

some part of its distributing system, whereby graphic records of the water pressure in such part of the system, continuous for each consecutive 24-hour period, shall be automatically made. Such records shall show the time and date of both beginning and ending, and shall be preserved on file in the office of the utility for a period of not less than 3 years following their respective dates.

**PSC 185.08 Fire service.** Each water utility furnishing fire-protection, as well as domestic and industrial, service, shall, unless exempted by the commission from the necessity of furnishing fire streams direct from hydrants, be prepared on short notice to make such increase in the normal pressure and volume of water delivered as may be required for reasonably adequate fire protection and other simultaneous service throughout the system.

**PSC 185.09 Pumpage records.** (1) A permanent record shall be kept of the amount of water pumped into the distributing-pipe system each day, and the amounts pumped daily shall be summarized by months, and such daily records and summaries kept on file.

(2) For measuring pumpage, station meters are recommended as much more reliable and satisfactory than the simple pump stroke, or revolution, counter.

### METERS

**PSC 185.10 Initial accuracy.** Before initial installation every new meter shall be tested by the utility for accuracy of registration, and no meter whose accuracy of registration does not fall within the following limits of allowable error shall be placed in service:

Meter Size (Diam. of Connection, Inches)	Allowable Error 2% Plus or minus on Rates of Flow (Gals. per Min.)		Allowable Error 10% (Under-registration) on Flow of (Gals. per Min.)
	From	To	
5/8"	1	20	1/4
3/4"	2	35	1/2
1"	3	60	3/4
1 1/2"	5	100	1 1/2
2"	8	160	2
3"	16	320	4
4"	28	560	7
6"	48	960	12

**PSC 185.11 Maintenance of accuracy.** The accuracy of registration of all meters in service shall be maintained, and shall be insured, by periodic retests of such frequency as the conditions of service in any case may warrant. Retests should include a test on a small and definite rate of flow within the range for which the allowable error is 2%.

**PSC 185.12 Complaint test.** Every water consumer or utility patron shall be entitled to have his meter retested by the utility at any time upon his conditional deposit of \$2 per inch of nominal size or fraction thereof, and such deposit shall be returned to him by the

utility in case the retest shall show the meter to be over-registering by more than 2%; otherwise, it shall be forfeited to the utility by the depositor. Such retest on request of a consumer shall be made in his presence, if desired by him.

**History:** 1-2-56; Am. Register, May 1956, No. 5, eff. 6-1-56.

**PSC 185.13 Referee tests.** Any water consumer may have official test of his meter made by this commission upon request, accompanied by a deposit of a meter-test fee of \$4 per inch of nominal size or fraction thereof, and upon payment of meter-transportation expense, if any. In such case, the meter-test fee deposited by the consumer will be refunded to him by the utility furnishing the metered service in question if the meter be found by the commission to be over-registering beyond the allowable limit of error for new meter as stated in section PSC 185.10.

**History:** 1-2-56; Am. Register, May 1956, No. 5, eff. 6-1-56.

**PSC 185.14 Meter records.** A permanent record shall be kept of the tests on each meter, and such records shall show the name, number and size of the meter, date and place of the original and of each subsequent installation, and the complete results of each test and retest. The records shall also show the cause of each removal from service and what, if any, repairs were made between time of removal and the retest of the meter. The original test record shall show the identification of the meter and all data taken in form that permits convenient checking of the methods employed and the calculations. Any meter that has been in service for a period of 2 years, for which no satisfactory record is available, shall be tested, and a permanent record made within 1 year from the date of this order unless this time is extended by written order of the commission.

**PSC 185.15 Equipment.** Each water utility furnishing service to any of its patrons on the meter basis shall provide and maintain suitable working space and equipment or apparatus satisfactory to the commission for the testing and repairing of meters. Meter-testing equipment shall at all reasonable hours be accessible for inspection and use by the authorized representatives of the commission.

**PSC 185.16 Portable test meters.** Where portable test meters are used to determine the accuracy of meters in service, they shall be frequently recalibrated by suitable testing apparatus to insure safe reliance upon them for correct registration at the specified test rates of flow.

**PSC 185.17 History:** 1-2-56; r. Register, May, 1959, No. 41, eff. 6-1-59.

**PSC 185.18 Construction records.** Every water utility shall prepare, or cause to be prepared, and shall keep on file, permanent and adequate records, in the form of maps or clearly descriptive tabular statements, or both, showing the size, kind and location of all its underground main- and service-pipe lines or other hidden construction, and definite locations of all valves and shutoff cocks. For all new construction work done after January 1, 1920, the records shall also show date of construction, by year and month.

Register, May, 1959, No. 41

**PSC 185.19 Meter readings and billing periods.** Readings of all meters used for determining charges to customers shall be scheduled monthly, bimonthly, quarterly, semi-annually or for such other period as may be authorized by the commission. An effort shall be made to read meters on corresponding days of each meter-reading period. The meter reading date may be advanced or postponed not more than 10 days without adjustment of the billing period. Bills for service shall be rendered within 40 days from the reading of the meter except as may be otherwise specifically authorized by the commission.

**History:** Cr. Register, May, 1959, No. 41, eff. 6-1-59.

**PSC 185.20 Billing.** (1) Each bill, including the customer's receipt, shall show the present and last preceding meter readings, the date of the present reading, the number of units used, the net and gross amount of the bill, the date after which the gross amount must be paid, and the rate schedule under which the bill is computed. In lieu of including the rate schedule on the bill, the utility may, whenever a rate change becomes effective and at least once each year, supply each customer with the schedule of rates at which the bills are computed and any other rates that might be applicable. Minimum and estimated bills shall be distinctly marked as such.

(2) (a) If the billing period is longer or shorter than allowed in section PSC 185.19, the bill shall be prorated on a daily basis unless other provision is made in the utility's filed rules.

(b) If the utility reads the meters at the end of each billing period, the utility may leave meter reading forms when access to meters cannot be gained. If requested by the customer, the utility shall provide such forms. If no form is left or the form is not returned in time for the billing operation, a minimum or estimated bill may be rendered. In cases of emergency, the utility may render minimum or estimated (average) bills without reading meters or supplying meter-reading forms to customers. Only in unusual cases or when approval is obtained from the customer shall more than two consecutive estimated bills be rendered.

(c) If an estimated bill appears to be abnormal when a subsequent reading is obtained, the bill for the entire period shall be computed at a rate which contemplates the use of service during the entire period and the estimated bill shall be deducted. If there is reasonable evidence that the use occurred during only one billing period, the bill shall be so computed.

(3) (a) Credits due a customer because of meter inaccuracies, errors in billing, or misapplication of rates shall be shown separately and identified.

(b) The original billing rendered because of meter inaccuracy, or error in billing, shall be separated from the regular bill and the charges explained in detail. Subsequent to the first billing, the amount may be shown as a separate item on the regular bills.

**History:** Cr. Register, May, 1959, No. 41, eff. 6-1-59.