E.