

Chapter PSC 134

STANDARDS FOR GAS SERVICE

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PSC 134.01 General. (1) Chapter PSC 134 of the public service commission's departmental rules is part of the Wis. Adm. Code and constitutes a general order of the public service commission, the issuance of which is authorized by ss. 227.014, 196.02, 196.06, 196.10, 196.12, 196.15, 196.16, 196.17, and 196.19, Stats.

(2) The rules making up ch. PSC 134 are designed to effectuate and implement ss. 196.02, 196.03, 196.06, 196.10, 196.12, 196.15, 196.16, 196.17, 196.19, 196.21, 196.22, 196.60, 196.62 and parts of other sections of the Wisconsin statutes.

(3) Nothing in this chapter of the Wisconsin Administrative Code shall preclude the commission's giving special and individual consideration to exceptional or unusual situations or, upon investigation of the facts and circumstances involved, adopting requirements as to individual utilities or services which may be lesser, greater, other than or different from those provided in these rules.

(4) The requirements of ch. PSC 134 shall be observed by all public utilities, both privately and publicly owned, engaged in the manufacture, mixing, purchasing, storage, transmission and/or distribution of gaseous fuel.

(5) The manner of enforcing the rules in ch. PSC 134 is prescribed in s. 196.66, Stats., and such other means as provided in statutory sections administered by the public service commission.

(6) In case of emergency, where public interest requires immediate action without waiting for compliance with the specific terms of these rules, immediate corrective action shall be taken by the utility, which action, however, shall be subject to review by the public service commission.

(7) Periodic reports to the public service commission are required by ss. PSC 134.14 (6); 134.17; 134.18 (3); 134.19 (3); 134.25 (4). Individual reports are required by PSC 134.18 (4) and (5).

History: 1-2-56; r. and recr. Register, February, 1959, No. 38, eff. 3-1-59; am. (5), Register, January, 1965, No. 109, eff. 2-1-65; renum. (3) to (6) to be (4) to (7), Register, November, 1980, No. 299, eff. 12-1-80.

PSC 134.02 Definitions. In this chapter:

(1) "Ability to pay" means a customer's financial capacity to meet his or her utility service obligation, considering all of the following factors:

- (a) Size of the delinquent account.
- (b) Customer's payment history.
- (c) Period of time the debt has been outstanding.
- (d) Reasons why the debt has been outstanding.

(e) Any other relevant factors concerning the customer's circumstances, as household size, income and expenses.

(2) "Appliance" means any device which utilizes gas fuel to produce light, heat, or power.

(3) "British thermal unit" or "Btu" means the quantity of heat that must be added to one avoirdupois pound of pure water to raise its temperature from 58.5° Fahrenheit to 59.5° Fahrenheit under standard pressure.

(4) "Complaint" means a statement or question by any person, whether a utility customer or not, concerning a wrong, grievance, injury, dissatisfaction, illegal action or procedure, dangerous condition or action, or failure of a utility to meet a utility obligation.

(5) "Customer" means the party billed for payment of bills issued for use of utility service at a given premises.

(6) "Customer-requested termination" means that the customer or occupant has asked the utility to cease providing utility service to a premises.

(7) "Demand" means the amount of gas required per unit of time, usually expressed in cubic feet, Btu, or therms per unit of time.

(8) "Denied or refused service" means that a utility has refused to provide present or future service to a customer, occupant or premises.

(9) "Disconnection" means an event or action taken by the utility to terminate or discontinue the provision of service, but does not include a customer-requested termination of service.

(10) "Dry calorific value" means the value of the total or net calorific value of a gas divided by the volume of dry gas in a standard cubic foot.

provide the owner or property manager with 5 days to notify the utility of:

1. The name of the customer who should be placed in service, such service date not to be later than 5 days from the notice mailing date; or

2. That utility service to the premises should be terminated and affirms to the utility that such termination will not endanger human health or life or cause damage to property during the period of disconnection.

(9) (a) A utility shall pay interest on customer overpayments not refunded to the customer within 60 days of receipt by the utility if the net amount refunded exceeds \$20 per refund and the overpayment was made to the utility due to:

1. Meters registering fast as defined in s. PSC 134.14.

2. Use of an incorrect meter constant or multiplier.

3. Incorrect service or rate classification, provided the information furnished by the customer to the utility was not deficient, or the customer did not choose the rate as provided in sub. (4).

4. Billing based on a switched meter condition where the customer was billed on the incorrect meter.

5. Misapplication of rates.

(b) A utility is not required to pay interest to customers for overpayments made for:

1. Financing of service extensions or other equipment.

2. Budget payment plans.

3. Estimated bills, if the utility made a reasonable effort to obtain access to the customer's meter, but was unable to gain access. Reasonable effort to gain access means that the utility notified the customer after three consecutive estimated readings that the utility will read the meter at other than standard business hours at the customer's request.

4. Receipt of lump sum payment made from an outside source as the Low Income Home Energy Assistance Program or other like programs.

(c) The rate of interest to be paid shall be calculated in the same manner as provided for in s. PSC 134.061 (10) (b). Interest shall be paid from the date when the customer overpayment was made until the date when the overpayment is refunded. Interest shall be calculated on the net amount overpaid in each calendar year.

(d) Nothing in these rules shall prevent the commission or its staff from requiring the payment of interest on amounts returned to customers in those instances where the commission or its staff finds that such payment is necessary for a fair and equitable resolution of an individual complaint.

History: 1-2-56; r. and rec. Register, February, 1959, No. 38, eff. 3-1-59; am. (6), Register, January, 1965, No. 109, eff. 2-1-65; r. and rec. (1), Register, August, 1976, No. 248, eff. 9-1-76; am. Register, March, 1979, No. 279, eff. 4-1-79; am. (1) and (5), Register, October, 1980, No. 298, eff. 11-1-80; am. (6), Register, November, 1980, No. 299, eff. 12-1-80; renum. (1) (d) to be (1) (f) and am. (intro.), cr. (1) (d), (e) and (g) and am. (6) (f), Register, September, 1981, No. 309, eff. 10-1-81; r. and rec. Register, October, 1989, No. 406, eff. 11-1-89.

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PSC 134.14 Adjustment of bills. (1) Whenever a meter is found to have a weighted average error of more than 2% fast as tested in the manner specified in s. PSC 134.28, a recalculation of bills for service shall be made for the period of inaccuracy assuming an inaccuracy equal to the weighted average error. Weighted average error refers to 80% of the open rate plus 20% of the check rate. The recalculation shall be made on the basis that the service meter should be 100% accurate.

(2) If the period of inaccuracy cannot be determined, it shall be assumed that the full amount of inaccuracy existed during the last half of the period since the previous test was made on the meter; however, the period of accuracy shall not exceed one-half the required test period.

Note: If the meter test period is 16 years and the meter had been in service for 16 years, the period of accuracy shall be 7½ years, and the period of inaccuracy shall be 8½ years.

(3) If the average gas bill of a customer does not exceed \$10 per month over the refund period the monthly consumption of which the refund is calculated may be averaged.

(4) If the recalculated bills indicate that more than \$1 is due an existing customer or \$2 is due a person no longer a customer of the utility, the full amount of the calculated difference between the amount paid and the recalculated amount shall be refunded to the customer. The refund to an existing customer shall be a credit to the customer's current bill. If the amount of the credit is greater than the current bill, the amount in excess of the current bill shall, at the discretion of the customer, be made in cash or as credit on future bills. If a refund is due a person no longer a customer of the utility, a notice shall be mailed to the last known address, and the utility shall upon request made within 3 months thereafter refund the amount due.

(5) (a) Whenever a meter with a rated capacity of 400 cubic feet per hour (CFH) or more is found to have a weighted average error of more than 2% slow, the utility shall bill the customer for the amount the test indicates has been undercharged for the period of inaccuracy, which period shall not exceed the last 2 years the meter was in service unless otherwise ordered by the commission after investigation. No back billing for an inaccurate meter will be sanctioned for the following:

1. The customer has called to the company's attention his or her doubts as to the meter's accuracy and the company has failed within a reasonable time to check it.

2. The rated capacity of the meter is 399 cubic feet per hour (CFH) or less.

3. The amount of the backbill is less than \$50.

(b) Backbilling shall be required for any size meter for any of the following circumstances.

1. The meter did not register.

2. An incorrect correction factor or meter constant was applied.

3. The meter or service were tampered with.

4. An incorrect index or gear ratio was applied.

5. Meters were switched between customers.

6. Rates were misapplied.

(6) A classified record shall be kept of the number and amount of refunds and charges made because of inaccurate meters, misapplication of rates, and erroneous billing. A summary of the record for the previous calendar year shall be submitted to the commission by April 1 of each year.

History: Cr. Register, 1-2-56; r. and recr. Register, February, 1959, No. 38, eff. 3-1-59; am. (1), (2) and (4), renum. (5) to be (5) (a) and am., cr. (5) (b), Register, November, 1989, No. 407, eff. 12-1-89.

PSC 134.15 Employees authorized to enter customers' premises. The utility shall keep a record of employees authorized pursuant to s. 196.171, Stats., to enter customers' premises.

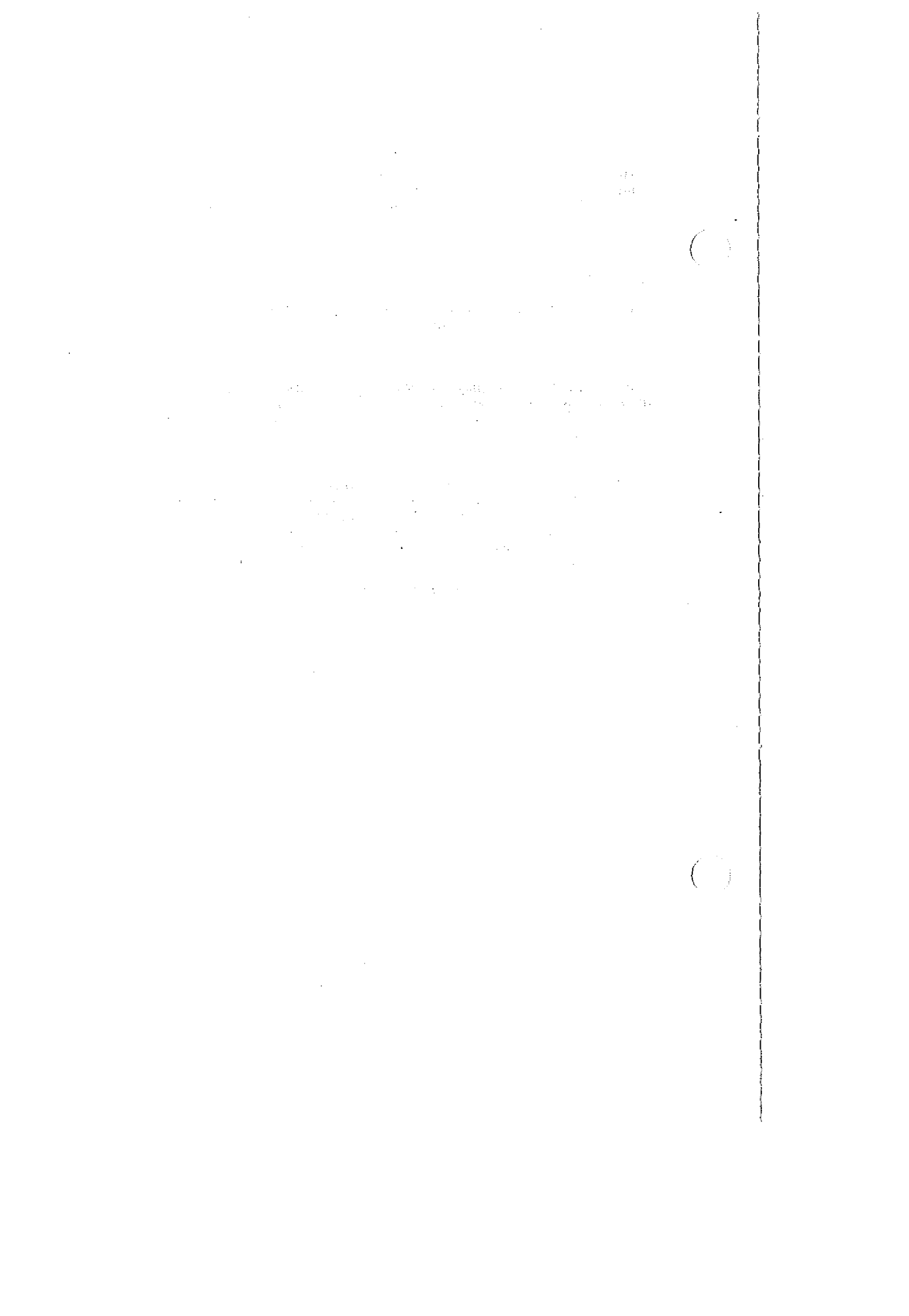
History: Cr. Register, February, 1959, No. 38, eff. 3-1-59.

PSC 134.16 Maps and diagrams. Each utility shall have maps, records, diagrams, and drawings showing the location of its property, in sufficient detail so that the adequacy of service to existing customers may be checked and facilities located.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59.

PSC 134.17 Complaints. Each utility shall investigate and keep a record of complaints received by it from its customers in regard to safety, service, or rates, and the operation of its system. The record shall show the name and address of the complainant, the date and nature of the complaint, and its disposition and the date thereof. A summary of this record for the previous calendar year shall be sent to the commis-

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heating value of gas sold to customers shall be sent the commission each calendar month.

(5) The calorimeter equipment shall be maintained so as to give results within + or - 1%. Recording calorimeters used to test or control the production or mixing of gas or measure the heating value of purchased gas when therm rates are not applicable shall be tested with a gas of known heating value at least 3 times a year or when the accuracy is in question. Recording calorimeters used only with standby or peak shaving production plants shall be tested with a gas of known heating value at least 2 times a year. Non-recording calorimeter equipment such as the Junkers shall be tested with a gas of known heating value at least once a year or tested against another calorimeter of known accuracy at least once a year.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; am. (5), Register, January, 1965, No. 109, eff. 2-1-65.

PSC 134.251 Use of recording calorimeter for therm billing. (1) In the application of gas rates based on the therm, a recording calorimeter shall be used to determine the heating value of the gas being distributed to utility customers. These calorimeters will be located as set forth in s. PSC 134.25 (2) and (3). They shall have such accuracy characteristics as to be able to measure the heating value of the gas to within + or - 2 B.t.u., shall be able to reproduce these readings to within + or - 2 B.t.u., and shall be able to hold their accuracy over an extended period of time. The instruments shall be installed in accordance with the manufacturer's recommendations.

(2) Each utility selling gas shall file with the commission a complete installation report stating the following information: location of calorimeter, kind of gas tested, type of scale, uniform or split scale range, date installed, publication number of manufacturer's applicable book of instructions, outline of the building, the location of the calorimeter or calorimeters within the building, the size, length, gas pressure, and general route of the gas sample pipe from the supply main to each calorimeter and location of all secondary equipment necessary for the operation of the recording calorimeter.

(3) (a) Each utility selling gas shall keep a chronological record of dates and results of tests and operations performed on the calorimeter to test and maintain accuracy.

(b) Twice every month the following tests shall be made:

1. Two days of each month shall be selected for the performance of an "as found" accuracy test, mechanical tests, adjustments, and an "as left" accuracy test of each recording calorimeter, and thereafter the specified accuracy tests, adjustments, and maintenance work shall be performed on the same days of each month insofar as practicable.

2. In making the accuracy tests on the calorimeter, the utility shall use reference natural gas which has been certified by the Institute of Gas Technology before cleaning parts or making any adjustments to either the tank unit or the recorder mechanism. The change from line gas to the certified gas should be made so as to have a continuous chart recording. The inlet pressure used should be the same for both calibration and subsequent operation.

3. If the "as found" accuracy test is within + or - 3 B.t.u., no adjustment will be required and the instrument may be returned to service. If the "as found" accuracy test is not within + or - 3 B.t.u., maintenance shall be performed to restore the accuracy of the instrument.

4. In order that adequate information concerning each cylinder of natural gas which is to be used for the semi-monthly check tests be available at all times, the following information shall be entered on a form or in a log book provided for the purpose and also on a label or tag securely attached to each cylinder in which the gas is stored:

- (a) Institute of Gas Technology Cylinder Number.
- (b) Institute of Gas Technology Certificate Number.
- (c) Date cylinder was certified.
- (d) Date cylinder was received by the utility.
- (e) Heating value certified by Institute of Gas Technology.
- (f) Basis of the heating value in (e) above.
- (g) Heating value to be used in the semi-monthly accuracy tests. This heating value will not include any plus or minus values. For example, if the heating value is 1,000 + or - 0.9 B.t.u. per cubic foot, the heating value is 1,000 B.t.u. per cubic foot.
- (h) Basis of the heating value in (g) above.

(5) The original chart records produced by the recording calorimeters shall be dated, labeled, and kept on file for 6 years. A copy of the daily average heating value of gas and the results of the semi-monthly "as found" and "as left" test shall be sent to the commission each calendar month.

(6) A gravitometer may be substituted for the calorimeter equipment required to control standby or peak shaving plants in subs. (1) and (5) provided the heat content of the standby or peak shaving gas produced does not directly affect the therm billing of the gas customer receiving it.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65; cr. (6), Register, July, 1983, No. 331, eff. 8-1-83.

PSC 134.26 Meter testing and testing equipment. (1) Each public utility giving gas service is responsible for the accuracy of equipment used to measure service to its customers and all gas supplied by the utility shall be metered unless specific exemption is obtained from the public service commission. The utility shall own and maintain the equipment and facilities necessary for accurately testing the various types and sizes of meters used by the utility for the measurement of gas, shall make the tests required by these rules, shall maintain the measuring devices, and maintain their accuracy; unless arrangements are made to have the work done by others who have properly equipped laboratories, are approved by the commission and arrangements are also made to have equipment and procedures checked by the public service commission. A test by the manufacturer of a metering device is not acceptable unless witnessed by a utility representative.

(2) Each public utility giving gas service shall own and maintain, except as provided in sub. (1), a meter prover of sufficient capacity to test

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meters in accordance with s. PSC 134.28. The meter prover shall be complete with all accessories needed for accurate meter testing, shall be suitably located for meter testing, and shall be protected from drafts and excessive temperature changes. The equipment shall be maintained in good condition and correct adjustment and be capable of determining the accuracy of service meters to within one-half of one per cent. When the meter prover is used to test temperature-compensating meters, there shall be present a temperature-indicating device to accurately determine the temperature of the prover to within + or - 1° Fahrenheit.

(3) Each public utility giving gas service through turbine or rotary displacement type meters shall a) own and maintain, except as provided in sub. (1), a flow or volumetric meter of suitable capacity, together with necessary accessories, and it shall maintain such equipment in proper adjustment so that it will be capable of determining the accuracy of turbine or rotary displacement type meters to within one-half of one per cent; or b) have a record of tests of each turbine or rotary displacement type meter made by an acceptable laboratory or by a manufacturer witnessed by a representative of the utility. The record should show that the test included a check of the recording device.

(4) Each public utility giving gas service through orifice type meters shall own and maintain, except as provided in sub. (1), instruments for checking the diameter of the orifice, a water column for testing the pressure differential recorder, and a mercury column or a dead weight gauge tester for testing the static pressure recorder so that the utility will be capable of determining the accuracy of these orifices and recorders to within one-half of one per cent.

(5) All instruments and equipment used for testing of meters shall be maintained in good condition and correct adjustment and be capable of determining the accuracy of service meters to within one-half of one per cent. Bell type provers shall be checked at least once each 3 years against a standard by either the bottling or strapping method. All electrical and electronic equipment associated with testing equipment shall be tested every 6 months.

(6) A rotary displacement type meter, when used as a standard for testing other service meters, shall be given a differential test every 6 months. An original differential test record of the standard meter shall be established and all future differential test results shall be recorded and compared with the original test record. When the test differential pressure differs from the original test record by more than 25% at approximately 25% of the capacity of the meter, the meter shall be cleaned and/or repaired. All associated electrical equipment shall be tested before each series of tests. Associated pressure and temperature correction equipment shall be tested every 6 months.

(7) A diaphragm-type meter shall not be used as a standard for testing other service meters.

(8) The temperature in the proving and meter storage rooms shall not vary by more than $\pm 3^\circ$ Fahrenheit, or testing shall be stopped. If the proving equipment can compensate for a temperature differential between the proving equipment and the meter, then testing may be performed within the proving equipment temperature specification. The proving and meter storage rooms shall be equipped with a temperature recording device. A meter shall be stored in the temperature controlled

area a minimum of 12 hours before being tested. The meter shop shall be kept in a clean and orderly manner.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; am. (2), Register, January, 1965, No. 109, eff. 2-1-65; am. (3) and (5), cr. (6) and (7), Register, April, 1969, No. 160, eff. 5-1-69; am. (2) and (5), cr. (8), Register, November, 1989, No. 407, eff. 12-1-89.

PSC 134.27 Meter accuracies. All meters shall be set as close to 100% accurate as possible. Diaphragm meters shall be considered correct for service if the results of the multiple tests called for agree within 1% and no test shows an error of more than 1% fast or slow. Turbine and rotary displacement type meters shall be considered correct for service when tested at approximately 10% of rated flow with accuracy between 2% slow and 2% fast, and at approximately 100% flow with accuracy between 1% slow and 1% fast and in the case of turbine type meters, have a spin test time equal to or greater than that on file with the commission under s. PSC 134.28 (6). In orifice type meters, the deviations in the diameter of the orifice shall not exceed the following:

PRACTICAL TOLERANCES FOR ORIFICE DIAMETERS

Orifice Size	Tolerance Plus or Minus	Orifice Size	Tolerance Plus or Minus
.2500	.0003"	1.2500	.0014"
.3750	.0005"	1.5000	.0017"
.5000	.0006"	1.7500	.0020"
.6250	.0008"	2.000 to 5.000	.0025"
.7500	.0009"	over 5.000	.0005" per inch of diameter
.8750	.0010"		
1.0000	.0012"		

In orifice type meters the sharpness of the orifice edge shall be maintained in such a condition that the upstream edge of the orifice shall not appreciably reflect a beam of light when viewed without magnification. No meter which is mechanically defective shall be placed in service or allowed to remain in service after such defect has been discovered. The inlet and outlet of diaphragm type meters shall be capped when not connected in service.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; am. intro par. Register, November, 1962, No. 83, eff. 12-1-62; am. intro par., Register, April, 1969, No. 160, eff. 5-1-69.

PSC 134.28 Meter testing. (1) Each meter test of a diaphragm type meter with a capacity of 2,400 cubic feet per hour or less shall consist of one proving at a rate of flow of 15 to 30% of the rated capacity of that meter and one proving at a rate of flow at 90 to 120% of the rated capacity of the meter. The capacity of the meter for test purposes shall be the capacity at one-half inch water column differential pressure.

(2) Each meter test of a diaphragm type meter having a capacity greater than 2,400 cubic feet per hour shall consist of one proving at a rate of flow of 15 to 30% of the rated capacity of that meter and one proving at a rate of flow of 90 to 120% of the rated capacity of the meter but not less than 2,500 cubic feet per hour. The capacity of the meter for test purposes shall be the capacity at one-half inch water column differential pressure.

(3) Rotary meters shall be tested at 2 loads with the minimum load at 10% of rating by the use of a portable or volumetric meter or other ap-
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proved proving devices, or be given a differential test. In the latter case an original test record shall be set up immediately after installation; future differential test results shall be recorded and compared with the original test record.

(4) A test of an orifice meter shall consist of tests of the recording gauges, and the removal, inspection and measurement of the orifice.

(5) Temperature-compensated gas displacement meters when tested shall be proved to a base temperature of 60° Fahrenheit.

(6) Turbine-type meters shall be tested at 2 loads with the minimum load at 10% of rating by the use of a portable or volumetric meter or other approved proving devices, or be given a turbine blade, rotor and gear assembly spin test, either by manual or velocity rotation. Before a particular type turbine meter can be used, the manufacturer must file with and be accepted by the commission a minimum coasting time which will satisfactorily indicate the operating condition of the internal metering mechanism. For the spin test method a test record shall be set up; and the original and subsequent spin test results shall be recorded and compared with the specified minimum coasting time as filed with the commission for that type meter.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; am. (3), Register, November, 1962, No. 83, eff. 12-1-62; cr. (5), Register, January, 1965, No. 109, eff. 2-1-65; cr. (6), Register, April, 1969, No. 160, eff. 5-1-69; am. (1) and (2), Register, November, 1989, No. 407, eff. 12-1-89.

PSC 134.29 Installation test. No meter shall be used to meter gas consumption for billing purposes unless it was tested and found correct, as defined in s. PSC 134.27 not longer than 15 months previous to its use. The first test on a meter or a retest after a major overhaul shall include a check of the registering device and linkages.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; am. Register, April, 1969, No. 160, eff. 5-1-69.

PSC 134.291 Statistical sample testing plan for new meters. The following new meter sample testing plan may be used for testing new meters instead of the new meter test requirements of s. PSC 134.26 (1), if the commission authorizes the adoption of the plan by a utility.

(1) Meters, as received from the manufacturer, shall be divided into homogeneous lots by manufacturers and types. The maximum number of meters in any lot may not exceed 1,000 or be less than 96. From each such lot assembled, there shall be drawn a coded sample size specified in Military Standard 414 (MIL-STD-414) dated 11 June 1957, as shown for the various group sizes using Inspection Level IV of Table A-2 on page 4 and a corresponding actual sample size as shown on Table B-3 on page 45. The sample shall be drawn by a random method that ensures that each meter in the lot has an equal chance of being selected.

(2) The test criterion for acceptance or rejection of each lot shall be based on a separate analysis conducted at both the open and check flow rate, as specified in s. PSC 134.28 (1) by means of the Standard Deviation Method, Double Specification Limit and with an Acceptable Quality Level (AQL) of .25 for the open accuracy analysis and an AQL of .40 for the check accuracy analysis as shown in Table B-3, MIL-STD-414, page 45. The statistical analysis calculations shall be made following the

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example on page 43 of MIL-STD-414 with the upper and lower specification limits U and L designated at 101% and 99% respectively.

(3) One nonregistering meter may be removed from the sample lot for analysis purposes and replaced with another randomly selected meter. If more than one meter in a sample is found not to be registering, the entire lot shall be rejected.

(4) A lot shall be deemed acceptable for installation if the total estimated percent defective (P) is less than the appropriate maximum allowable percent defective (M) as determined from Table B-3 under the procedures of sub. (2). All meters in an acceptable lot shall be deemed to have met the accuracy requirements of s. PSC 134.26 (1) for placement in service without further testing.

(5) A lot shall be considered rejected and not acceptable for installation if the total estimated percent defective (P) exceeds the appropriate maximum allowable percent defective (M) as determined from Table B-3 under the procedures of sub. (2). All meters in a rejected lot shall be tested and adjusted in accordance with the procedures of s. PSC 134.27 or replaced with meters meeting these requirements.

Note: Military Standard 414 is on file at offices of the Public Service Commission, Secretary of State and Revisor of Statutes offices.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

PSC 134.30 Periodic testing and maintenance. Each utility shall test its meters according to the following schedule except as provided in s. PSC 134.26 (1). Where pressure regulators, volume corrective devices, or other measuring devices are used on the service or used in conjunction with the meters, they shall be tested on the same schedule as the meters.

(1) All diaphragm meters that are measuring dry gas and have non-absorptive type diaphragms or were rediaphragmed since the introduction of dry gas shall be due for removal from service, tested, adjusted, repaired if necessary, and retested if reused, every 180 months if the meter capacity is 2,400 cubic feet per hour or less at ½-inch water column and every 48 months if the capacity is greater than 2,400 cubic feet. Meters shall be tested during the calendar year in which said 180th or 48th month falls.

(2) All diaphragm meters that are measuring dry gas that do not have non-absorptive-type diaphragms and have not been rediaphragmed since the introduction of dry gas shall be removed from service, tested, adjusted, rediaphragmed and retested within 48 months of the introduction of dry gas if the meter capacity is 2,400 cubic feet per hour at ½-inch water column and within 24 months if the capacity is greater than 2,400 cubic feet.

(3) All diaphragm meters that measure other than dry gas shall be removed from service, tested, adjusted, repaired, if necessary, and retested if reused every 96 months if the meter capacity is 2,400 cubic feet per hour or less at ½-inch water column and every 48 months if the capacity is greater than 2,400 cubic feet.

(4) Rotary meters having a capacity of 15,000 cubic feet per hour or less at 4 oz. water column pressure shall be given a differential test at least once every 96 months and once every 48 months if the capacity is greater than 15,000 cubic feet. When the differential differs from the orig-

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inal test record by more than 50%, the meter shall be cleaned and/or repaired.

(5) Orifice meters shall have their differential and static recording gauges tested at least once each month, the diameter and condition of the orifice checked at least once a year. The specific gravity of the gas shall be checked as required in s. PSC 134.21 (4), and any temperature recording devices tested annually.

(6) Turbine meters shall be given an inspection and spin test at least once every 12 months. When the coasting time is equal to or less than the specified minimum coasting time as on file with the commission, the meter shall be cleaned and/or repaired.

(7) Turbine meters which are capable of automatically adjusting shall be inspected and tested at least once every 12 months. They shall be tested in accordance with s. PSC 134.28 (6) or with the use of the meter manufacturer's electronic field prover.

(8) Whenever an automatically adjusting turbine meter automatically adjusts the volume for plus or minus 5% or more while in operation at a steady flow rate of 10% or more of the meter's rated capacity, the meter shall be cleaned and/or repaired.

(9) Whenever an automatically adjusting turbine meter is being tested at a steady flow rate of 10% or more of the meter's rated capacity and indicates an error of plus or minus 1% or more, the meter shall be cleaned and/or repaired.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; am. (4), Register, November, 1962, No. 83, eff. 12-1-62; am. (1), Register, January, 1965, No. 109, eff. 2-1-65; am. (4) and cr. (6), Register, April, 1969, No. 160, eff. 5-1-69; cr. (7) to (9), Register, December, 1984, No. 348, eff. 1-1-85; am. (1) and (4), Register, November, 1989, No. 407, eff. 12-1-89.

PSC 134.31 Request and referee tests. (1) Each utility furnishing gas service shall make a test of the accuracy of any gas meter upon request of the customer, provided the customer does not request such test more frequently than once in 6 months. A report giving the results of each request test shall be made to the customer and the complete, original record shall be kept on file in the office of the utility. A customer or group of customers may not abuse the request test procedures. Abuse shall be determined by the commission.

(2) Any gas meter may be tested by a commission inspector upon written application of the customer. For such test, a fee shall be forwarded to the commission by the customer with the application. The amount of this fee shall be refunded to the customer by the utility if the meter is found to be more than 2% fast as determined in s. PSC 134.14 (1). The amount of the fee that is to be remitted for such tests shall be \$5 for each consumption meter that has a rated capacity not exceeding 1,000 cubic feet per hour; for larger consumption meters, demand meters, etc., the test fee shall be the actual expense of the test.

(3) All request and referee meter tests shall include an inspection of the meter index by removing the index from the meter body. The dials, gears and all other parts of the index shall be visually inspected for wear, misalignment or other mechanical defects which would affect the accuracy of

the meter on a continuing or sporadic basis. Any defects affecting the meter's accuracy shall be noted and evaluated in the report of the test.

History: Cr. Register, February, 1959, No. 38, eff. 3-1-59; cr. (3), Register, July, 1983, No. 331, eff. 8-1-83; am. (2), Register, December, 1984, No. 348, eff. 1-1-85; am. (1) and (2), Register, November, 1989, No. 407, eff. 12-1-89.