

Chapter PSC 185

STANDARDS FOR WATER PUBLIC UTILITY
SERVICE

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History: Chapter PSC 185 as it was in effect on May 31, 1972 was repealed, and a new chapter PSC 185 was created, Register, May, 1972, No. 197, effective June 1, 1972.

Part 1. General

PSC 185.11 Authorization for and application of rules. (1) Wis. Adm. Code Chapter PSC 185 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 sections 227.014, 196.02, 196.06, 196.12, 196.15, 196.16, 196.17, 196.19, 196.37, Wis. Stats.

(2) The rules making up Wis. Adm. Code chapter PSC 185 are designed to effectuate and implement sections 196.02, 196.03, 196.06, 196.12, 196.15, 196.16, 196.17, 196.19, 196.21, 196.22, 196.60, 196.62, 196.72 and parts of other sections of the Wisconsin statutes.

(3) The requirements of Wis. Adm. Code chapter PSC 185 shall be observed by all water public utilities except insofar as an exemption may be given by the commission as hereinafter mentioned. Nothing herein shall preclude special and individual consideration being given to exceptional or unusual situations and, upon due investigation of the

facts and circumstances therein involved, the adoption of requirements as to individual utilities or services which shall be lesser, greater, other, or different than those provided in these rules and regulations.

(4) The manner of enforcing the rules in Wis. Adm. Code chapter PSC 185 is prescribed in section 196.66, Wis. Stats., and such other means as provided in statutory sections administered by the public service commission.

(5) In case of emergency, where public interest requires immediate action without waiting for compliance with the specific terms of these rules, the rules shall not prevent immediate corrective action by the utility, which action, however, shall be subject to review by the public service commission.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.12 Definitions. The following terms as used in this chapter mean:

- (1) "Commission"—public service commission.
- (2) "Customer"—any person, owner or occupant, firm, partnership, corporation, municipality, cooperative organization, governmental agency, political entity, etc., provided with water service by any water public utility.
- (3) "Meter"—an instrument installed to measure the volume and/or rate of flow of water delivered through it.
- (4) "Percent registration"—the ratio of the meter registration divided by the actual volume or rate of flow, stated in percent. Stated more simply for domestic (volumetric) meters, this is the percent of the water delivered through a meter which the meter actually registers.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.13 General requirement. Every utility shall furnish reasonably adequate service and facilities at the rates filed with the commission and subject to these rules and the rules of the utility (on file with the commission) applicable thereto and not otherwise.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.15 Free or discriminatory service prohibited. (1) No utility shall provide water service free or at a rate different than provided for in its rates. (See sections 196.62 and 196.63, Wis. Stats.) Such prohibition shall include, among others, water service for all non-utility municipal purposes such as street and sewer flushing and service to non-utility public buildings.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.16 Protection of utility facilities. A water public utility upon receipt of written notice as required by section 66.047 (2), Wis. Stats., from the property owner or from a contractor of work which may affect its facilities used for serving the public:

- (1) Shall investigate and decide what action, if any, must reasonably be taken to protect or alter utility facilities, in order to protect service to the public and to avoid unnecessary damage, such as identifying in a suitable manner the location of any underground utility facilities which may be affected by the work.

(2) The utility shall take such action as is reasonably and legally necessary to protect, remove, alter, or reconstruct its facilities, and shall perform such work with reasonable dispatch taking into account the conditions to be met, provided that nothing in this rule shall be deemed to affect any right which the utility may have to require advance payment or adequate assurance of payment of the reasonable cost thereof to the utility by the property owner or contractor.

(3) The utility may, in order to protect its interests, require that the owner or contractor perform certain work upon that part of the service piping on or being removed from the property upon which the excavating, building, or wrecking operations are being performed.

(4) This rule is not intended to affect the responsibility of the contractor or owner, or the liability or legal rights of any party.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.17 Interference with public service structures. (1) No utility having any work upon, over, along, or under any public street or highway or upon, over, along, or under any private property shall interfere with, destroy, or disturb the structures of any other public service corporation or railroad encountered in the performance of such work so as to interrupt, impair, or affect the public service for which such structures may be used, without first reaching an agreement concerning the location and the nature of the proposed work.

(2) A utility shall exercise care when working in close proximity of existing facilities. When the facilities are underground and are to be exposed or possibly may be exposed, hand-digging shall be employed. In these cases, such support as may be reasonably necessary for protection of the facilities shall be provided in and near the construction area. When backfilling an excavation such procedures and materials will be employed to provide reliable support for existing underground facilities in and near the construction area.

(3) A utility shall, in the absence of working arrangements, give at least 3 days' written notice (not counting Saturdays, Sundays, and legal holidays) to all utilities or railroads and to those who may have facilities in and near the construction area which may be affected by the proposed work. The utility proposing to work shall obtain from the affected party the location of the existing facilities determined to be affected or to be in and near the construction area.

(4) A utility upon receiving a notice of proposed construction shall furnish in 3 days detailed information relative to location and type of facilities that are present in the proposed construction area. Where practical in those cases where the facilities are underground, they shall be marked physically in the field relative to location.

(5) Nothing in the above shall prevent a utility from proceeding as quickly as possible with any emergency construction work which might interfere with existing facilities. However, all reasonable precautions shall be taken to avoid or minimize damage or interference to the other facilities and notification shall be given as soon as possible to the utilities which have facilities in the construction area.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.18 Location of records. All records required by these rules or necessary for the administration thereof, shall be kept within this state unless otherwise authorized by the commission. These records

shall be available for examination by the commission or its authorized representative at all reasonable hours. (See section 196.06 (6), Wis. Stats.)

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.19 Retention of records. The following records shall be preserved and kept available for inspection by the commission for the period indicated. The list is not to be taken as comprehending all types of utility records.

Description of Record	Period to be Retained
(1) Maps showing the location and physical characteristics of the utility plant.	Until map is superseded or 6 years after plant is retired provided mortality data are retained.
(2) Engineering records in connection with construction projects.	Until record is superseded or 6 years after plant is retired provided mortality data are retained.
(3) Operating records: Station pumpage records	15 years or 3 years after the source is abandoned, whichever is shorter
Interruption records	6 years
Meter test records	(See Wis. Adm. Code section PSC 185.46)
Meter history record*	Life of meter
Annual meter accuracy summary	10 years
Pressure records	6 years
(4) Customer records: Complaint records	3 years
Customer deposit	6 years after refund
Meter reading sheets or cards	**
Billing record	**
(5) Filed rates and rules	Permanently

* Where practicable should be placed in mortality study before destroying.
** Where machine billing is used and meter readings recorded on tabulated cards the register sheets may be considered to be "meter reading sheets" and the "billing records." "Meter reading sheets" and "billing records" or the "register sheets" shall be kept 6 years or until they are no longer needed to adjust bills. This means that the records must be kept 6 years or from the date of one meter test to the next, whichever is longer.

Note: See also "Regulations to Govern the Preservation of Records of Electric, Gas and Water Utilities" adopted by the Commission in docket 2-U-5005, April 27, 1961 for more comprehensive listing of retention periods of specific records.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

Part 2. Rate Schedules and Rules

PSC 185.21 Schedules to be filed with the commission. The schedules of rates and rules shall be filed with the commission by the utility and shall be classified, designated, arranged and submitted so as to conform to the requirements of the current tariff or rate schedule circulars and the special instructions which have been and may from time to time be issued by the commission. Provisions of the schedules shall be definite and so stated as to minimize ambiguity or the possibility of misinterpretation, and shall include, together with such other information as may be deemed pertinent, the following:

(1) All rates for service with indication for each rate of the class of customers to which it applies. There shall also be shown any limitations on the service furnished under such rate, the prices per unit of service, and the number of units per billing period to which the prices apply, the period of billing, the minimum bill, method of measuring demands (where applicable) and consumptions, and any special terms and conditions applicable. The discount for prompt pay-

ment or penalty for late payment, if any, and the period during which the net amount may be paid shall be specified.

(2) If service to other utilities or municipalities for resale is furnished at a standard filed rate, either a copy of each contract or the standard contract form with a summary of the provisions of each signed contract.

(3) Extension rules for extending service to new customers indicating what portion of the extension or cost thereof will be furnished by the utility, and if the rule is based on cost, the items of cost included.

(4) Designation of such portion of the service facilities as the utility furnishes, owns and maintains.

(5) Rules with which prospective customers must comply as a condition of receiving service, and the terms of any contracts required.

(6) Rules governing the establishing of credit by customers for payment of service bills.

(7) Rules governing disconnecting and reconnecting service.

(8) Notice required from customer for having service discontinued.

(9) Rules governing temporary, emergency, auxiliary, and standby service.

(10) Rules governing any limitations on the type of equipment which may or may not be connected.

(11) A list of the municipalities in which service is rendered.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.22 Information available to customers. (1) There shall be kept on file in every station and office of the utility where customer payments are received copies of the rate schedules applicable in such locality. Copies of these rules and such rules of the utility as are applicable shall be kept on file in every general and local office of the utility. Reasonable notice shall be given customers as to where the foregoing information is available to them.

(2) Where a customer is eligible to take service under any one or more of 2 or more rates, the company shall advise the customer in the selection of the rate or rates which result in the lowest cost of service, based on 12 month's service and on the information at hand.

(3) Each water utility, for every municipality in which it serves, shall provide in the respective telephone directories a telephone listing by which the utility can be notified during a 24-hour day of any utility service deficiency or emergency which may exist.

(4) Where a second language is common in a particular area served by the utility and so identified by the commission, all rules pertaining to billing and credit shall be available upon customer request for distribution in English and that second language in every business office of the utility in that area accessible to the public and where customer payments are received.

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(5) Upon application for service, every customer shall be advised by the utility of the utility's collection powers contained in s. 66.069 (1) (b), Stats.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72; emerg. r. and recr. eff. 1-21-75; r. and recr. Register, January, 1975, No. 229, eff. 2-1-75.

Part 3. Service and Billing

PSC 185.31 Metered service. (1) Except where otherwise authorized by the commission, all water sold by a utility shall be on the basis of meter measurement except that water used for street or sewer flushing, construction, or similar purposes where metering is not practicable may be estimated (See PSC 185.15).

(2) Wherever practicable, consumption of water within the utility itself, or by administrative units associated with it or with the municipality shall be metered.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.32 Meter readings and billing periods. Readings of all meters used for determining charges to customers shall be taken by the utility monthly, bimonthly, quarterly, semi-annually or for such other period or in such other manner 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 50 days from the reading of the meter except as may be otherwise specifically authorized by the commission.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.33 Billing. (1) (a) 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 consumed, the class of service if other than residential, 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 twice a year, supply each customer with the schedule of rates at which the bills are computed and any other rates that might be applicable. Bills rendered at rates requiring the measurement of a number of different factors shall show all data necessary for the customer to check the computation of the bill. Minimum and estimated bills shall be distinctly marked as such.

(b) The commission may authorize the utility to make late payment charges to a customer's utility service bill that is not paid in full within 20 days following issuance of the bill. The late payment charge may be either a one-time charge as provided in par. (f) [(c)] or a monthly charge as provided in par. (g) [(d)]. The utility shall receive approval from the commission of the method it desires to use and shall not change methods without commission approval.

(c) If the utility is authorized to make a one-time late payment charge, such charge shall comply with the following requirements.

1. The bill shall clearly indicate the amount of the late payment charge and the date after which the late payment charge shall be applied.

2. Late payment charges shall be applied no sooner than 20 days after the date of issuance of the bill.

3. The amount of the late payment charge shall be 3% of the bill, except a minimum charge of 30¢ shall apply.

4. Late payment charges shall be applied to all customer classes and rate classifications.

5. The utility shall not waive any properly applied late payment charges.

6. A late payment charge shall be applied only once to any given amount outstanding.

(d) If the utility is authorized to make monthly late payment charges, such charges shall comply with the following requirements.

1. The amount of the charge shall be no more than 1-½% per month and shall be filed with and approved by the commission before it can be applied.

2. The late payment charge shall be applied to the total unpaid balance for utility service, including unpaid late payment charges.

3. The late payment charge shall be applied no sooner than 20 days after the date of issuance of the bill.

4. The late payment charge shall be applied to all customer classes and rate classifications.

5. If a customer disputes a bill for utility service or portion thereof and does not pay the disputed bill in full within 20 days following issuance of the bill, the late payment charge shall be applied only to that portion of the disputed bill later found to be correct and payable to the utility.

6. The utility may not waive any properly applied late payment charge.

7. No additional late payment charge may be applied to a delinquent account for utility service after the date on which the delinquent account was written off by the utility as uncollectable.

8. If a utility changes the type of late payment charge or initiates a late payment charge, the new charge shall apply only to utility service provided after the effective date of the change or initiation.

(2) (a) If the billing period is longer or shorter than allowed in s. PSC 185.32, 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 the 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 3 consecutive estimated bills be rendered

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where bills are rendered monthly and there shall be not more than 2 consecutive estimated bills where the billing period is 2 months or more.

(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, 1972, No. 197, eff. 6-1-72, r. and recr. (1), Register, August, 1976, No. 248, eff. 9-1-76; renum. (1) (b) to be (1) (c) and am. (intro.), cr. (1) (b) and (d), Register, September, 1981, No. 309, eff. 10-1-81.

PSC 185.35 Adjustment of bills. (1) Whenever a positive displacement meter is found upon test to have an average percent registration of more than 102 and whenever a compound or current type meter is found upon test to have an average percent registration of more than 103, a recalculation of bills for service shall be made for the period of inaccuracy assuming an inaccuracy equal to the average percent error in excess of 100.

(2) For the purposes of this rule, the average percent registration shall be the average percent registration for those normal test points which are within the normal test flow limits of the meter, except that the test point within the "change-over" range for compound meters shall be ignored. (For positive displacement meters the light flow test point would not be considered.)

(3) 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 meter was installed or last tested; however, the period of accuracy shall not exceed one-half the required test period.

(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 may be in cash or as credit on a bill. 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) Where a meter in service is found not to register or is found to have an average percent registration of less than 97, the utility may bill the customer for the amount the test indicates has been undercharged for the period of inaccuracy, which period shall not exceed the last 6 months the meter was in service unless otherwise authorized by the commission after investigation. This limitation does not apply in the case of wholesale customers. No back bill will be sanctioned if the customer has

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

(6) Subject to the utility's rules setting forth the method of determining a reduced rate herein authorized, if a leak unknown to the customer is found in an appliance or the plumbing, the utility may estimate the water so wasted and bill for it at a reduced rate not less than the utility's cost thereof. No such adjustment shall be made for water supplied after the customer has been notified and has had an opportunity to correct the condition.

(7) Where, because of some deficiency in the utility's portion of the facilities and at the request of the utility, a customer permits a stream of water to flow to prevent freezing of the service or main the utility shall adjust his bill for the excess consumption which results.

(8) A classified record shall be kept of the number 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, upon request, be submitted to the commission by April 1.

History: Cr. Register, May 1972, No. 197, eff. 6-1-72.

PSC 185.36 Deposits. (1) **NEW RESIDENTIAL SERVICE.** A utility shall not require a cash deposit or other guarantee as a condition of new service unless a customer has an outstanding account balance with the utility which accrued within the last 6 years, and which at the time of the request for new service remains outstanding and not in dispute. (See PSC 185.39.)

(2) **EXISTING RESIDENTIAL SERVICE.** A utility shall not require a cash deposit or other guarantee as a condition of continued service unless either or both of the following circumstances apply:

(a) The utility has shut off or discontinued the service of the customer within the last 12-month period for violation of the utility's filed rules or for nonpayment of a delinquent service account not currently in dispute.

(b) Subsequent credit information indicates that the initial application for service was falsified or incomplete to the extent that a deposit would be required under this section.

(3) **NON-RESIDENTIAL SERVICE.** (a) In the case of non-residential service if the credit of an applicant for water service has not been established satisfactorily to the utility, he may be required to deposit a sum not exceeding the estimated gross bills for all water service, both billed and unbilled, which can be supplied before the utility's filed disconnect rule becomes applicable. The amount to be deposited may be a minimum of \$1 per month for each class of water service furnished.

(b) The deposit shall be refunded after 24 consecutive months of prompt payment. In no case, however, will a deposit be refunded if the customer's credit standing is not satisfactory to the utility.

(c) Payment shall be considered "prompt" if it is made prior to notice of disconnection for nonpayment not in dispute.

(4) **CONDITIONS OF DEPOSIT.** The maximum deposit for a new or existing residential account shall not exceed the estimated gross bills for

all water service, both billed and unbilled, which can be supplied before the utility's filed disconnect rule becomes applicable. The amount to be deposited may be a minimum of \$1 per month for each class of water service furnished.

(5) **INTEREST.** Deposits shall bear interest of at least the legal rate, payable from the date of deposit to the date of refund or discontinuance of service, whichever is earlier.

(6) **REVIEW.** The utility shall review the payment record of each residential utility customer with a deposit on file at 12-month intervals. The utility shall not require or continue to require a cash deposit unless a deposit is required under the provisions of s. PSC 185.36 (2).

(7) **REFUND.** Any deposit or portion thereof refunded to a customer shall be refunded by check unless both the customer and the utility

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agree to a credit on the regular billing or unless subsection (8) applies.

(8) **ACCRUED INTEREST.** Upon termination of service, the deposit, with accrued interest shall be credited to the final bill and the balance shall be returned promptly to the customer.

(9) **GUARANTEE.** A utility shall not require any customer to pay a deposit or establish a guarantee in lieu of deposit without explaining, in writing if requested, why that deposit is being required.

(10) **SERVICE REFUSAL.** Service may be refused or disconnected for failure to pay a deposit request subject to the rules pertaining to disconnection and refusal of service. (Wis. Adm. Code section PSC 185.37).

(11) **GUARANTEE TERMS AND CONDITIONS.** (a) The utility may accept, in lieu of a cash deposit, a contract signed by a guarantor satisfactory to the utility, whereby payment of a specified sum not exceeding the cash deposit requirement is guaranteed. The term of such contract shall be no longer than 2 years, but shall automatically terminate after the customer has closed his account with the utility, or at the guarantor's request upon 30 days' written notice to the utility.

(b) Upon termination of a guarantee contract or whenever the utility deems same insufficient as to amount or surety, a cash deposit or a new or additional guarantee may be required upon reasonable written notice to the customer. The service of any customer who fails to comply with these requirements may be disconnected upon 8 days' written notice.

(c) The utility shall mail the guarantor copies of all disconnect notices sent to the customer whose account he has guaranteed unless the guarantor waives such notice in writing.

(12) **DEFERRED PAYMENT.** In lieu of cash deposit or guarantee, an applicant for new service who has an outstanding account accrued within the last 6 years with the same utility shall have the right to receive service from the utility under a deferred payment agreement as defined in Wis. Adm. Code section PSC 185.38 for the outstanding account.

(13) **APPLICABILITY.** The rules in subsections (11) and (12) of this section are not applicable to deposits or guarantees made in connection with the financing of extensions or other equipment.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72; r. and recr. Register, January, 1975, No. 229, eff. 2-1-75.

PSC 185.37 Disconnection and refusal of service. (1) (a) In no circumstances will the cumulative time before notice of disconnection be less than 20 days after the date of issuance of the bill and an account may be deemed delinquent for the purpose of disconnection after such period has elapsed.

(b) At least 8 calendar days prior to disconnection, the utility shall give written disconnect notice upon a form which must be in the tariff of the utility filed with the public service commission and which conforms to the requirements of Wis. Adm. Code section PSC 185.37

(9) unless excepted elsewhere.

(c) When a customer, either directly or through the public service commission, disputes a disconnection notice, the utility shall investigate any disputed issue and shall attempt to resolve that issue by negotiation. During this investigation and negotiation, utility service shall not be disconnected over this matter.

(d) If a disputed issue cannot be resolved pursuant to Wis. Adm. Code section PSC 185.39 (1), the utility shall inform the customer of the right to contact the public service commission.

(2) Utility service may be disconnected or refused for any of the following reasons:

(a) Failure to pay a delinquent account or failure to comply with the terms of a deferred payment agreement. (See Wis. Adm. Code section PSC 185.38).

(b) Failure to comply with deposit or guarantee arrangements as specified in Wis. Adm. Code section PSC 185.36.

(c) Diversion of service around the meter.

(3) A utility may disconnect utility service without notice where a dangerous condition exists for as long as the condition exists.

(4) Service may be discontinued with a written 24-hour notice for nonpayment of a bill covering surreptitious use of water if so provided in the filed tariff of the utility.

(5) Utility service may not be disconnected or refused for any of the following reasons:

(a) Nonpayment of a delinquent account over 6 months old where collection efforts have not been made within that period of time unless the passage of additional time results from other provisions herein or from good faith negotiations or arrangements made with the customer.

(b) Delinquency in payment for service by a previous occupant of the premises to be served other than a member of the same household residing at the same premises.

(c) Failure to pay for merchandise or charges for non-utility service billed by the utility.

(d) Failure to pay for a different type or class of utility service.

(e) Failure to pay the account of another customer as guarantor thereof.

(f) Failure to pay charges arising from any underbilling occurring more than one year prior to the current billing and due to any misapplication of rates.

(g) Failure to pay charges arising from any underbilling occurring more than one year prior to the current billing and due to faulty metering.

(h) Failure to pay an estimated bill other than a bill rendered pursuant to an approved bimonthly meter reading plan unless the customer upon request refuses to permit the reading of the meter during normal business hours.

(6) A utility shall not disconnect any residential service without notifying the county department of health and social services at least 5 calendar days prior to the scheduled disconnection, if the customer or responsible person has made a written request for this procedure to the utility. The customer shall be apprised of this right upon application for service.

(7) Notwithstanding any other provision of this section, a utility may not disconnect service to a residential customer if disconnection will aggravate an existent medical emergency of the customer, a member of his family or other permanent resident of the premises where service is rendered and if the customer conforms to the procedures described in par. (a) below.

(a) A utility shall postpone the disconnection of service for 21 days to enable the customer to arrange for payment, if the customer produces a licensed Wisconsin physician's statement or notice from a public health or social service official which identifies the medical emergency and specifies the period of time during which disconnection will aggravate the circumstances. The postponement may be extended once by renewal of the certificate or notice. No further extension of time shall be granted except upon a showing by the customer of the existence of extraordinary circumstances and further that he has exercised due diligence in meeting the emergency as evidenced in part by close and continuous communication with the utility.

(b) During the period service is continued under the provisions of this subsection, the customer shall be responsible for the cost of residential utility service. However, no action to disconnect that service will be undertaken until expiration of the period of continued service.

(c) If there is a dispute concerning an alleged existent medical emergency, either party shall have the right to an informal review by the public service commission staff. Pending a decision after informal review, residential utility service shall be continued, provided that the resident has submitted a statement or notice as set forth in par. (a) of this subsection.

(8) (a) A utility shall not disconnect service unless written notice by first class mail is sent to the customer or personally served at least 8 calendar days prior to the first date of the proposed disconnection. Notice shall be sent to the account name and address, and to the address where service is provided, if different. If disconnection is not accomplished on or before the 15th day after the first notice date, a subsequent notice must be left on the premises not less than 24 hours nor more than 48 hours prior to the disconnection.

(b) The utility shall make a reasonable effort to have a personal or telephone contact with the customer prior to disconnection.

(c) Disconnection notice shall be given upon a form approved by the commission, and shall contain the following information:

1. The name and address of the customer and the address of the service, if different.

2. A statement of the reason(s) for the proposed disconnection of service and that disconnection will occur if the account is not paid, or if arrangement is not made to pay the account under deferred payment

agreement, or if other suitable arrangements are not made, or if equipment changes are not made. If disconnection of service is to be made for default on a deferred payment agreement, the notice shall include an explanation of the acts of the customer which are considered to constitute default.

3. A statement that the customer should communicate immediately upon receipt of the notice with the utility's designated office, listing a telephone number, if he disputes the notice of delinquent account, if he wishes to negotiate a deferred payment agreement as an alternative to disconnection, if any resident is seriously ill, or if there are other extenuating circumstances.

4. A statement that residential utility service will be continued for up to 21 days during serious illness if the account holder submits a statement or notice pursuant to sub. (7).

5. A statement that the customer may appeal to the public service commission staff in the event that the grounds for the proposed disconnection or the amount of any disagreement remains in dispute after the customer has pursued the available remedies with the utility.

(9) (a) Service shall not be disconnected on a day, or on a day immediately preceding a day, when the business offices of the utility are not available to the public for the purpose of transacting all business matters unless the utility provides personnel which are readily available to the customer 24 hours per day to evaluate, negotiate or otherwise consider the customer's objection to the disconnection as provided under s. PSC 185.39, and proper service personnel are readily available to restore service 24 hours per day.

(b) If a residential service which has been disconnected has not been restored to service within 24 hours after the time of the disconnection, the utility shall inform the local law enforcement department of the billing name and the service address and that a threat to health and life might exist to persons occupying the premises.

History: Emerg. cr. eff. 1-21-75; r. Register, January, 1975, No. 229, eff. 2-1-75; am. (1) (a) and (5) (a), Register, December, 1975, No. 240, eff. 1-1-76; emerg. cr. (10), eff. 12-17-81.

PSC 185.38 Deferred payment agreement. The utility is required to offer deferred payment agreements only to residential accounts.

(1) Every deferred payment agreement entered into due to the customer's inability to pay the outstanding bill in full shall provide that service will not be discontinued if the customer pays a reasonable amount of the outstanding bill and agrees to pay a reasonable portion of the remaining outstanding balance in installments until the bill is paid.

(2) For purposes of determining reasonableness under these rules the parties shall consider the:

- (a) Size of the delinquent account.
- (b) Customer's ability to pay.
- (c) Customer's payment history.
- (d) Time that the debt has been outstanding.
- (e) Reasons why debt has been outstanding.

(f) Any other relevant factors concerning the circumstances of the customer.

(3) A deferred payment agreement offered by a utility shall state immediately preceding the space provided for the customer's signature and in bold face print at least 2 sizes larger than any other used thereon, that "IF YOU ARE NOT SATISFIED WITH THIS AGREEMENT, DO NOT SIGN. IF YOU DO SIGN THIS AGREEMENT YOU GIVE UP YOUR RIGHT TO DISPUTE THE AMOUNT DUE UNDER THE AGREEMENT EXCEPT FOR THE UTILITY'S FAILURE OR REFUSAL TO FOLLOW THE TERMS OF THIS AGREEMENT."

(4) A deferred payment agreement shall not include a finance charge.

(5) If an applicant for utility service has not fulfilled terms of a deferred payment agreement, the utility shall have the right to disconnect pursuant to disconnection of service rules (s. PSC 185.37) and under such circumstances, it shall not be required to offer subsequent negotiation of a deferred payment agreement prior to disconnection.

(6) Any payments made by a customer in compliance with a deferred payment agreement or otherwise shall first be considered made in payment of the previous account balance with any remainder credited to the current bill.

History: Emerg. cr. eff. 1-21-75; r. Register, January, 1975, No. 229, eff. 2-1-75.

PSC 185.39 Dispute procedures. (1) Whenever the customer disputes the utility's request for a deposit or other guarantee, or advises the utility's designated office prior to the disconnection of service that all or any part of any billing as rendered is in dispute, or that any matter related to the disconnection or refusal of service is in dispute, the utility shall:

(a) Investigate the dispute promptly and completely.

(b) Advise the customer of the results of the investigation.

(c) Attempt to resolve the dispute.

(d) Provide the opportunity for the customer to enter into a deferred payment agreement when applicable in order to settle the dispute.

(2) After the customer has pursued the available remedies with the utility, he may request that the public service commission staff informally review the disputed issue and recommend terms of settlement.

(a) A request for informal review may be made in any reasonable manner such as by written notice or telephoned request directed to the public service commission. By telephone or written notice the public service commission staff may request the utility to investigate the dispute.

(b) There must be at least 5 days between the date the commission staff telephones or mails written notice of terms of settlement after informal review, and any subsequent disconnection.

(3) Any party to the dispute after informal review may make a written request for a formal review by the commission. Such request must be made within 5 days of the date the commission staff telephones or mails written notice of terms of settlement after informal review. If written

confirmation of the staff telephone notice is requested and mailed, the 5 day period begins from the date of that mailing.

(a) Within 10 days from the time such a request is made, the commission shall decide on the basis of the information it has received from the staff whether to hold a hearing on the matter and shall inform both parties of its decision.

(b) If the commission decides to conduct formal hearing on the dispute, the customer shall be required to pay 50% of the bill or deposit in dispute to the utility or post bond for that amount on or before date of hearing. Such payment or bond may be waived by the commission for good cause shown. Failure to pay the specified amount before hearing will constitute waiver by the customer.

(c) Such a hearing shall conform to the procedures described in ss. 196.27 to 196.34, Stats.

(d) Any such hearing shall be held not less than 10 days following a notice of hearing and a decision thereon shall be rendered following the conclusion of the hearing.

(4) Utility service shall not be disconnected or refused because of any disputed matter while the disputed matter is being pursued in accordance with the provisions of this section. In no way does this relieve the customer from obligation of paying charges which are not in dispute.

History: Emerg. cr. eff. 1-21-75; r. Register, January, 1975, No. 229, eff. 2-1-75; am. (1), (3) (b) and (4), Register, December, 1975, No. 240, eff. 1-1-76; emerg. am. (2) (a) and (b) and (3) (intro.) eff. 12-17-81; am. (2) (a) and (b) and (3) (intro.), Register, July, 1982, No. 319, eff. 8-1-82.

Part 4. Records

PSC 185.41 Employes authorized to enter customers' premises. The utility shall keep a record of its employes authorized pursuant to s. 196.171, Stats., to enter customers' premises.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.42 Customer 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.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.43 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 and other construction, and definite locations of all valves and shutoff cocks. The records shall also show date of construction by year and month. The maps may be part of the continuing property records if they show the size, kind and location of the facilities and the date of construction by month and year.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.44 Records and reports of service interruptions. (1) Each utility shall notify the commissioner as soon as possible of any un-
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usual occurrence which has caused or is expected to cause an interruption of service for one hour or longer to all of the customers or 500 (or more) customers, whichever number is the smaller. (This supplements but does not preempt the requirements of ch. PSC 104).

Note: See also s. PSC 185.88, interruptions of service.

(2) Each utility shall maintain a record of interruptions showing for each the date and time it began, the duration, the cause, and the approximate number of customers affected.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.45 Pumpage records. A permanent record shall be kept of the amount of water pumped into the distribution system each day from each station. The daily pumpage shall be summarized by months and such daily records and monthly summaries kept on file.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.46 Metering equipment records. (1) A test record shall be made whenever a unit of metering equipment is tested but need not be retained after the equipment is again tested if a complete history record is maintained. The test record shall identify the unit and its location, date of test, reason for test, readings before and after test, a statement of "As Found" and "As Left" accuracies, a statement of test conditions sufficiently complete to permit checking the calculations employed, identification of the testing standard and the person making the test, and the results of the check or test of any associated remote register device. (See s. PSC 185.19 for record retention period).

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(2) Each utility shall keep a history record for each unit of metering equipment showing when the unit was purchased, its cost, utility's identification, associated remote register or other equipment, essential nameplate data, dates and results of all "As Found" and "As Left" tests unless separate records are kept of each test, and locations where installed with dates of installation and removal. (See Wis. Adm. Code section PSC 185.19 for record retention period.)

(3) Each utility shall summarize the meter tests made during each calendar year. When requested, a copy of such summary shall be filed with the commission by April 1 of the following year. The summary shall be in such detail as may be prescribed by the commission from time to time.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.47 Other records. Other required records which are referred to elsewhere in these rules include records of adjustment of customers' bills (Wis. Adm. Code section PSC 185.35 (7)), main flushing (Wis. Adm. Code section PSC 185.86), valve and hydrant operations (Wis. Adm. Code section PSC 185.87), pumpage—metered consumption (Wis. Adm. Code section PSC 185.85 (2)), and service interruptions (Wis. Adm. Code section PSC 185.88).

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

Part 5. Engineering

PSC 185.51 Requirement for good engineering practice. The design and construction of the utility's water plant shall conform to good standard engineering practice and shall conform to the requirements of these rules and the requirements of the Wisconsin department of natural resources.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.52 Construction standards. (1) **MAINS.** (a) *Installed depth.* Mains shall be placed at such depth below ground level, or otherwise protected, as will prevent freezing during the coldest weather experienced in the community in which laid.

(b) *Dead-ends.* Insofar as practicable, the utility shall design its distribution system so as to avoid dead-end mains. Where dead-ends are necessary, appropriate hydrants shall be provided to permit flushing. (See Wis. Adm. Code section PSC 185.86.)

(c) *Grid systems.* Wherever feasible, the distribution system shall be laid out in a grid.

(d) *Segmentation of system.* Valves shall be provided at reasonable intervals and at appropriate locations so that repairs to or maintenance of the mains will interrupt service to not more than a reasonable number of customers.

(e) *Disinfection of mains.* When main additions are made or other work is done on the distribution system the utility shall comply with the requirements of the Wisconsin department of natural resources for disinfecting the facilities involved.

(2) **SERVICE PIPES.** (a) Under normal circumstances no customer shall be supplied through the service pipe or building plumbing of another. This does not apply in the case of multi-occupancy premises such as condominiums and shopping centers.

(b) *Size.* The size, design, and material and installation of service pipes shall conform to such reasonable rules and regulations as may be filed with this commission. The minimum size shall be not less than $\frac{3}{4}$ -inch nominal size except under unusual circumstances which shall be clearly defined. A larger minimum size may be necessary in some locations so that the minimum pressure standard may be met. (See Wis. Adm. Code section PSC 185.82.)

(c) *Depth.* All service pipes shall be laid at such depth as will prevent freezing.

(d) *Inspection.* When a service pipe is installed the customer shall leave the trench open and pipe uncovered until it has been inspected by the utility or other authorized agent and shown to be properly installed at proper depth.

(3) CONSTRUCTION AND MAINTENANCE. (a) Pipe on a bridge shall be located so as to reduce hazard to a minimum and be protected from freezing.

(b) Pipe shall be tested and made tight before being placed in service.

(c) The trench under, around, and over the pipe shall be back-filled with good material, well tamped.

(d) The service connection at the main and the run of service pipe shall allow for a reasonable amount of flexibility to prevent fracture or leaks.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

Part 6. Customer Meters, Accuracy Requirements

PSC 185.61 Meters. (1) All meters used for measuring the quantity of water delivered to a customer shall be in good mechanical condition and shall be adequate in size and design for the type of service measured and shall be accurate to the standard specified herein. Cold water meters of the current type shall be used for metered service only where the actual flow rates fall entirely within the normal test flow limits of the meter. Flow meters, including magnetic and ultrasonic meters, may be used for customer metering only with the specific approval of the commission.

(2) Meters and remote reading devices shall be owned and maintained by the utility except where otherwise authorized by the commission.

(3) Metering installations shall be properly sealed.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.65 Accuracy requirements for customer meters. (1) For the purpose of these rules the minimum test flow and normal test flow limits for the more commonly used sizes of positive displacement, compound, and current meters shall be as follows:

Meter Size (in.)	Min. Test Flow (g.p.m.)	Normal Test Flow Limits (g.p.m.)
$\frac{5}{8}$	$\frac{1}{4}$	1-20
$\frac{3}{4}$	$\frac{1}{2}$	2-30
1	$\frac{3}{4}$	3-50
$1\frac{1}{2}$	$1\frac{1}{2}$	5-100
2	2	8-160

Compound Meters

Meter Size (in.)	Min. Test Flow (g.p.m.)	Normal Test Flow Limits (g.p.m.)
2	1/2	2-160
3	1	4-320
4	1 1/2	6-500
6	3	10-1,000
8	4	16-1,600
10	8	32-2,300
12	14	32-3,100

Current Meters*

Meter Size (in.)	Min. Test Flow (g.p.m.)	Normal Test Flow Limits (g.p.m.)
2	10	16-160
3	15	24-350
4	20	40-600
6	30	80-1,400
8	50	144-2,500
10	75	224-3,800
12	100	320-5,800
16	150	400-11,500

Note: See AWWA Standards C-700 (Positive Displacement Meters), C-702 (Compound Meters), and C-701 (Current Meters).

* See Wis. Adm. Code section PSC 185.61 (1).

(2) Positive displacement meters shall have a percent registration between 98.5 and 101.5 within the range of normal test flow limits before being placed in service. In addition, these meters shall have a percent registration at the minimum test flow between 95 and 101.5 if new and between 90 and 101.5 otherwise before being placed in service. (See Appendix to this chapter.)

(3) Compound meters shall have a percent registration between 97 and 103 throughout the range of normal test flow limits except at flows within the "change-over" flow range where the percent registration shall not be less than 90 percent.

(4) Current meters shall have a percent registration between 97 and 103 throughout the range of normal test flow limits and a percent registration of at least 95 percent at the minimum test flow.

(5) For meter installations with remote reading registers, the above accuracy requirements apply to the metering accuracy of the complete installation.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

Part 7. Meter Testing

PSC 185.71 Meter testing facilities and equipment. (1) Each utility furnishing metered water service shall provide adequate equipment and facilities for testing all of its water meters in compliance with these rules. For utilities having 250 or more meters, minimum testing equipment shall consist of one or more test benches with appropriate calibrated tanks (or tank with scale) all located in a suitable shop or work area. For utilities having less than 250 meters, minimum test equipment shall consist of a 10-gallon or a 1-cubic foot calibrated tank or such other test equipment as may be approved by the commission. For the testing of large meters, each utility shall either provide adequate facilities or make such other arrangements as may be approved by the commission.

(2) The utility's meter test shop shall insofar as practicable simulate the actual service condition of inlet pressure and outlet pressure.

It shall be provided with the necessary fittings, including a quick acting valve for controlling the starting and stopping of the test, and a device for regulating the flow of water through the meter under test within the requirements of these rules and regulations.

(3) The over-all accuracy of the test equipment and test procedures shall be sufficient to enable the testing of service meters within the requirements of these rules and regulations. In any event, the inherent over-all accuracy of the equipment shall permit tests with an over-all error of not to exceed 0.5 percent at normal test flows and 1.0 percent at the stated minimum test flow.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.72 Calibration of meter testing equipment. (1) Volumetric standards shall be accompanied by a dated certificate of accuracy from a laboratory or agency as may be approved by the commission. For any weight standard used, the scales shall be tested periodically by an approved agency and a record maintained of the results of the test.

(2) A reference or test meter used for testing domestic or larger meters shall not be so used unless it has been tested and calibrated during the preceding 6 months. A record of the two latest tests of said reference or test meter shall be maintained. (See also Wis. Adm. Code section PSC 185.73 (1).)

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.73 Testing of customer meters. (1) The test of any unit of metering equipment shall consist of a comparison of its accuracy with that of a standard of known accuracy. Where the test standard consists of a previously calibrated test meter or service meter, the test results for the service meter under test shall be adjusted to compensate for the inaccuracies of the test standard at the particular flow rates.

(2) Meters shall be tested before repair ("As Found") and, if repaired or cleaned, after repair ("As Left").

(3) The volume of water passed at each test point must be sufficient to produce at least one revolution of the test dial except at the "minimum test flow" point when said volume of water must produce at least one-half revolution of the test dial.

(4) Meters not meeting the accuracy or other requirements of Wis. Adm. Code sections PSC 185.61 or 185.65 shall be repaired or rebuilt to meet those requirements.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.74 Test flows. (1) The "minimum test flow" and "normal test flow limits" as used herein refer to those listed in Wis. Adm. Code section PSC 185.65. The stated test flows apply for both "As Found" and "As Left" tests.

(2) Positive displacement meters. (See Appendix to this chapter.) For each test, the percent registration shall be determined at each of the following test flows:

(a) The minimum test flow.

(b) Two test flows within the normal test flow limits, one to be approximately at the point of maximum registration and the other to be at a flow as high as practicable within the normal test flow limits.

(3) Compound meters. For each test it shall be determined whether or not the by-pass unit operates at the minimum test flow and, in addition, the percent registration shall be determined at each of the following test flows as determined from accuracy curves for the particular type and size of meter:

(a) The flow for maximum registration of the by-pass unit.

(b) A flow near the point of minimum registration within the "change-over" range.

(c) At least 3 flows within the normal test flow limits of the current unit, one of which is to be at the flow for maximum registration, one at approximately 50% of such flow but above the "change-over" range, and one at as high a flow as practicable.

(4) Current meters. For each test the percent registration shall be determined at each of the following test flows:

(a) The minimum test flow.

(b) At least 3 flows within the normal test flow limits, one of which is to be at or near the lower limit, another as near as practicable to the upper limit, and one at an intermediate flow rate.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.75 Required tests of customer meters. Meters shall be tested by the utility at the following times:

(1) Before use (new or rebuilt meters) or sample tested in accordance with PSC 185.751.

(2) Periodically to insure accuracy. (See Wis. Adm. Code section PSC 185.76.)

(3) Upon customer request or complaint. (See Wis. Adm. Code section PSC 185.77.)

(4) When damaged or otherwise suspected of being inaccurate.

(5) Upon removal.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72; am. (1), Register, November, 1977, No. 263, eff. 12-1-77.

PSC 185.751 Alternate sample-testing plan for "before use" test for 5/8, 3/4-, and 1-inch meters.

(1) This sample testing plan may be used only when the supplier tests and furnishes a test report for each new or remanufactured meter.

(2) Meters as received from the supplier shall be divided into lots of 36 or less. Each lot shall consist of meters of the same make, type and size.

(3) A random-selected sample of four meters from each lot shall be selected and tested.

(4) If any of the tested meters in a given lot fail to meet the accuracy requirements of PSC 185.65(2) for new meters, either the entire lot shall be rejected or the utility shall test all meters in the lot, rejecting or correcting those found to be inaccurate.

(5) Records shall be maintained showing the identification numbers of all meters in each lot and the test results for the meters tested.

History: Cr. Register, November, 1977, No. 263, eff. 12-1-77.

PSC 185.76 Periodic tests. (1) Customer meters shall be tested as frequently as is necessary to maintain their accuracies within requirements set forth in Wis. Adm. Code section PSC 185.65. Unless otherwise authorized by the commission, each utility shall observe a test schedule such that the intervals between tests do not exceed the following:

Meter Test Intervals

Meter Size—In.	Test Interval—Yr.
$\frac{5}{8}$, $\frac{3}{4}$, 1	8
1 $\frac{1}{2}$ and 2	4
3 and 4	2
6 and over	1

(2) Where local water conditions are such that meters will not retain the required accuracy for the periods indicated, appropriate shorter test intervals shall be observed and may be specifically required by the commission.

(3) Where local water conditions permit and with specific commission approval, the test interval for $\frac{5}{8}$ -, $\frac{3}{4}$ -, and 1-inch meters may be extended to 10 years. This contemplates that the utility will demonstrate that the accuracy of its meters will be retained for such period.

(4) For 3-inch and 4-inch meters the above test interval may be extended to 4 years where it is the practice of the utility to remove the meter to a test shop at time of test, open the case, and perform such maintenance and repair as may be indicated.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.77 Complaint tests. Each utility shall promptly make an accuracy test without charge of any metering installation upon request of the customer if 24 months or more have elapsed since the last complaint test of the meter in the same location, and for a charge of \$2 per inch of nominal size or fraction thereof, payable in advance, if less than 24 months have elapsed. Said amount shall be refunded if the test shows the meter to be over-registering by more than 2%. A report giving the results of such test shall be made to the customer and the complete, original test record shall be kept on file in the office of the utility. The test shall be made in the presence of the customer if he desires. (See also Wis. Adm. Code PSC 185.35, Adjustment of bills.)

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.78 Referee tests. Any customer may have an official test of his meter made by the 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 customer will be refunded to him by the utility if the test shows the meter to have an

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average percent registration of more than 102 for a positive displacement meter or 103 for a compound meter.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.79 Testing of metering installations having remote registers. (1) The remote register unit shall be tested each time the associated meter is tested.

(2) The test of these metering installations shall be sufficiently complete to demonstrate that the accuracy of the complete meter-register combination meets the accuracy requirements of Wis. Adm. Code section PSC 185.65.

(3) Metering installation with pulse-driven remote register unit. The test of such installation shall include the following:

(a) The complete test of the metering unit at all prescribed test flows (using a substitute register if necessary).

(b) A test of the generator to assure that it sends out a pulse for the prescribed volume of water or number of disc rotations.

(c) A test of the wiring and remote register unit to assure that the pulses are properly received and recorded by the remote register. Where the reading of the remote register continues to agree with the reading of the register in the meter head this requirement shall be considered to be complied with.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.795 Jumpering meter settings. Under certain abnormal conditions, a dangerous voltage may appear across the meter setting when the water line is electrically opened as by removal of the meter. Before a water meter is removed (or the interior piping leading to the service otherwise opened) an appropriate electrical jumper should be connected across the meter setting or proposed opening in the

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pipng to maintain electrical continuity. The connection should be maintained until a meter is again set or the piping closed.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

Part 8. Operating Requirements

PSC 185.81 Quality of water. (1) Every water public utility shall provide water of such quality as will comply with the requirements for drinking water as prescribed by the Wisconsin Department of Natural Resources (Wis. Adm. Code Chapters NR 102, NR 103, NR 104, NR 108, NR 111, and NR 112) and with those portions of the (U.S.) Public Health Service Drinking Water Standards—1962—pertaining to Part 3. Bacteriological Quality, Part 4. Physical Characteristics, Part 5. Chemical Characteristics, and Part 6. Radioactivity. These requirements are subject to change by action of the commission at such time as the water quality requirements of either of the above-named agencies are updated or otherwise changed.

Note: Entitled *Excerpts from the PHS Drinking Water Standards (PHS Publication 956)*, copies of those portions of the (U.S.) Public Health Service Drinking Water Standards—1962—pertaining to Part 3. Bacteriological Quality, Part 4. Physical Characteristics, Part 5. Chemical Characteristics, and Part 6. Radioactivity, are on file in the offices of the secretary of state, the revisor of statutes, and the public service commission, and may be obtained from the public service commission, Hill Farms State Office Building, 4802 Sheboygan Avenue, Madison, Wisconsin 53702.

(2) In addition, each water utility system shall be designed and operated so that the water supplied all customers shall be free from objectionable taste, color, odor, and sand or other sediment.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.815 Adequacy of water supply. Each utility shall exercise reasonable diligence to furnish a continuous and adequate supply of water to its customers. (See also Wis. Adm. Code section PSC 185.88.)

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.82 Pressure standards. (1) Under conditions of normal heavy system demand the residual pressure at the meter outlet shall not be less than 20 p.s.i.g. For typical residential customers, normal conditions of use shall mean a flow rate of not less than 12 gallons per minute. This standard assumes that the customer's portion of the service lateral is of normal, adequate design and in good condition. This standard will ordinarily require that the distribution main pressure at the corporation stop connection be at least 35 p.s.i.g. The utility should prescribe in its operating rules minimum specifications for the service lateral to assure that excessive pressure drop does not occur in the lateral because of its length or for other cause.

(2) The maximum pressure at the meter shall not exceed 125 p.s.i.g. For major additions to existing systems to the extent practicable, and for new systems, the maximum pressure at the meter shall not exceed 100 p.s.i.g.

(3) Each utility shall have at least one permanently installed pressure gauge on its system and shall own or have access to indicating and recording pressure gauges as may be needed to check pressure levels.

(4) Each utility shall annually make such pressure tests or surveys as are necessary to assure that the pressure limitations of subsections (1) and (2) of this section are being met.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.83 Station meters. (1) Each pumping station shall be provided with station metering to accurately measure the water pumped into the distribution system. (See Wis. Adm. Code section PSC 185.45.) ✓

(2) Station meters shall be maintained in a manner to insure reasonable accuracy, and shall be tested or the accuracy otherwise checked at least once each 2 years.

(3) Station meters shall be chosen such that the actual flow rates are entirely within the normal flow range for the particular meter. Such meters shall ordinarily be installed in the inlet rather than outlet line of pressure tank storage reservoirs.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.84 Emergency operation. Each water utility shall make reasonable provision to meet emergencies resulting from failure of power supply or from fire, storm or similar emergencies. Employees shall be informed of procedures to be followed in the event of emergency so as to prevent or mitigate the interruption or impairment of water service.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.85 System losses. For the purposes of this section, system losses are considered to be the difference between the metered pumpage into the distribution system and metered consumption.

(1) Each utility shall strive to keep its system losses at a minimum level. To accomplish this, it is necessary that, to the extent practicable, all consumption including that for municipal purposes be metered, that use of water from hydrants be controlled, that system leaks be reduced to a minimum, and that station and customer meters be adequately maintained to insure their accuracy.

(2) A continuing record comparing pumpage with metered consumption shall be maintained.

(3) Metered consumption should ordinarily be at least 75% of station pumpage for the smaller utilities (Class C and D) and at least 85% for the larger utilities.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.86 Flushing mains. (1) Dead-end mains, or other portions of distribution systems, shall be flushed at sufficiently frequent periods as to eliminate or minimize complaints from consumers arising from an objectionable condition of water due to lack of circulation. Proper provisions must be made for flushing all parts of a system which need flushing.

(2) When practicable, public notice of proposed flushing will be given by radio or newspaper announcement or other appropriate means.

(3) Record shall be kept of all flushing of mains, showing date, place and estimated volume of water. Such record should be used as a guide to determine the necessary frequency of flushing and for an estimate of this unmetered use.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.87 Operation of distribution system valves and hydrants. (1) To assure that valves and hydrants are operable when needed, a schedule shall be adopted and followed for operating each valve and

hydrant at least once each 2 years. A record of such operations shall be kept.

(2) Procedures shall be adopted and observed for the draining of hydrants when necessary to avoid freezing.

History: Cr. Register May, 1972, No. 197, eff. 6-1-72.

PSC 185.88 Interruptions of service. (See also Wis. Adm. Code sections PSC 185.44, Records and reports of service interruptions and PSC 185.815.) (1) Each utility shall make all reasonable efforts to prevent interruptions of service and when such interruptions occur, shall endeavor to reestablish service with the shortest possible delay consistent with safety to its customers and the general public. Where an emergency interruption affects fire-protection service, the utility shall immediately notify the Fire Chief or other responsible local official.

(2) Each utility shall schedule planned interruptions for such hours as will cause the least customer inconvenience. All reasonable efforts shall be made to notify customers of the time and anticipated duration of a planned interruption.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

PSC 185.89 Thawing frozen services. (1) Frozen services shall be thawed by and at the entire expense of the utility except where the customer has been notified in advance of a corrective measure to follow or the freezing was caused by contributory fault or negligence on the part of the customer, such as reduction of the cover or undue exposure of the piping in the building or on the customer's property, or failure to comply with water department specifications and requirements as to depth of service, sufficient backfill, etc. (See Wis. Adm. Code section PSC 185.35 (7) for adjustment of bill where utility requests customer to permit stream of water to flow to prevent freezing.)

(2) The thawing of frozen services or other underground pipes electrically may introduce hazards if proper precautions are not taken. Damage to buildings and to electrical facilities may result from high current flow in grounding conductors and neutrals. The electric current may reach the grounding conductor and the neutral which can be in parallel with the pipe, or reach the conductor because of physical contact between the interior water piping and the metallic tubing or conduit of the interior wiring.

(3) It is recommended that when service pipes are being thawed electrically, the water meters be removed and that experienced personnel familiar with the above hazards be asked to disconnect the grounding conductors and to suggest a safe place to connect the conductors used for thawing the pipe.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.

APPENDIX TO WIS. ADM. CODE CHAPTER PSC 185
 Summary of Test Conditions and Accuracy Requirements for Positive Displacement Meters

Size in.	Maximum Rate				Intermediate Rate				Minimum Rate			
	Rate of Flow gpm	Test Quantity		Accuracy Limits Per cent	Rate of Flow gpm	Test Quantity		Accuracy Limits Per cent	Rate of Flow gpm	Test Quantity*		Accuracy Limits Per cent
		Gal.	Cu. ft.			Gal.	Cu. ft.			Gal.	Cu. ft.	
5/8	15	100	10	98.5-101.5	2	10	1	98.5-101.5	1 1/2	10	1	95-101.5
3/4	25	100	10	98.5-101.5	3	10	1	98.5-101.5	1 1/2	10	1	95-101.5
1	40	100	10	98.5-101.5	4	10	1	98.5-101.5	1 1/2	10	1	95-101.5
1 1/2	80	1,000	100	98.5-101.5	8	100	10	98.5-101.5	2	100	10	95-101.5
2	120	1,000	100	98.5-101.5	15	100	10	98.5-101.5		100	10	95-101.5

*Section PSC 185.73 (3) provides that at this flow rate the test quantity may be reduced to that equivalent to one-half revolution of the test dial. For the typical 5/8-inch meter the minimum test quantity would, therefore, be 5 gal. or 1/2 cu. ft.

History: Cr. Register, May, 1972, No. 197, eff. 6-1-72.