

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

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IN THE MATTER OF THE RULES AND )  
REGULATIONS GOVERNING THE SER- )  
VICE OF WATER UTILITIES. )

CASE NO. 4995

JULY 22, 1949

S T A T E M E N T

By the Commission:

This Commission on October 5, 1916, entered an order adopting Rules Regulating The Service of Gas, Electric and Water Service of all privately owned and municipally owned gas, electric and water public utilities operating within the State of Colorado.

On April 18, 1935, the Commission revised the Rules Regulating the Service of Gas, Electric and Water Utilities under the jurisdiction of this Commission in the State of Colorado, and by order adopted said rules and regulations as the First Revised Issue, effective June 1, 1935.

Since the adoption of said First Revised Issue, conditions have changed in the operation and practices of water utilities in the light of present day knowledge, and the Commission instituted an investigation as to the necessity for a second revision of said Rules.

After due notice to all parties in interest, and after hearings in the matter at which many water utilities appeared by counsel and made suggestions, and after the Commission's Staff consulted with interested parties, the Commission has revised its Rules and Regulations governing the service of water public utilities. Said revision is hereby designated as "Second Revised Issue of the Rules Regulating the Service of Water Utilities."

F I N D I N G S

THE COMMISSION FINDS:

1. That the changing conditions in the operation of water utilities necessitate a revision in the Commission's 'Rules Regulating the Service of Water Utilities.'

2. That this revision should be designated as "Second Revised Issue of the Rules Regulating the Service of Water Utilities."

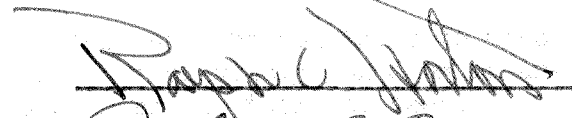
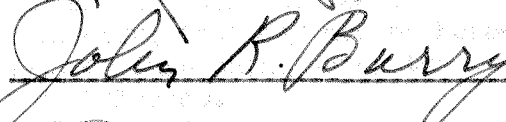

O R D E R

THE COMMISSION ORDERS:

That the revised rules regulating the service of water utilities under the jurisdiction of this Commission in the State of Colorado, hereto attached and made a part hereof, be and the same are, hereby approved and adopted to be hereafter designated as "Second Revised Issue, Rules Regulating the Service of Water Utilities."

It Is Further Ordered, That the said "Second Revised Issue, Rules Regulating the Service of Water Utilities," shall become effective August 1, 1949.

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

  
  
  
Commissioners

DATED at Denver, Colorado,  
this 22nd day of July, 1949.

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

RULES REGULATING THE SERVICE OF WATER UTILITIES  
SECOND REVISED ISSUE

EFFECTIVE AUGUST 1, 1949

RULE 1.

Application of Rules:

(a) The following rules shall apply to any person, copartnership, firm, corporation, their lessees, trustees, or receivers appointed by any court, now or hereafter engaged in the business of a public utility furnishing water to domestic or commercial consumers, operating under the jurisdiction of the Public Utilities Commission of the State of Colorado.

(b) The adoption of these rules shall in no way preclude the Commission from altering or amending the same in whole or in part or from requiring any other additional service, equipment, facility or standard, either upon complaint or upon its own motion, or upon the application of any utility. Furthermore, these rules shall not in any way relieve any utility from any of its duties under the laws of this State.

RULE 2.

Definitions:

(a) The word "Utility" as used in these rules shall be construed to mean any person, copartnership, firm, corporation, whether privately owned or otherwise, when subject to the jurisdiction of this Commission, their lessees, trustees, or receivers, appointed by any court whatsoever, that may now or hereafter be engaged as a public utility in the business of furnishing water to domestic and/or commercial consumers in the State of Colorado.

(b) The word "Commission" as used in these rules shall be construed to mean The Public Utilities Commission of the State of Colorado.

(c) The word "Consumer" as used in these rules shall be construed to mean any person, copartnership, firm, corporation, their lessees, trustees, or receivers appointed by any court, supplied by any utility with water for domestic or commercial use.

RULE 3.

Operating Schedules and Interruptions of Service:

(a) Each utility shall adopt an operating schedule, and shall report the same, or any changes therein, to this Commission, indicating in any case where service is not rendered continuously, the time at which service is commenced, and the time at which it is discontinued. Any changes in such operating schedules shall be made only with the approval of this Commission.

(b) Each utility shall keep a record of all interruption of service upon its entire system or major division thereof, including a statement of the time, duration and cause of any such interruption.

(c) The record of interruptions of service and a statement of the operating schedules of the utility shall be open at all times to the inspection of the duly authorized representatives of this Commission.

#### RULE 4.

##### Inspection of Plant and Equipment:

Each utility shall inspect its plant and distributing equipment and facilities in such manner and with such frequency as is in accord with good practice, in order that the same may be maintained in proper condition for use rendering safe and adequate service.

#### RULE 5.

##### Testing Facilities:

(a) Each utility shall provide such laboratory, meter testing shop, and other equipment and facilities as may be necessary to make the tests required of it by these rules or other orders of this Commission. The apparatus and equipment so provided shall be of a form acceptable to this Commission, and it shall at all times be available for the inspection and use, on the premises of the utility, of the authorized representatives of this Commission.

(b) Each utility shall make such tests as are prescribed under these rules with such frequency and in such manner and at such places as may be approved by this Commission.

#### RULE 6.

##### Records of Tests and of Meters:

(a) A complete record of the tests made under these rules of the quality and condition of service shall be kept by each utility. The record so kept shall contain full information concerning each test, including the date, and the place where the test was made, the name of the employee conducting the test, the result of the test, and such other information as may be required by these rules, or as this Commission may from time to time direct, or as the utility making the test may deem desirable.

(b) Whenever any service meter is tested the original test record shall be preserved, including the information necessary for identifying the meter, the reason for making the test, the reading of the meter if removed from service, and the result of the test, together with all data taken at the time of the test in sufficiently complete form to permit the convenient checking of the methods employed and the calculations made.

(c) A record shall also be kept indicating for each meter owned or used by any utility, the date of purchase, manufacturer's serial number, record of the use, and tests to which it has been subjected, and its present location.

#### RULE 7.

##### Accidents:

Each utility shall, as soon as possible, report to this Commission each accident happening in connection with the operation of its property, facilities, or service wherein any person shall have been killed or seriously injured, or whereby any serious property damage shall have resulted; such first report shall later be supplemented by as full a statement as is possible of the cause and details of the accident, and the precautions, if any, which have been taken to prevent similar accidents. Each utility shall further give all reasonable assistance to the Commission in the investigation of the cause and suitable means for the prevention of any such accidents in the future.

## RULE 8.

### Complaints:

Each utility shall make a full and prompt investigation of all complaints made to it by its consumers, either directly or through the Commission, and it shall keep a record of all written complaints received, which shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof. This record shall be open at all times to the inspection of the duly authorized representatives of this Commission.

## RULE 9.

### Information for Consumers:

(a) Each utility shall at any time, on request, give its consumers such information and assistance as is reasonably possible in order that consumers may secure safe and efficient service. Each utility shall inform each consumer of any change made or proposed to be made in any condition as to its service as would affect the efficiency of the service or the operation of the appliances or equipment which may be in use by said consumer.

(b) Each utility supplying metered service shall adopt some means of informing its consumers as to the method of reading meters, either by printing on its bills a description of the method of reading meters, or a notice to the effect that the method will be explained upon application.

## RULE 10.

### Meter Readings and Bill Forms:

(a) Each service meter shall indicate clearly the units of service in cubic feet or gallons for which charge is made to the consumer. In cases where the dial reading of a meter must be multiplied by a constant to obtain the units consumed, the proper constant to be applied shall be clearly marked on the face or dial of the meter.

(b) Each utility shall, upon written request of any consumer, cause the meter reader reading the meter installed upon the premises of such consumer, to leave upon such meter a card or slip showing the date and time such reading was taken, and either the total reading expressed in the units of service, cubic feet or gallons, recorded by the meter read, or showing the position of the hands upon the dial of such meter at the time the reading was taken.

(c) All bills rendered periodically to consumers for metered service furnished shall show, in addition to the net amount due, the dates on which the readings were taken, the meter readings at the beginning and end of the period for which the bill is rendered, when requested by the consumer or deemed necessary by the utility, and all other essential facts upon which the bill is based.

## RULE 11.

### Meter Rentals, and Consumers' Deposits:

(a) No meter rental, as distinguished from a minimum charge for service, shall be charged by any utility for any service meter installed by it or measurements upon which bills are rendered; provided, however, that in cases where service meters are used as sub-meters to a main meter, a rental charge for such sub-meter may be established with the approval of this Commission. The utility

shall keep such sub-meters in good operating condition, but will not be required to keep a record of the monthly readings of these meters. Sub-metering for resale by a consumer, other than another utility or a cooperative, is prohibited.

(b) Any utility may require at any time from any consumer or prospective consumer, a cash deposit intended to guarantee payment of current bills; such required deposit shall not exceed the amount of an estimated ninety days' bill of such consumer, or, in the case of a consumer whose bills are payable in advance, it shall not exceed an estimated sixty days' bill for such consumer, except that in the event an extension of lines and facilities is required to furnish such prospective consumer with service, the deposit may be the amount of the estimated bill for a longer period if so specified in the provisions of the extension policy of the utility. Interest shall be paid by the utility upon such deposits at the rate of five per cent per annum, payable upon the return of the deposit, or annually upon request of the consumer, for the time such deposit was held by the utility and the consumer was served by the utility, unless such period be less than six months; provided, further, that the rate of interest on such cash deposits shall be only four per cent per annum if the utility keeps such cash deposits in a separate and distinct trust fund and deposits as such in some bank or trust company and not used by the utility in the conduct of its business. Interest payments may, at the option of the utility, be made either in cash or by a credit to the consumer's account. In computing interest, no consideration need be given to fractional parts of months or dollars.

(c) Each utility having on hand such deposits from consumers, or hereafter receiving such deposits from consumers, shall keep records to show:

(1) the name of each consumer making a deposit; (2) the premises occupied by the consumer when making the deposit, and each successive premises occupied while the deposit is retained by the utility; (3) the amount and date of making the deposit; and (4) a record of each transaction, such as the payment of interest, interest credited, etc., concerning such deposit.

(d) Each utility shall issue to every consumer from whom such deposit is received a certificate of deposit.

(e) Each utility shall provide ways and means whereby a depositor who makes application for the return of his deposit or any balance to which he is entitled, but is unable to procure the original certificate of deposit, may not, upon reasonable proof, be deprived of his deposit or balance.

## RULE 12.

### Filing of Rate Schedules, Rules, and Regulations:

(a) Copies of all schedules of rates for service, forms of contracts, charges for service connections and extensions of lines, and of all rules and regulations covering the relations of consumer and utility, shall be filed by each utility in the office of this Commission. Complete schedules, contract forms, rules and regulations, etc., as filed with the Commission, shall also be on file in the local office of the utility and shall be open to the inspection of the public.

(b) A copy of this order shall likewise be on file in the office of the utility and open to the inspection of the public.

(c) The attention of the public shall be called to these files of schedules, rules and regulations, and orders, by placing a suitable placard in the office of the utility.

(d) If the reasonableness of any charge, rule, regulation, or practice of any utility with reference to service connections or extensions, or of any rule

covering the relations between consumer and utility, is challenged, the Commission will, upon complaint and investigation, prescribe the proper charge, rule, regulation, or practice which shall thereafter be followed.

#### RULE 13.

##### Discontinuance of Service:

No utility shall discontinue the service of any consumer for violation of any rule of such utility except upon written notice of at least forty-eight (48) hours, advising the consumer in what particular such rule has been violated for which service will be discontinued. This rule may be waived where a by-pass is discovered on a consumer's service meter or in the event of the discovery of dangerous leakage on a consumer's premises, or in the case of a consumer utilizing the service in such manner as to make it dangerous for occupants of the premises, thus making an immediate discontinuance of service to the premises imperative.

#### RULE 14.

##### Reports to the Commission:

Each utility shall make special reports at such time and in such form as the Commission may from time to time require.

#### RULE 15.

##### Purity of Water Supply:

(a) All water furnished by any utility for human consumption and general household purposes should be free from disease-producing organisms, injurious chemical or physical substances and agreeable to the sight and smell.

(b) Water which never shows the presence of the "B Coli Group" and which has a reasonably low "Bacterial Count" under the usual standard test methods, will ordinarily be considered safe from the standpoint of disease producing organisms. The rules and tests of the Sanitary Division of the State Board of Health will govern in this matter.

#### RULE 16.

##### Chemical and Bacteriological Analyses:

(a) Each utility furnishing water for human consumption or household purposes shall take a sample monthly, or as much oftener as this Commission or the State Board of Health may require, from the source of supply or any point in the service designated by this Commission or the State Board of Health, in accordance with the rules for sampling water as prescribed by the Division of Sanitary Engineering of the State Board of Health, and such samples shall be forwarded to that Department for tests and analysis. Such test and analysis shall be made free of charge. The result of such test and analysis shall be recorded in triplicate; one copy will be furnished to the utility, one copy to be retained by the State Board of Health, and the other copy to be furnished to this Commission whenever the results show that remedial action is necessary.

(b) The Commission reserves the right to require, under its supervision, an extended bacteriological as well as physical and chemical examination when deemed advisable for any particular water furnished.

(c) The results of all tests made by the Division of Sanitary Engineering of the State Board of Health shall be kept on file and available for public inspection for a period of at least two years. The records must indicate when and where and by whom each test was made. The standard methods of water analysis recommended by The American Health Association, except as hereinbefore provided, should be followed as regards chemical, physical, and bacteriological examinations and collection of water, and any departure therefrom should be specifically stated.

(d) Whenever tests made by the Division of Sanitary Engineering of the State Board of Health, or by any other authorized agency, that disclose the presence of bacillus coli, or such a bacterial count as may be considered unsafe, the utility shall employ all reasonable means to make its water supply safe for human and domestic purposes.

#### RULE 17.

##### Operation of "Dead Ends":

"Dead Ends" in the distributing mains should be avoided as far as possible. Where such "dead ends" exist, they should be flushed at least once each week. To insure compliance with this requirement, it is suggested that, where feasible, all "dead ends" be equipped with hydrants.

#### RULE 18.

##### Adequate Pressure required:

Every effort shall be made to maintain a steady pressure which will not at any time fall below the fixed minimum for domestic service. In addition to furnishing commercial service, each utility furnishing fire hydrant service must be able to, at any time within reasonable notice, to supply added fire service in accordance with the best standard practice covering service to local fire fighting equipment and facilities.

When the foregoing pressure requirements are outlined in a reasonable manner by the ordinances under which the utility operates, they should be complied with as set forth therein.

#### RULE 19.

##### Pressure Surveys:

Each utility furnishing water service in cities of 1,000 inhabitants or more shall maintain a graphic recording pressure gauge at its plant, downtown office, or at some central point in the distributing system or each subdivision thereof, where continuous records shall be made of the pressure in the mains at that point.

Utilities operating in cities of five thousand or more inhabitants shall equip themselves with one or more graphic recording pressure gauges in addition to the foregoing, and shall make frequent records, each covering intervals of at least 24 hours' duration, of the water pressure at various points on the system. All records or charts made by these meters shall be identified, dated, and kept on file, available for inspection for a period of at least two years.

# RULE 20.

## METERS:

### Allowable Error:

Customers' meters should at all times register as nearly correct as is commercially possible, but whenever an installation is made of a new or repaired meter, or tests are made periodically or otherwise, and a meter is found to register more than 103 per cent, or less than 97 per cent, of the water passed, when tested in the manner indicated below, it must be replaced or adjusted so as to register as nearly 100 per cent as possible.

All meters shall be tested at three rates of flow, and it is required that meters larger than one inch (1") be tested at three or more rates according to the following table, the average of these tests to determine the per cent error:

Allowable Range Test				Recommended Test			
Flow				Rate Flow			
Gallons per Minute				Gallons per Minute			
	Min.	Max.		Min.	Med.	Max.	
5/8"	*	1	20	5		20	
3/4"	*	2	34	5		34	
1 "		3	53	5	25	53	
1-1/2"		5	100	5	40	100	
2 "		8	160	10	100	160	
3 "		16	315	* 15	150	315	
4 "		28	500	* 15	250	500	
6 "		48	1,000	* 20	500	1,000	

\* A meter which does not register 95 per cent of the water which passed those rates marked \* should not be installed without correction.

It is suggested that all meters purchased conform to the Standard Specifications for Cold Water Meters, as adopted by the American Water Works Association, and that the rules for tests and requirements of meters follow as closely as possible the specifications of the Association.

After all necessary repairs, adjustments and final tests have been made so that the meter registers correctly, such meter shall be sealed.

# RULE 21.

## Periodical Tests:

Accuracy in registration of meters shall be insured by periodical tests, the frequency of such tests to be determined by local conditions, but under average conditions the following intervals between tests should not be exceeded for disc or current (turbine) type of meters:

1" or less at least once every five years,  
1-1/4", 1-1/2", and 2", at least once every four years,  
3" at least once every three years,  
4" at least once every two years,  
6" and larger at least once every year.

Ordinarily, meters of the current and compound type shall be cleaned at least once each year, except in the case of filtered or exceptionally clear water, the intervals between cleanings may be increased.

#### RULE 22.

##### Request Tests:

Each utility furnishing metered water service shall make a test of the accuracy of any service water meter free of charge, upon the request of the consumer, provided that the meter has not been tested within the twelve months period prior to such request, and provided that the consumer will agree to accept the result of such test as a basis for the adjustment of the difference claimed. The consumer requesting the test may be present or have a representative present when the test is made, if he so desires. A written report giving the result of such request test shall be made to the consumer requesting same, the original record being kept on file at the office of the utility for a period of at least two years.

#### RULE 23.

##### Tests by Commission:

(a) Any service water meter will be tested by an employee of the Commission upon written application of the consumer for such test. For such test a fee shall be forwarded to the Commission by the consumer when making application, which fee shall be refunded to the consumer by the utility if the meter be found fast, beyond the limits prescribed in Rule 24. The schedule of fees for Commission tests of water service meters is as follows:

For each meter not exceeding 1 inch capacity.....	\$2.50
For each meter exceeding 1 inch but not exceeding 2 inch capacity.....	4.00
For meters exceeding 2 inch capacity.....	8.00

(b) Upon written application to the Commission by any water utility, the Commission will make a test on any of the utility's service meters upon payment of the scheduled fee.

#### RULE 24.

##### Adjustment of Bills for Meter Errors:

(a) If on test of any service water meter, made upon the request of the consumer, by either the utility or the Commission, it is found to be more than three per cent fast, additional tests shall be made to determine the average error of the meter.

(b) Average Error: The average error of a water meter in tests made by the Commission or the utility at the request of the consumer shall be defined as one-third of the algebraic sum of the errors when tested in accordance with Rule 20.

(c) When a meter is found to have a positive average error -- that is, is fast -- in excess of three per cent on tests made at the request of the consumer by either the Commission or the utility, the utility shall refund to the consumer an amount equal to the excess charged for the water incorrectly metered for a period equal to one-half of the time elapsed since the last previous test, provided that this period does not exceed one year.

(d) When a water meter is found to have a negative average error -- that is, is slow -- the excess of three per cent in tests made at the request of the consumer, by either the Commission or the utility, the utility may make a charge to the consumer for the water incorrectly metered for a period equal to one-half of the time elapsed since the last previous test, provided that this period does not exceed one year.

(e) If a meter is found not to register for any period, the utility shall estimate a charge for the water used by averaging the amounts registered over similar periods preceding or subsequent thereto, or over corresponding periods in previous years.

#### RULE 25.

##### Meter Testing Equipment:

Each utility furnishing metered water service in cities of 1,500 or more inhabitants shall maintain suitable water meter testers and keep same in proper adjustment so as to accurately register the condition of the meters at all times.

Each water meter tester must be accompanied by a certificate of calibration, indicating that the volumes or weighing devices used have been referred to proper standards, which standards have been certified by the National Bureau of Standards, or some testing laboratory or other authority of recognized standing.

Meter testers must be located in a large, comfortable working space, easily accessible, and equipped with all necessary facilities and accessories. They must be available for inspection and use at all reasonable hours by the authorized representatives of this Commission.

Meters of the current type can be tested and calibrated more accurately in place.

#### RULE 26.

##### Meter Installation and Maintenance:

All meters used in connection with metered service shall be furnished, installed, and maintained at the expense of the utility, unless special authority to the contrary has been granted by the Commission for good cause. Municipal utilities shall be subject to this requirement except that in cases where the municipality requires the consumers inside the corporate limits to furnish their own meters, they may require consumers outside to do likewise. Any appliances furnished at the expense of the utility shall remain its property and may be removed by it at any time after the discontinuance of service.

#### RULE 27.

##### Service Connections:

Upon application by a bonafide applicant for service, the utility will furnish and install service pipe of suitable capacity, including the curb cock

and curb box required, from its water mains to the curb line or property line of the property upon a public street, highway, alley, lane, or road along which it has mains, all such facilities to remain the property of and be maintained by the utility. Utilities other than municipal utilities may require the applicant to bear not over 50 per cent of the total expense incurred in making the service connection as a tap or service charge. Municipal utilities may make a tap or service charge to the outside consumer of not over 50 per cent of the cost incurred or of the same amount as made to consumers served inside the corporate limits.

The consumer will install that portion of the service inside of curb or property line, the expense of same to be paid by the consumer, material and construction to be approved by the utility. The materials furnished by consumer in construction of such service extension will at all times be and remain the sole property of the consumer, and when necessary shall be maintained and repaired by the consumer at his own expense.

#### RULE 28.

##### Water Main Extensions:

(a) Free Extensions: If an extension of the utilities distribution system should be necessary to serve an applicant or group of applicants, the utility, upon written request for service by such applicant or applicants, shall make the necessary extension at its own expense to give service, provided the length of the entire extension is not greater than that obtained by allowing one hundred (100) feet or one hundred dollars (\$100.00) per customer, whichever is the lesser.

(b) Extension above Free Limit: If the main extension required in order to furnish service is greater than the free extension specified above in (a), such extension shall be made under the following conditions:

(1) The utility may require the consumer to advance the cost of the extension above the free limit, and in such a case, for each additional consumer connecting to the extension, or extension thereto, within a period of ten years from the making of the extension, shall repay to the existing consumers on the extension who have made advances, an amount equal to the amount collected, as hereinafter provided, from such new customers. Consumers added to these extensions within ten years of the extension shall be required by the utility to pay an amount equal to their pro rata share of the cost of the original and subsequent extensions, plus the amount of the cost of their particular extension over and above the free limit. At no time shall the repayment to a consumer exceed his original advance. At the end of ten years, or when all existing consumers on the extension have been repaid, no further repayment need be made by the utility, nor shall any amounts be collected from new consumers attaching to the extension within the free limit. Where two or more consumers are applicants above the free extension limit, any repayments to them, upon the addition of new consumers, shall be prorated between them according to the amount of their original advance.

(c) The utility may, at its option, file with the Commission an extension policy other and different than stated in (a) and (b) above, subject to the approval of the Commission.

(d) The distance of the applicant from the nearest main shall be used in determining whether the applicant is entitled to a free extension, and the cost of extending the nearest existing main shall be used as a basis in determining the amount of deposit necessary in case the extension is above the free limit.

(e) The utility shall not be obliged to make the extension as required by this rule unless the applicant shall furnish a suitable guarantee that he will use the service for at least three years, or unless the owner of the property served by such extension, or some responsible party, shall guarantee that the service will be used for that time.

(f) The utility may, at its option, construct extensions having more than sufficient capacity to meet particular requirements, in which case such additional capacity will be constructed without obligation to consumers. This refers particularly to anticipated future extensions to the extension requested.

(g) If an extension is of such length and/or the prospective business, which may be developed by it is so meager as to make it doubtful whether the business from the extension would ever pay a fair return on the investment, such a case will be classed as "Special", and the fact reported to the Commission for investigation and determination as to the reasonableness of such extension, and such action as may be considered necessary.