

STATEMENT OF AUTHORITY:

These rules are legislative rules as defined in West Virginia Code §29A-1-2(d) and (i). These rules relate to the authority of the Public Service Commission of West Virginia, pursuant to West Virginia Code §§24-1-1, 24-2-1, 24-2-2, 24-2-5, 24-2-7(a), 24-2-8, 24-2-9, 24-3-1, 24-3-5 and 24-3-7. The Public Service Commission is authorized to issue rules and regulations as may be necessary to carry out the provisions of Chapter 24 of the West Virginia Code, including the code sections listed above, by West Virginia Code §24-1-7.

ABSTRACT OF PROMULGATION HISTORY:

On March 16, 1977, the Commission entered an order finally adopting, as amended, the rules contained herein, excluding the subsequent amendment to the rules discussed below. The order of March 16, 1977, specified that such rules and regulations were adopted, promulgated, and issued, including the filing of the final rules in the State Register, as provided by and pursuant to Chapter 24 of the West Virginia Code and the then effective sections of the State Administrative Procedures Act.

AMENDMENTS:

RULE 4.01(3) CUSTOMER INFORMATION

The proceeding which gave rise to this finally adopted rule was initiated on November 7, 1980, by the institution of a rule-making proceeding by the Commission, which included the filing of Commission-proposed rule in the State Register as required

PSC
Adm. Reg. 24-1
Series VII

by the then effective sections of the State Administrative Procedures Act.

On September 11, 1981, a Commission Hearing Examiner entered a Memorandum Opinion recommending various amendments to existing Commission rules and rejecting the rule proposed by the Commission in its order of November 7, 1980. By order entered on December 4, 1981, the Commission promulgated proposed rules and amendments to existing rules and filed a copy of those proposed rules, along with a Notice of Proposed Rulemaking in the State Register and with the Governor as required by West Virginia Code §§29A-3-7 and 29A-3-8. Interested parties were given until January 6, 1982, to submit, in writing, any data, objections, suggested amendments, comments, evidence and arguments regarding the proposed rules.

On September 14, 1982, the Commission entered an order finally adopting, as amended, such rule to be effective sixty days after filing such in the State Register, which filing was made the same day.

FILED
JUN 12 1974 4:35

PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
LEGISLATIVE RULE
CHAPTER 24-1
SERIES VII

TITLE: Rules and Regulations for the Government of Water
Utilities

Section	Page
1.00 GENERAL	1
1.00(1) Scope	1
1.00(2) Authority	1
1.00(3) Filing Date	1
1.00(4) Effective Date	1
1.00(5) Filing Requirements	1
1.01 Authorization of Rules	1
1.02 Application of Rules	2
1.03 Definitions	2
2.00 RECORDS, REPORTS AND OTHER INFORMATION TO BE SUPPLIED TO THE COMMISSION	4
2.01 Records and Reports	4
2.02 Filing of Rate Schedules	4
2.03 Financial and Statistical Report	5
2.04 Uniform System of Accounts	5
2.05 Maps and Records	6
2.06 Management Audits	6
3.00 METER REQUIREMENTS	9
3.01 Utility to Provide Meters	9
3.02 Location of Meters	10
4.00 CUSTOMER RELATIONS	10
4.01 Customer Information	10
4.01A Applications for Water Service	12
4.01B Special Applications for Water Service	12
4.01C Private Fire Protection Service	13
4.02 Customer Deposits	16
4.03 Billing Information	18
4.04 Adjustment of Bills	19
4.05 Complaints	19
4.06 Disputed Bills	20
4.07 Customer Discontinuance of Service	20
4.08 Utility Discontinuance of Service	20
4.09 Refusal to Serve Applicant	21

PSC
Leg. Rule/Adm. Reg. 24-1
Series VII

4.10	Change in Character of Service	22
4.11	Access to Property	22
4.12	Service Interruptions	23
4.13	Resale of Water	23
4.14	Interpretations	23
5.00	ENGINEERING REQUIREMENTS	24
5.01	Adequacy of Facilities	24
5.02	Unaccounted for Water	25
5.03	Cross Connections and Back Flow Prevention Regulations	25
5.04	Standard Pressure	26
5.05	Extension of Mains	27
5.06	Service Connections	
5.07	Dead Ends	34
5.08	Long Service Lines	34
5.09	Quality of Water	35
6.00	INSPECTIONS AND TESTS	35
6.01	Meter Testing Facilities and Equipment	35
6.02	Tagging, Sealing and Capping Meters	37
6.03	Accuracy Requirements for Water Meters	37
6.04	Periodic Test	41
6.05	Complaint Test	41
6.06	Request Tests	42
6.07	Meter Resting Employees	43
7.00	SAFETY REQUIREMENTS	43
7.01	Accidents	43
FORMS:	Qualification Card for Water Meterman	45
	Water Meterman's Card	47
	Water Utility Report	48

WEST VIRGINIA LEGISLATIVE RULE
PUBLIC SERVICE COMMISSION
CHAPTER 24-1
SERIES VII

RULES AND REGULATIONS FOR
THE GOVERNMENT OF
WATER UTILITIES

1.00 GENERAL

- (1) Scope - These rules govern the operation and service of electric utilities subject to the jurisdiction of the Public Service Commission pursuant to West Virginia Code §24-2-1.
- (2) Authority - West Virginia Code §§24-1-1, 24-1-7, 24-2-1, 24-2-2.
- (3) Filing Date - March 20, 1986.
- (4) Effective Date - May 19, 1986
- (5) Filing Requirements - Pursuant to 29A-2.1 CSR§1 et seq., this series of rules and regulations of the Public Service Commission of West Virginia is being refiled in accordance with revised requirements by the Secretary of State for filing in the State Register. This refiling does not repeal any of the substantive or procedural aspects of the Commission's rules and regulations but merely represents changes in sizing and formatting of the currently effective rules and regulations. As a result of these revisions in the standard format, in particular, those rules which have evolved into terms of art in Commission practice are hereinafter incorporated into the title of each section or subsection heading of the standard format.

1.01 AUTHORIZATION OF RULES

- (1) These rules are intended to define good practices, which can normally be expected.
- (2) They are intended to insure adequate service and to prevent unfair charges to the public, and to protect the utilities from unreasonable demands.
- (3) The adoption of these rules and regulations shall in no way preclude the Public Service Commission from

altering or amending them in whole or in part, or from requiring any other or additional service, equipment, facility, or standard either upon complaint or upon its own motion, or upon the application of any utility.

- (4) These regulations shall not relieve in any way a utility from any of its duties under the laws of this State.

¹
1.02 APPLICATION OF RULES

- (1) These rules apply to public utilities as defined in Rule 1.03.
- (2) If hardship results from the application of any rule herein prescribed, or if unusual difficulty is involved in immediately complying with any rule, application may be made to the Commission for the modification of the rule or for temporary or permanent exemption from its provisions; provided, that no utility shall submit application for such modification or exemption without submitting therewith a full and complete justification for such action.

^c
1.03 DEFINITIONS

- (1) Commission - Whenever in these rules and regulations the words "Commission or "Public Service Commission" occur, such word or words shall, unless a different intent clearly appears from the context, be taken to mean the Public Service Commission of West Virginia.
- (2) A "Governmental Unit" is any municipality or other political sub-division or agency of the State of West Virginia or the Federal Government.
- (3) "Distribution Main" means water pipe owned, operated, or maintained by the utility which is used for the purpose of distribution of water from which service connections with customers are taken.
- (4) "Utility Service Pipe" shall mean that portion of the service pipe between the distribution main and the curb cock or the inlet connection of the coppersetter when installed at or near the property line, right-of-way, and/or easement line, installed at the cost and expense of the utility.

- (5) "Customer's Service Pipe" shall be that portion of the service pipe from the end of the utility's service pipe to the structure or premises supplied, installed at the cost and expense of the customer.
- (6) A "Private Fire Service Connection" is one to which is attached fixtures from which water is taken only for the extinguishment of fire.
- (7) A "Temporary Service Connection" is one which is installed for the temporary use of water, provided that the customer's premises is located on a lot having a curb line abutting on that part of a street or public right-of-way in which there is located a distribution main of the utility extending for the total frontage of the lot on said street or right-of-way, unless otherwise agreed to by the utility.
- (8) "Public Utility" - Except where a different meaning clearly appears from the context, the word or words "utility" or "public utility" when used in these rules and regulations shall mean and include any person or persons, or association of persons, however associated, whether incorporated or not, including municipalities, engaged in the business of producing, furnishing, transporting, distributing or selling water for any purpose which is now or may hereafter be held to be a public service.
- (9) "Service Connection" - The term "service connection" shall be defined to mean the utility's pipe and appurtenances which connect any water main in a public highway, street, alley, or private right-of-way with the inlet connection of a customer's service line at or near the property line.
- (10) "Standard Distribution Pressure" - "Standard distribution pressure" shall be the distribution pressure established by the utility under the requirements of Rule 5.04.

2.00 RECORDS, REPORTS AND OTHER INFORMATION TO BE SUPPLIED TO THE COMMISSION

2.01 RECORDS AND REPORTS

- (1) Preservation of Records - All records required by these rules shall be preserved by the utility in accordance with the "Rules to Govern the Preservation of Records of Public Utilities and Licensees" as prescribed by The National Association of Regulatory Utility Commissioners (NARUC) dated April, 1972, and adopted by the Commission in its General Order No. 117-C of September 25, 1972, and effective December 1, 1972, except, as they may be hereinafter modified.
- (2) Location of Records - Such records shall be kept at the office or offices of the utility, and shall be open at all reasonable hours for examination by the Commission or its representative, or by others authorized by the Commission.
- (3) Reports to Commission -
 - (a) Each utility shall, at such times and in such form as the Commission may prescribe, report to the Commission the results of any test or tests required to be made or the information contained in any records required to be kept by the utility.
 - (b) Each utility shall furnish to the Commission any further information in its possession, respecting its rates, charges, or practices which may from time to time be required by the Commission, and without formal order of the Commission.

2.02 FILING OF RATE SCHEDULES

- (1) Filing Required - No rules and regulations, or schedules of rates or charges, or modification of the same, shall be effective until filed with the Commission as provided by law.
- (2) Where Filed - Copies of all schedules of rates and other charges, and copies of all rules and regulations, covering the relation of customer and utility, shall be filed by every utility in the office of the Secretary of the Commission.

- (3) Manner of Filing - Tariffs containing all the rates, rules and regulations of each utility shall be filed in the manner prescribed by the Commission in the "Rules and Regulations for the Government of the Construction and Filing of Tariffs of Public Utilities and Common Carriers by Motor Vehicles," effective _____, 1977, and any amendments or modifications thereafter made by the Commission.
- (4) Forms for Filing - The Commission will, upon application, furnish proper blanks to be used for the filing of tariffs or tariff sheets any charges thereof and additions thereto.
- (5) Utility's Special Rules - A utility desiring to establish any rule or requirement supplementing the rules of the Commission shall first make application to/or file tariff sheets with the Commission for authority for such rule or rules, clearly stating in its application the reason for such establishment and substantiating data.

2.03 FINANCIAL AND STATISTICAL REPORT

- (1) Every utility shall file annually a financial and statistical report upon forms to be furnished by the Commission. Said report shall be based upon the accounts set up in conformity with the Commission's order and rule as set out in Rule 2.04 of these rules and regulations. This report shall be filed on or before March 31st of each year, or at such date as the Commission may direct.
- (2) Each utility shall file, periodically, water statistical reports upon Forms ED-2 to be furnished by the Engineering Division of the Commission's Staff. This report shall be filed not later than forty-five (45) days following the period covered by the report.

2.04 UNIFORM SYSTEM OF ACCOUNTS

All water utilities shall maintain the Uniform System of Accounts as promulgated in 1973 by the National Association of Regulatory Utility Commissioners for Class A and B Water Utilities and Class C and D Water Utilities.

Observance of the system of accounts applicable to the water utility by appropriate class is obligatory upon all persons

having direct charge of the books and accounts of the utility. For the purpose of securing uniformity in the applications of this system all questions of doubtful interpretation of accounting rules are to be submitted to the Commission for consideration and decision.

2.05 MAPS AND RECORDS

Each utility shall keep on file suitable maps, plans and records showing the entire layout of every pumping station, filter plant, reservoir, transmission and distribution system, with the location, size and capacity of each plant, size of each transmission and distribution line, fire hydrant, valve and customer's service, reservoirs, tanks and other facilities used in the production and delivery of water. In general, where present plans of existing facilities are not entirely up to date, special surveys to locate any plant or facilities will not be required at once, but they must be updated as prescribed by the Commission. In the case of new construction or property acquired from others, the additions to such maps and records should be made by the end of the next calendar year following the year in which the construction is done or property acquired.

2.06 MANAGEMENT AUDITS

(1) Scope -

To establish a procedure for examination of management practices and policies to determine whether the entity being audited is operating with efficiency and utilizing sound management practices. The purpose of a management audit is to disclose operating areas that are efficient or inefficient, to identify areas for improvement, and to form recommendations for changes. The results of a management audit and the response of the utility to the recommendations and implementation plans developed pursuant to a management audit may be a factor in determining just and reasonable rates, as set out herein.

(2) Types of Management Audits -

The following types of management audit, which vary in scope, may be directed and utilized by the Commission:

- (a) Comprehensive - an investigation characterized by an extensive, detailed analysis of a utility's management and operations.
- (b) Reconnaissance - a broad review, similar in scope to a comprehensive audit, but in less detail. The objective of this type of audit is to identify specific areas for more intensive investigation based upon the magnitude of the problem identified or the potential benefits to be derived.
- (c) Focused - an in-depth investigation of one or several specific areas of a utility's management and operations.

(3) Frequency -

The Commission shall order a management audit of any utility under its jurisdiction whenever the Commission deems it necessary to investigate the operational efficiency of the utility. Such factors as the cost of the management audit and the potential benefits of such audit may be taken into consideration. The Commission may accept or request a management audit performed under the rules of another jurisdiction in satisfaction of this rule when that audit is of the scope contemplated by the Commission, conforms to the standards herein set forth and covers the utility's service functions in its West Virginia jurisdiction.

(4) Conduct and Control -

- (a) The Commission may choose to have the audit performed by its Staff or contracted to a qualified outside auditing firm. In the latter case, the Commission may supervise the selection process. If the management audit is to be conducted by an auditing firm, the Commission's order initiating the audit shall include provision for the development of the request for proposal (RFP), the consultant selection process and Staff's assistance and supervision during the audit.
- (b) The Commission may impose eligibility restrictions upon contractors relating to past, current, and post-audit relationships with the utility.

(c) The utility is expected to cooperate to the fullest extent with the performer of a Commission ordered management audit. A responsible employee shall be appointed by the utility as its management audit coordinator, who shall be responsible to assist in the efficient performance of the management audit.

(5) Costs -

It shall be the responsibility of the audited utility to pay for a contracted audit. The Commission shall include the reasonable cost of conducting the contracted management audit in the cost of service of the utility. The Commission may allow such costs to be recovered in the utility's next general rate case following completion of the audit, or the Commission may order such costs to be amortized over a reasonable period of years, considering the impact of these costs on both the utility and its customers.

(6) Implementation of Recommendations -

(a) Draft report.

1. Upon completion of the audit a draft report shall be submitted to the utility for comments.
2. The auditor and Company representatives shall conduct a draft review meeting subsequent to the distribution of the draft review report.

(b) Final report.

1. A final report shall be submitted to the Commission no later than thirty days after the submission of the draft report to the utility.
2. Within thirty days of the final submission of the management audit report, the utility shall file a document detailing its position on each audit recommendation. This document must state which recommendations are acceptable to the utility and the nature of the utility's disagreement with any recommendations.

- (c) The Commission may, after hearing, issue an order prescribing the recommendations which should be adopted by the utility.
- (d) The utility shall file detailed implementation plans for the Commission's review and approval within the time specified in the Commission's order prescribing which recommendations the utility should adopt. The utility shall not deviate from an approved implementation plan without prior notice to the Commission which specifically states the utility's reasons for departing from the approved plan.
- (e) At the direction of the Commission, a follow-up audit may be performed to review the progress of the utility in implementing the approved plans and the results of previously performed management audits.
- (f) A management audit report and implementation plan adopted pursuant thereto and any follow-up audit may be used by parties in a general rate case subsequent to the management audit. Such audits and implementation plans may be a factor in the determination of just and reasonable rates if introduced as an exhibit and subjected to normal due process procedures.
- (g) The Commission may grant an extension of the time limits established in this section upon a showing of good cause for such extension.

3.00 METER REQUIREMENTS

3.01 UTILITY TO PROVIDE METERS

Unless otherwise authorized by the Commission, each utility shall provide and install at its own expense (except as provided in Rule 5.06) and shall continue to own, maintain, and operate all equipment necessary for the regulation and measurement of water, in accordance with tariff or contract provisions, to its customers. Where additional meters are requested by the customer and are furnished by the utility for the convenience of the customer, a charge for such meters may be made.

3.02 LOCATION OF METERS

- (1) **Accessibility** - In the interest of safety and convenience to the customer, and as a measure of economical operation to the utility, it is required that all meters should be located at or near the property line; provided, however, that when such location is impractical meters shall be placed outside of the customer's building as near as possible to the point where the utility's "Service Connection" joins the "Customer's Service Line"; provided, further, if neither of the foregoing requirements can be complied with on account of physical, economic, or climatic conditions, the meter may be placed within the building, preferably in the cellar, and when so placed within the building, the meter shall be so located that it will be easily accessible for reading, maintenance and protected from freezing and mechanical damage.
- (2) **Meter Grouping** - When a number of meters are grouped, every meter shall be tagged so as to indicate the particular customer served by it.
- (3) **Remote Meters** - When a meter is located inside a home or building, the utility may install a remote register or dial on the exterior of a home or building accessible for meter reading.
- (4) **Meter Setting Installation** - Meter settings shall be installed in accordance with drawings submitted and approved by the Commission under Rule 5.06(4).

4.00 CUSTOMER RELATIONS

4.01 CUSTOMER INFORMATION

- (1) **Information as to Service** - Each utility shall, upon request, give its customers such information and assistance as is reasonable, in order that customers may secure safe and efficient service.
- (2) **Explanation of Meter Readings** - Each utility shall adopt some means of informing its customers as to the method of reading meters, either by a printed description on its bills, or by a notice to the effect that the method will be explained at the office of the utility upon request. It is recommended that an

exhibition meter be kept on display in each sales office maintained by a utility.

- (3) Explanation of Rates - It shall be the duty of the utility to explain to the customer at the beginning of service, or whenever the customer shall request the utility to do so, the utility's rates applicable to the type of service furnished to the customer and all other classes of customers, and to assist him in obtaining the rate which is most advantageous to his requirement for service. The responsibility for the selection, however, must rest with the applicant. In the event that the customer's use of service is later such that an applicable rate schedule, other than the one initially selected, proves to be more favorable, the responsibility for requesting a change in rate schedule, consistent with the provisions of the service agreement, shall rest with the customer. The utility shall, on its periodic statements, annually inform its customers that, if they so request, it shall supply the customers with a copy of the utility's rate or rates applicable to the type of service to be furnished to them and to all other classes of customers with a concise written explanation of the rates, and an identification of any classes of customer whose rates are not summarized.
- (4) Posting of Law, Rates, Rules and Regulations -
- (a) Every utility shall maintain in its office for inspection by the public the following:
1. A copy of the rates, rules and regulations of the utility, and of forms of contracts and applications applicable to the territory served from that office.
 2. A copy of the Public Service Commission Law of this State.
 3. A copy of these rules and regulations.
- (b) A suitable placard, in large type, shall be exhibited in a conspicuous location, giving information to customers that a copy of the law, the rules and regulations of the Public Service Commission and the schedule of rates are kept for their inspection.

- (5) The following wording shall be added to the margin of the utility bill cards:

"This utility is regulated by the Public Service Commission of West Virginia."

4.01 A. APPLICATIONS FOR WATER SERVICE

- (1) All customers desiring water service must make written application at the office of the utility on printed forms provided therefor, setting forth in said application all purposes for which water will be used upon their premises.
- (2) Any change in the identity of the contracting customer at a premises will require a new application for water, and the utility may, after reasonable notice, discontinue water service until such new application has been made and accepted, but the former customer shall remain liable for water furnished to said premises until he has given notice in writing to the utility to discontinue water service.
- (3) No charge will be made for turning on the water to new customers during regular working hours.
- (4) Accepted applications for water to be supplied to any premises shall constitute a right to the customer to take and receive a supply of water for said premises for the purposes specified in such application; (i.e., Domestic, Commercial, and Industrial) subject only to the fulfillment of the conditions of these rules and regulations by the customer.

4.01 B. SPECIAL APPLICATIONS FOR WATER SERVICE

- (1) Water for building, construction or other temporary purposes must be specially applied for.
- (2) Connections for private fire service must be specially applied for.
- (3) Where water is desired for only a short period of time, and not continuously throughout the year, such as for vacation homes or cottages, building purposes, street paving, cleaning property, filling tanks or other uses of this kind, an application shall be made as set forth in Rule 4.01 A., and payment made in accordance with

the applicable schedule of rates and charges, in which case a suitable deposit shall be made.

- (4) Whenever a street service connection is made to the mains for temporary service or for temporary private fire service, the applicant shall bear the entire cost and expense of labor and material for tapping the main and installing the service pipe and meter and its removal, if required.

4.01 C. PRIVATE FIRE PROTECTION SERVICE

- (1) Service connections for water to be taken for the extinguishment of fire shall be made only under the terms and conditions contained in the "Special Applications" for such service, a copy of which is on file in the utility's office. (See Rule 4.01 B.)
- (2) Application for private fire protection service will not be approved unless there is sufficient water volume and pressure available in the main and the premises to be supplied abuts the street wherein said main is located.
- (3) All applications for private fire protection service where public fire service exists shall be subject to the written approval of the Chief of the Fire Department having jurisdiction, who, by such approval, shall affirm that, in his opinion, the public fire protection will not be endangered by the proposed connection to be made for the applicant.
- (4) The applicant shall furnish, attach and make a part of his application, three complete sets of drawings approved by Insurance Services Office of W. Va., or another comparable agency approved by the utility showing the pipes, valves, hydrants, tanks, openings, and appurtenances contemplated in the application. Such sketch must also show any other water supply system and pipelines and appurtenances which may exist on the premises, and there shall be no connection between such other supply and pipes connected to the utility's mains.
- (5) The customer agrees to obtain in advance the approval of the utility for any change, alteration or addition in the fixtures, openings and uses specified in the application.

- (6) The utility shall determine the size and location of any connections made to its distribution mains for private fire protection service, and will, at the cost and expense of the customer, make the connection to its mains and install the service connection from the distribution main to a point at or near the property line.
- (7) The extent of the rights of the private fire protection service customer is to receive, but only at times of fire on his premises, such supply of water as shall then be available. The utility shall not be considered in any manner an insurer of property or persons, or to have undertaken to extinguish fire or to protect any persons or property against loss or damage by fire or otherwise, and it shall be free and exempt from any and all claims for damages on account of any injury to property or persons by reason of fire, water, failure to supply water or pressure, or for any other cause whatsoever.
- (8) No pipe or fixtures connected with a private fire service served by the utility shall be connected with pipes or fixtures supplied with water from any other source.
- (9) Unless otherwise provided in a written agreement between the applicant and the utility, service lines for private fire protection service shall be distinct and separate from the regular or general water service line. A private fire service connection is furnished for the sole purpose of supplying water for the extinguishment of fires, and the use of water from such a connection for any other purpose is absolutely forbidden.
- (10) Where one service pipe is used for both general and fire purposes, separate charges will be made for each type of use, in accordance with the applicable schedule of rates, the charge for private fire protection service being based on the schedule of Rates For Private Fire Protection or Private Fire Service, and that for general water service being based on the consumption through and the size of the meter or meters installed.
- (11) A gate valve with post indicator controlling the entire supply shall be placed at the curb or property line of

the street in which the main is located or at such other points as may be approved by the utility, and shall be furnished and installed by and at the expense of the customer, and unless otherwise approved by the utility, said valve shall be installed in a valve pit or vault which shall also be furnished and installed at the expense of the customer.

- (12) Private fire protection service may be furnished through a line guarded by an approved fire line meter or detector device which shall be furnished and installed by the utility at its cost and expense. The meter shall be set in a masonry or concrete vault or chamber, properly drained and protected, located on the customer's premises at a point as near as possible to the curb line, and said vault or chamber shall be constructed and maintained by and at the expense of the customer.
- (13) Under no circumstances will anti-freeze be permitted in the sprinkling systems.
- (14) The entire private fire service system on the customer's premises shall be installed and maintained by and at the expense of customer and shall be subject to the inspection, test and approval of the utility before the service is made effective, and at such times thereafter as may be deemed necessary or appropriate by the utility.
- (15) Hydrants and other fixtures connected with a private fire service system may be sealed by the utility, and such seals may be broken only in case of fire or as specially permitted by the utility, and the customer shall immediately notify the utility of the breaking of any such seal.
- (16) Whenever a fire service system is to be tested, the customer shall notify the utility of such proposed test, designating the day and hour when same is to be made, so that, if desired, the company may have an inspector present during the test.
- (17) Private fire hydrants may be painted any color other than that adopted by the utility for public fire hydrants, provided such color is approved by the Chief of the Fire Department, where public fire service exists.

4.02 CUSTOMER DEPOSITS

(1) Security Deposits -

- (a) Security Deposits - A utility may require the applicant or customer to make a deposit with it initially, and from time to time, as a guarantee of the payment for water used. Such deposit shall not be more than one-sixth (1/6) of the annual estimated charge for service to secure the utility from loss. The utility shall not be bound to supply water until these conditions are fulfilled and it may cut off the supply if the guarantee or increased guarantee is not given when required. After the customer has paid bills for service for twelve consecutive months, the utility shall promptly and automatically refund the deposit plus accrued interest. Calculation of the above twelve months' period shall commence from the first regular payment or following the payment of a past due bill or bills. Interest at the rate of 8% per annum will be paid from the date of deposit until refund date. The utility shall have a reasonable time, not to exceed thirty (30) days, to read and remove meters and to ascertain that the obligations of the customer have been fully performed before being required to return any deposit in the case where there has not been an automatic refund.
- (b) Record of Deposit - Each utility holding a cash deposit shall keep a record showing: (i) the name and current address of each depositor; (ii) the amount and date of the deposit; and (iii) each transaction concerning the deposit.
- (c) The Receipt - Concurrently with receiving a cash deposit, the utility shall deliver to the applicant for service or customer, a receipt showing: (i) the date thereof, (ii) the name of the applicant or customer and the address of the premises to be served or served, (iii) the service to be furnished or furnished, and (iv) the amount of the deposit and the rate of interest to be paid thereon. Each utility shall provide automatic means to refund the deposit of a customer, when he is so entitled, if the original receipt cannot be produced. A receipt of proof or payment will not

be necessary under the provisions for an automatic refund.

- (d) Unclaimed Deposits - Should a utility have retained, through no fault of its own, deposits made by customers to whom service has been discontinued during any calendar year, it shall, on or before the first day of March, in each year, mail to the customer's last known address a check as refund of the deposit plus accrued interest, or at the utility's option, publish a list of such depositors, in a newspaper published and of general circulation in each of the counties in which it operates and in which the deposits were made, showing as of the thirty-first day of December immediately preceding, the amount of each such deposit, together with the interest due thereon, and notifying depositors listed therein that their deposits, together with accrued interest, are being held to their credit and will be returned upon request. The utility shall not be liable for any interest on such deposit after publication of such lists. Upon the completion of the above procedure, the deposit shall be considered as derelict property subject to recovery by the State of West Virginia under the provisions of Chapter 34, Article 2, Section 1 of the Code of West Virginia.

(2) Guarantee Agreement -

- (a) A utility may accept, in lieu of the cash deposit, a guaranty agreement signed by a financially responsible guarantor, whereby payment of a specified sum, not exceeding the cash deposit aforesaid, is guaranteed. The guarantor may, upon request, receive copies of disconnection notices sent to the customer whose account has been guaranteed. Provided, however, that the limitations herein fixed upon the terms of a guaranty agreement shall not apply to industrial customers.
- (b) The term of the guaranty agreement shall be indeterminate, but it shall terminate when the customer gives notice to the utility of discontinuance of service at the location covered by the guaranty agreement, or six months after

discontinuance of service where no notice was given, or at the guarantor's request upon thirty (30) days' written notice to the utility. Upon termination of a guaranty agreement, or whenever the utility deems the same insufficient as to amount of surety, a cash deposit or a new or additional guaranty may be required upon reasonable written notice to the customer.

- (3) Application in Case of Receiver or Trustee - The aforesaid provisions shall apply in the case of a receiver or trustee operating, under court order, a business requiring utility service.

4.03 BILLING INFORMATION

- (1) (a) Bills shall be rendered periodically, and they shall show the readings of the meter at the beginning and end of the period for which the bill is rendered, the date of the meter readings, the number of cubic feet or gallons of water supplied, and the authorized rate.
- (b) Opening and closing bills, monthly or quarterly, for water service rendered for periods of five days more or five days less than the normal billing period will be computed in accordance with the rate applicable to that service, by the amount of water blocks, and the minimum charge as set forth in that rate will be prorated on the basis of the number of days in the period in question, to the total number of days in the normal period.
- (c) Utilities desiring to adopt mechanical billing of such nature as to render compliance with all the terms of paragraph (a) impractical, may make application to the Commission for relief from part of these terms. After consideration of the reasons given when asking for relief, the Commission may allow the omission of part of these requirements.
- (2) On all bills which include any other items than a definite authorized water rate, the other factors used in computing the bill shall be clearly stated so that the amount may be readily verified from the information appearing upon the bill.

- (3) Each bill may bear upon its face the latest date upon which it may be paid without penalty. On all accounts not paid in full within twenty (20) days of the billing date, ten percent (10%) penalty may be added to the net amount shown. This delayed payment penalty is not interest and is only to be collected once for each bill where it is appropriate.

4.04 ADJUSTMENT OF BILLS

- (1) Fast Meters - If, upon test of any meter, the meter is found to have an average error of more than two percent (2%) fast, the utility shall refund to the customer the overcharge, based upon the corrected meter reading for a period equal to one-half the time elapsed since the last previous test, but not to exceed six (6) months. If it can be shown that the error was due to some cause, the date of which can be fixed, the overcharge shall be computed back to but not beyond such date. If the meter has not been tested in accordance with Rule 6.05, the period for which it has been in service beyond the regular test period shall be added to the six (6) months in computing the refund.
- (2) Dead Meters - If a meter is found not to register for any period, the utility shall compute the water used by taking the average of the water used for the meter-reading period preceding and the meter-reading period following the date when the meter was found to be dead, which amount shall be assumed to be the amount of water used by the customer during the billing period in which the meter was found dead. Exceptions will be made to this rule in case the facts clearly show that the above method does not give the correct consumption for the period.

4.05 COMPLAINTS

- (1) Investigation of Complaints - Each utility shall make a full and prompt investigation of all complaints made to it by its customers, either directly or through the Commission. In the event that the complaint is not adjusted, the utility shall, before service is discontinued, notify the customer that he has the privilege of appeal to the Consumer Relations Department of the Public Service Commission.

- (2) Records of Complaints - The utility shall keep a record of all complaints received, which record shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof.
- (3) Disposition of Records - Records of complaints shall not be destroyed until a summary has been prepared for permanent record, showing the character of complaints made, the number of each type received in each month, and the disposition of the complaints.

4.06 DISPUTED BILLS

In the event of a dispute between the customer and the utility respecting any bill, the utility shall make forthwith such investigation as shall be required by the particular case, and report the result thereof to the customer. In the event that the complaint is not adjusted, the utility shall, before service is discontinued, notify the customer that he has the privilege of appeal to the Consumer Relations Department of the Public Service Commission.

4.07 CUSTOMER DISCONTINUANCE OF SERVICE

Every customer who is about to vacate any premises supplied with service by the utility, or who for any reason wishes to have service discontinued, shall give at least twenty-four (24) hours' notice thereof to the utility, specifying the date on which it is desired that service be discontinued. Until the utility shall have such notice, the customer shall be held responsible for all service rendered.

4.08 UTILITY DISCONTINUANCE OF SERVICE

- (1) Notice of Discontinuance -
 - (a) No utility shall discontinue service to any customer for violation of rules and regulations or for non-payment of bills, without first having tried diligently to induce the customer to comply with its rules and regulations, or to pay his bills.
 - (b) Service shall actually be discontinued only after at least twenty-four (24) hours' written notice shall have been given to the customer by the

utility that bills are five or more days delinquent, or that the violation of rules must cease; provided, however, that where fraudulent use of water is detected, or where the utility's regulating or measuring equipment has been tampered with, or where a dangerous condition is found to exist on the customer's premises, the water may be shut off without notice in advance. In no case shall the utility discontinue service on Friday, Saturday, Sunday, or day prior to holiday or if an emergency exists. All disconnections shall be performed between the hours of 8 a.m. and 4 p.m.

(2) Charge for Reconnection -

- (a) Whenever the supply of water is turned off for violation of rules and regulations, non-payment of bills, or fraudulent use of water, the utility may make a charge as set forth in its tariff for reestablished service.
- (b) If service is discontinued at the request of the customer, the utility may refuse service to such customer, at the same premises, within eight (8) months, unless it shall first receive payment as set forth in the tariff for reconnecting charge.

4.09 REFUSAL TO SERVE APPLICANT

- (1) Non-compliance with Rules and Regulations - Any utility may decline to serve an applicant until he has complied with the State and municipal regulations governing water service and the Commission approved rules and regulations of the utility.
- (2) Applicant's Facilities Inadequate - The utility may refuse to serve an applicant if, in its judgment, the applicant's installation of piping equipment is regarded as hazardous or of such character that satisfactory service cannot be given.
- (3) Applicant's Recourse - In the event that the utility shall refuse to serve an applicant under the provisions of this rule, the utility must inform the applicant that the question may be submitted to the Commission for decision.

- (4) In the case of the establishment of a new utility and/or extensions, the utility has received applications for service and has accepted the tap-fee for same; the utility will immediately upon receiving bids for such installation determine the feasibility of serving the areas in question and immediately advise the applicants. In the event an area is deemed unfeasible to serve, the tap-fee deposit will be returned to the applicant immediately.

It is suggested the utility design this application form to reflect the above procedures.

4.10 CHANGE IN CHARACTER OF SERVICE

In case any substantial change is made by a utility in the pressure, or other conditions which would affect the efficiency of operation or adjustment of appliances, the appliances of all customers in the district affected shall be inspected and shall be readjusted, if necessary, by the utility for the new conditions without charge. Where circumstances require, the utility shall furnish and install suitable pressure regulating devices.

4.11 ACCESS TO PROPERTY

- (1) The utility shall at all reasonable times have access to meters, service connections and other property owned by it on customer's premises, for the purpose of maintenance and operation. Neglect or refusal on the part of customers to provide reasonable access to their premises for the above purposes shall be deemed to be sufficient cause for discontinuance of service on the part of the utility.
- (2) Identification for Employees - Every employee, whose duties regularly require him to enter the homes of customers shall wear a distinguishing uniform or insignia, identifying him as an employee of the utility and shall carry on his person an identification card which will identify him as an employee of the utility, containing a photograph of said employee. The identification card shall contain the telephone number of the utility as well as other pertinent information necessary to identify the employee. All other employees, whose duties require occasional entry into the homes or premises of customers shall carry an

identification card containing information as herein required.

4.12 SERVICE INTERRUPTIONS

- (1) Records of Interruptions - Each utility shall keep a record of any interruption of service affecting its entire system or a major division thereof, including a statement of the time, duration, and cause of the interruption.
- (2) Notification to Customer - Every customer affected shall be notified in advance of contemplated work which will result in an interruption of service. [See Rule 4.14(3) Notice]
- (3) Curtailment or Restriction Service Policy - Each utility shall make application to the Commission for any contemplated curtailment or restriction policy to any customers, prior to such curtailment or restriction policy being put into effect. The following information shall be supplied:
 - (a) Reason for curtailment or restriction of service.
 - (b) Date curtailment or restriction policy requested to begin.
 - (c) Duration of policy and projected correction programs with time parameters for completion.

4.13 RESALE OF WATER

Water furnished on approved rates or contracts by a public utility shall not be resold or caused to be resold by any customer unless the said customer is engaged in the business of distributing water as a public utility.

4.14 INTERPRETATIONS

- (1) Residential Service - Residential Service is defined as service to a householder or tenant living in a separate apartment in an apartment building.

Should the owner of a multiple apartment building undertake to furnish water to his tenants as a part of their monthly rent, then such service shall be classed as "Commercial." However, a close branch of a

householder's family, living with the householder and using the same water facilities, shall not be classified as an additional service or as "Commercial." In cases where a householder or tenant devotes some portion of the occupied building to commercial use and uses the remainder as a residence then the predominate use of water shall constitute the basis for classification as either residential or commercial.

- (2) Commercial Service - Commercial Service is defined to include service to each separate business enterprise, occupation or institution occupying for its exclusive use any units or units of space as an entire building, entire floor, suite of rooms or a single room, and using water for such incidental use as the schedule of rates applicable to the particular installation may permit. Commercial Service shall apply to all stores, offices, hotels, wholesale houses, garages, display windows, signs, theaters, barber and beauty shops, churches, opera house, auditoriums, lodge halls, school houses, banks, bakeries and any other space occupied for commercial purposes. Any rooming house, lodging house, resort, inn or tavern renting more than four rooms to strangers or transients without any previous agreement for accommodation or as to the duration of stay shall be classed as a hotel and as such it comes under the commercial classification.
- (3) Notice - Where possible individual notice of service interruption is urged, such as by telephone, notice at residence, or by mail. However, a general advice by newspaper of circulation in the affected area, or radio or telephone announcement will meet the notice requirement.

5.00 ENGINEERING REQUIREMENTS

5.01 ADEQUACY OF FACILITIES

- (1) Construction and Maintenance of Plant - Each utility shall at all times construct and maintain its entire plant and system in such condition that it will furnish safe, adequate and continuous service.
- (2) Inspection of Plant - Each utility shall inspect its plant and facilities in such manner and with such frequency as may be necessary to insure a reasonably

complete knowledge as to their conditions and adequacy at all times. Such inspections must comply with the requirements of the legally applicable Minimum Federal Safety Standards (Federal Occupational Health and Safety Administration) and the standards of the West Virginia Department of Health.

- (3) Records of Conditions - Records necessary for the proper maintenance of the system and in accordance with the West Virginia Department of Health and the Minimum Federal Safety Standard shall be kept of the conditions found. In special cases, a more complete record may be specified by the Commission.
- (4) Records of Operation - Each utility shall keep a record of the operation of its plant, which, so far as practical, shall show such details of plant operation as may be necessary to substantially reproduce the daily history of its operation. The records shall also be maintained in accordance with the requirements of the Minimum Safety Standards and West Virginia Health Department.
- (5) Reports to Commission - Each utility shall, upon request of the Commission, file with the Commission a statement regarding the condition and adequacy of its plant, equipment, and facilities, and of its operations and service in such form as the Commission may require.
- (6) West Virginia Department of Health Standards - All extensions, service connections and modifications to the utility's plant must meet applicable design standards established by the West Virginia State Department of Health in addition to these rules.

5.02 UNACCOUNTED FOR WATER

Each utility shall determine either by actual measurement or by estimate the amount of "Unaccounted for Water" in each division of its system and report, separately, to the Commission in its annual report. Said report shall contain the proposed remedial actions to be taken if unaccounted for water is in excess of 15% of the gross production.

5.03 CROSS CONNECTIONS AND BACK FLOW PREVENTION REGULATIONS

See West Virginia State Board of Health Bulletin EW-113 Effective April 1, 1976.

5.04 STANDARD PRESSURE

- (1) Each utility shall, subject to the approval of the Commission, adopt and maintain a standard pressure in its distribution system. Each utility shall select a point or points on its distribution system to be designated as the point or points of "standard pressure." The selection of such points shall be confined to locations fairly representative of average conditions. In selecting points for fixed standard pressure a utility may divide its distribution system into districts, when such division is necessary due to differences of elevation or loss of pressure because of friction, or due to both of said causes; and may adopt a standard pressure for each such division, or a utility may establish a single standard pressure for its distribution system as a whole. In no case shall the constant difference between the highest and lowest pressures in a district for which a standard has been adopted exceed fifty percent (50%) of such standard. In the interpretation of this rule it shall be understood that in districts of widely varying elevations a utility may undertake to furnish a service which does not comply with the foregoing specifications. In such event, the customer shall be fully advised of the conditions under which average service may be expected, and the customer's agreement secured in writing. It shall be understood that this waiver shall not deny the right of the customer to request a service more nearly comparable to that furnished to the balance of the system, or the Commission's right to require a better service when, upon investigation, it appears right and proper that such betterments should be made.
- (2) Each utility should establish an elevation in each pressure district above which it cannot serve water. This elevation shall be filed with the Engineering Division of the Commission and displayed in a prominent place in the public offices of the utility.
- (3) The standard pressure to be adopted in (1) above must be filed with the Engineering Division of the Commission. No change shall be made by a utility in the standard pressure or pressures adopted for its system without the approval of the Commission.

- (4) A customer's pressure shall be no less than 20 p.s.i. at peak demand on system or 30 p.s.i. static pressure at the terminus of the utility's service line (meter box or curb box) unless the customer has waived this requirement.

5.05 EXTENSION OF MAINS

In the matter of extension of facilities, the following rules shall apply:

~ (1) Free Extensions

1 (a) Public Fire Service -

- A 1. Any governmental unit located in the utility's service area by ordinance of its Council or by resolution of its Board of County Commissioners shall have the right to order the installation of additional fire hydrants on existing utility owned mains having an internal diameter of six (6) inches or larger and the utility will install such hydrants at its own cost and expense; provided, however, the estimated gross receipts from fire hydrants rentals shall equal or exceed twenty-four (24) percent annually of the cost of said installations.
- 6 2. Where pipeline installations are required to carry out an order of any governmental unit located in the utility's service area to install fire hydrants, or where existing utility owned mains, in the opinion of the utility, are inadequate to provide fire flows to such hydrants, and when any governmental unit located in the utility's service area orders the installation of a water main of adequate size to provide such flows to the hydrant or hydrants so ordered, the utility will install such mains and hydrants at its own cost and expense; provided, however, that the utility shall not be required to make extensions of said water mains unless the estimated gross receipts from private consumers and from fire hydrant rentals shall equal or exceed twenty-four (24) percent annually of the cost of such extensions.

2 (b) General Water Service -

- A 1. The utility will, upon written request for service by a prospective customer or group of prospective customers located in the same neighborhood, determine the necessary size of main required to give service and make an estimate of the cost of the proposed extension including pipe, valves, fittings, necessary materials, and all other costs such as labor, permits, and related costs. The length of the extension required shall be that length required to extend from the new proposed service area to the nearest main having sufficient excess capacity to provide service at maximum demand or said condition satisfied by other means such as storage.
- B 2. Where the cost of extension does not exceed three and one-half ($3\frac{1}{2}$) times the estimated normal annual revenue from hydrants and prospective customers whose service pipes will immediately be connected directly to the extension and from whom the utility has received applications for service upon forms provided by the utility for this purpose, the utility will install, at its own cost and expense, the necessary extension; provided, that the patronage or demand will be of such permanency as to warrant the capital expenditure involved.

Normal annual revenue shall be based on 150 gallons per day per residential unit or latest edition of American Water Works Association estimates and consumption for various units.

b (2) Extensions Beyond Free Limit of General Water Service and Public Fire Service -

If the estimated cost of the proposed extension required in order to furnish general water service exceeds three and one-half ($3\frac{1}{2}$) times the utility's estimate of immediate normal annual revenue, such extension will be made if the applicant or the applicant's authorized agent shall contract for such extension and shall deposit in advance with the utility

the estimated cost of the extension over and above the free extension limit. At the end of each fiscal year the utility will, in such case, for each bona fide customer directly connected to the extension between its original beginning and the original terminus within a period of ten (10) years from the making of such extension, refund to the original depositor or depositors, an amount equal to three and one-half (3½) times the annual revenue of the new customer, but in no event shall the aggregate refund made to any depositor exceed the original deposit of such depositor.

c (3) Adjustment of Cost of Extension -

- 1 (a) Should the actual cost of the extension be less than the estimated cost, the utility will refund the difference as soon as the actual cost has been ascertained. When the actual cost of the extension exceeds the estimated cost, then the utility will bill the depositor for the difference between the estimated and the actual cost. No interest will be paid by the utility on the applicant's payment or on any unrefunded balances.
- 2 (b) In estimating the cost of an extension, the estimate shall be based on the diameter of the pipe to be used; provided, however, that the estimated cost to the customer or customers shall not be based on a pipe in diameter of less than 6" or greater than the diameter of the main from which the extension is to be made, unless actual consumption estimated for the proposed customer or customers requires a larger pipe.
- 3 (c) At the expiration of said ten (10) year period, the refund account will be closed and no further refunds will be made.
- 4 (d) Extensions made under this rule shall be and remain the property of the utility.
- 5 (e) The utility reserves the right to further extend its water mains from and beyond the terminus of each water main extension made under this rule, and the depositor or the depositor's agent paying for an extension shall not be entitled to any refund for the attaching of customers to any further extension or branch mains so installed.

- (f) In determining the length of main extensions or of pipelines to be installed in an urban area when land is subdivided into lots, the main shall be extended to fully cover the frontage of the property, and if the last lot to be served is a corner lot the terminal point of the extension made hereunder shall be located so that the main laid hereunder ties in with the existing main located in the intersecting street; and further provided that if there is no main located in the intersecting street, the terminal point of the extension made hereunder shall be located at the nearest street line of the intersecting street. In rural areas or open land areas, the extension required will be that length necessary to adequately serve the applicant.
- (g) Before water lines will be laid hereunder in any new subdivision, it is understood and agreed that the road surface shall be brought to the established sub-grade as determined by the agency having jurisdiction.
- (h) This rule shall not be construed as prohibiting the utility from providing an alternate plan for main extensions so long as no discrimination is practiced between customers whose service requirements are similar. However, such alternate plan shall be filed with the Secretary's office of the Public Service Commission.
- (i) Contract for Service - The utility shall not be required to make free extensions or refunds as described in this rule unless those to be served by such extension shall guarantee to the utility that they will take water service at their premises within thirty (30) days after water is turned into the main.
- (j) Construction Conditions - Construction of line extensions, as provided in this rule, will be undertaken promptly after all applications have been completed and necessary right-of-way agreements or rights of entry have been delivered to the utility and all prospective customers have signed contracts.

- (k) Right-of-Way - With respect to the item "Right-of-Way", it is not the purpose of this rule to require the utility to build extensions over private rights-of-way. If the construction of an extension involves the use of private right-of-way, then the prospective customer, whenever reasonably possible, shall secure the right-of-way and deliver it to the utility free of cost before construction of the extension is started. If, however, it is not reasonably possible for the prospective customer or customers to secure the right-of-way, and the construction of an extension involves the utility's incurring expense for right-of-way easements, either by purchase or condemnation, such costs shall be added to the total cost of the extension.

5.06 SERVICE CONNECTIONS

- (1) Where its distribution mains are now or may hereafter be installed, the utility will install the service pipe and appurtenances between the water main in the street up to and including the stop cock and curb box, or the coppersetter when installed in a meter box at or near the property line or right-of-way at or near 90 degrees to the main, provided that the service pipe is required for the immediate and continuous supply of water for general water service to premises abutting the public street or highway in which such mains are located; and all such service pipes and appurtenances shall be installed only by the utility unless by prior written agreement.
- (2) The utility shall not make any charge for furnishing and installing any permanent service connection, meter or other appliance necessary to deliver and measure the water furnished unless the utility has prior approval of the Public Service Commission for establishing a tap-on or connection fee.
- (3) Temporary service connections for construction or other temporary purposes shall be installed by the utility at the cost of the applicant.
- (4) Each water utility shall adopt standard methods of meter installations where practicable. Such method shall be set out with a written description and with drawings to the extent necessary to a clear

understanding of the requirement; all of which shall be submitted to the Secretary of the Public Service Commission.

- (5) Service pipes supplying a premises shall not pass through or across any premises or property other than that to be supplied, nor across any portion of the property that could practicably be sold separately from the immediate premises supplied, and no water pipes or plumbing in any premises shall be extended therefrom to adjacent or other premises.
- (6) The utility will make all connections to its distribution mains and will specify the size, kind, quality, and location of all materials used in the service line.
- (7) The corporation cock, curb cock, curb box, or coppersetter when installed in a meter box, and the utility's service pipe from the distribution main to the curb cock or coppersetter will be furnished, installed, and maintained by the utility and shall remain under its sole control and jurisdiction.
- (8) The utility will not, at its own cost and expense, install service pipes for private fire service or temporary service connections.
- (9) The curb box or meter box shall be set at a location approved by the utility and shall be kept accessible at all times.
- (10) The customer's service pipe from the curb cock or coppersetter to the place of consumption shall be installed in a workmanlike manner and shall be furnished, installed and maintained by the customer at his own expense and risk.
- (11) The customer's service pipe and all connections and fixtures attached thereto shall be subject to the inspection of the utility before the water will be turned on, and all premises receiving a supply of water and all service pipes, meters and fixtures, including any and all fixtures within the said premises, shall at all reasonable hours be subject to inspection by any duly authorized employees of the utility.

- ✓ (12) The customer's service pipe shall be laid below the frost line at all points and shall be placed on firm and continuous earth so as to give unyielding and permanent support; shall not be laid in driveways nor pass through premises other than that to be supplied; and shall be installed in a trench at least two feet in a horizontal direction from any other trench wherein gas pipe, sewer pipe, or other facilities, public or private, are or are to be installed.
- n) (13) The customer shall install and properly maintain in good working condition a stop and waste cock of a type approved by the utility on the customer's service pipe immediately inside the foundation wall in a readily accessible location and in a place protected from the possibility of freezing and so placed that it will shut off and drain all plumbing within any and all buildings in the premises.
- n) (14) The customer shall install his service pipe to the point of service and/or meter at a point as designated by the Manager or other authorized employee of the utility, after which the utility will install the service from the main to the designed point of service.
- s) (15) Where the utility's service pipe is already installed to the point of service, the customer shall connect with the service pipe as installed.
- p) (16) The customer shall not be required to make changes in the customer's service pipe or meter location required on account of changes of grade, relocation of mains, and other causes not related to the customer. Said changes shall be accomplished by the utility and said utility shall bear the full costs related thereto.
- g) (17) No fixture shall be attached to, or any branch made in, the service pipe between the meter and the distribution main.
- k) (18) Each premise shall be supplied through an independent service pipe from a separate curb cock or coppersetter, unless otherwise approved by the utility in writing.
- s) (19) Customer's service pipes must be kept and maintained in good condition and free from all leaks and defects at the customer's cost and expense, and for failure so to do, water service may be discontinued.

5.07 DEAD ENDS

"Dead Ends" in the distribution mains should be avoided so far as possible. If such "Dead Ends" exist the utility shall provide facilities for flushing.

5.08 LONG SERVICE LINES

To assure the orderly development of its system, and to provide adequate service to its customers, the utility should ordinarily provide water service only at the property line of the customer requesting service, and in those instances where the utility's service does not extend to the customer's property line, an extension should be made by the utility in accordance with Rule 5.05 of the Rules and Regulations for the Government of Water Utilities. In unusual and exceptional cases where the property line of the customer requesting service is excessive distance from the existing main of the utility, and the cost to be borne by the prospective customer under Rule 5.05 is prohibitive, and there is no reasonable prospect of further growth and development in the area, or for any one of the above reasons, the utility may serve the customer by installing a meter in the utility's right-of-way at its main nearest the customer's property, and connecting the meter to the customer's privately owned service line. The customer shall extend his service line to an existing main of the utility and shall be solely responsible for service beyond the meter. Standards of service received by the customer shall be determined at the metering point. The customer shall not permit others to connect their water lines or receive water service from his privately owned service line. In the event the utility's main is later extended to the customer's property line under Rule 5.05, the customer shall discontinue the use of his privately owned service line and shall pay all costs and charges authorized by the rules of the Public Service Commission and the rules and tariffs of the utility for water service from such extension, the same as if the customer had not previously laid and received service through a private service line. The provisions of this rule shall apply to all persons now or hereafter receiving water service through a privately owned service line extending from the utility's main to the property to be served.

5.09 QUALITY OF WATER

- (1) Purity - All water furnished by a utility for domestic use, shall be pure, wholesome, potable and in no way dangerous to the health of the consumer.
- (2) Health Department - Every water utility shall comply with the rules of the State Department of Health governing purity of water, testing of water, operation of filter plants and such other rules they may prescribe, pursuant to law, having as their ultimate end the purity of water.

6.00 INSPECTIONS AND TESTS

6.01 METER TESTING FACILITIES AND EQUIPMENT

- (1) Testing Facilities - Each utility shall provide or have access to such laboratory meter-testing equipment and other equipment and facilities as may be necessary to make the tests required of it by these rules or other orders of the Commission. The apparatus and equipment so provided shall be subject to the approval of the Commission, and it shall be available at all times for the inspection or use by any member or authorized representative of the Commission.
- (2) Tests Required - Each utility shall, as a minimum requirement, make such tests as are prescribed under these rules with such frequency, and in such manner, and at such places as are herein provided or as may be approved or ordered by the Commission.
- (3) General Testing Equipment - Each utility furnishing metered water service shall own and maintain the equipment and facilities necessary for accurately testing all types and sizes of meters employed for the measurement of water unless arrangements shall have been made to have such testing done in a shop or laboratory containing equipment that is acceptable to the Commission. All alterations or repairs to meter-testing equipment, which might affect the accuracy of such equipment or the method of operating it, shall be promptly reported in writing to the Commission.

- 1 (a) Meter Test Shop - Each utility shall, unless specifically excused by the Commission, provide for and have available such meter-testing shop and instruments and other equipment and facilities as may be necessary to make the tests required by these rules or other orders of the Commission. Such equipment and facilities shall be satisfactory to and approved by the Commission and shall be available at all reasonable times for the inspection and use of any authorized representative of the Commission.

All testing instruments and other equipment shall at all times be accompanied by a certificate signed by a proper authority giving the date when it was last certified and adjusted, and certificates, when superseded, shall be kept on file in the office of the utility.

- 2 (b) Minimum Equipment - Except as noted in Paragraphs (c) and (d) below, testing equipment shall consist of either calibrated tanks or tanks mounted upon weighing scales. In either case, calibrations should be provided with markings so that normal errors may be determined without calculation. It is required, when tanks are mounted upon weighing scales, that the scales be tested periodically by the Consumer Protection Division of the State Department of Labor. Either type of equipment shall be provided with proper valves, gauges and orifices so constructed that the flow may be varied and an accurate check made of the pressure on the intake side of the meter.

- 3 (c) #1. When meters are tested by weight method it is required that utilities whose measure of quantity is the cubic foot, use test equipment capable of holding not less than two (2) cubic feet of water. Utilities whose measure of quantity is the U. S. gallon shall use equipment holding not less than twenty (20) U. S. gallons.

- 0
2. Utilities using scales which do not have calibrated bars to show percent error shall post a chart showing the percent error based on weight of water passing through meter.

- (d) Small utilities will, under certain conditions, be allowed to test meters by checking them against a "Standard Meter" but said standard shall be checked not less than once each month by weighing the water passed by it, the water so weighed shall be taken as 8.35 pounds per gallon or 62.43 pounds per cubic foot at seventy (70) degrees Fahrenheit. A record of such check tests, together with the name of the meterman performing said tests, and the date thereof shall be kept on file at the office of the utility.

6.02 TAGGING, SEALING AND CAPPING METERS

- (1) Tagging Meters - Each meter shall either be marked or accompanied by a record card when installed. The marking or card must show the date of the last test if the meter is tested on a time basis or the registration (index reading) and date if the meter may be tested on either a time or registration basis. In no case shall the elapsed time between the date of test and the date of installation exceed four (4) months.
- (2) Sealing Meters - All meters tested for installation shall be sealed at the time of test by the meterman performing the test. The seal shall be of a type acceptable to the Commission. Those utilities using a compression type lead seal shall have as a sealing tool a device furnished with a dye, which shall bear the initials of the utility. Utilities using a snap tin type seal shall have the seal stamped in a similar manner.
- (3) Capping Meters - All incoming meters must be capped when removed from service and awaiting test. All meters that have been tested and sealed or are ready for installation must be capped when sealed and kept capped until installed.

6.03 ACCURACY REQUIREMENTS FOR WATER METERS

- (1) Installation Accuracy - Before being installed for the use of any customer every water meter, whether new, repaired, or removed from the service for any cause, shall be in good order and shall be adjusted to be as nearly correct as is commercially practical. Tests shall be conducted by the utility for accuracy of registration, either in its shop or on the customer's

premises, by a competent meterman, who has complied with the rules and regulations of the Commission governing the appointment of metermen. However, a manufacturer's certified test may be accepted in lieu of utilities' test of new meters of 1-inch or less in size.

- (2) Whenever, on installation, periodic or any other test, a meter is found to exceed a limit of two percent (2%) fast or slow, it must be adjusted so as to register as nearly 100% as is commercially practicable.
- (3) The custom of putting a meter into service without adjusting it, if it is found to be less than two percent (2%) in error, is prohibited. It is required that meters be adjusted to the highest degree of accuracy, commercially practicable, before installation. A tolerance of one percent (1%) fast or slow is sufficient for any utility which carefully supervises its meter shop. With such tolerance meters will start in service as nearly correct as it is practicable to have them. It is possible to set all but a very few old style meters within one-half percent (.5%) correct on every adjustment, and these older styles can be set within one percent (1%) correct. It shall be understood that the allowance of this variation from correctness does not mean that the meter is to be set in error by this amount. The tolerance allows only for the unavoidable irregularity of the work on a commercial scale, and the average of the errors should be practically zero, substantially as many being slightly slow as are slightly fast.
- (4) After all necessary repairs, adjustments and final tests have been made so that the meter registers accurately, such meter shall be sealed. It is recommended that all meters of the disc or displacement type, two inch (2") or less in size, be tested before being installed on the premises of any customer.
- (5) Meters of the larger sizes may, at the discretion of the utility, be tested after installation. It is recommended that for those installations requiring a three inch (3") or larger meter that there be installed, at the expense of the utility, a "Test Tee" for use in testing large disc, current and compound current and disc meters.

- (6) Meters of the current type can be tested and calibrated more accurately in place. The accuracy of current meters is affected by changes in distribution of velocities through the meter. Such variation of velocity may occur to an appreciable degree through change of nature of inlet piping.

All tests to determine the accuracy of registration of any water meter shall be made with a suitable meter prover.

- (7) Meter Test Flow - The following method and formulae are recommended for conducting tests:

It is recommended that all meters be tested at three rates of flow; but 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 percent error:

	ALLOWABLE RANGE TEST FLOW GALLONS PER MINUTE		RECOMMENDED TEST RATE FLOW 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

*NOTE - A meter failing to register 5% of the water passed at those rates marked * should not be installed without correction.

- (8) Tests - How Made - Adjust the flow control of the prover to the proper outlet to allow water to pass at the rate of flow as is set out in the preceding paragraph. (The proper orifice to be used must be determined by trial as the rates of flow will vary proportionately to the pressure at time of test.) By passing water through the meter under test bring the test dial hand exactly to one of the division lines of the dial. Allow water to flow through meter and into container until exactly one or more complete

revolutions of the test hand take place. Because the dial of many meters cannot be read as accurately as the scale on the prover, it is preferred in some cases to pass water through meter until meter registers exactly ten gallons (10 gal.) or two cubic feet (2 cu. ft.), when testing small meters and more when testing large meters.

The percent error introduced by reading the weight of water passed to the nearest ounce is less than one-tenth of one percent (1/10 of 1%) when volume passed is approximately ten gallons (10 gals.). Therefore, weight of volume passed may be taken at the nearest ounce. For ease of calculation the weight of a gallon of water may be taken as follows:

The decimal equivalent of ounces are as follows:

1 oz. = .0625 lb.	6 oz. = .375 lb.	11 oz. = .6875 lb.
2 oz. = .125 lb.	7 oz. = .4375 lb.	12 oz. = .75 lb.
3 oz. = .1875 lb.	8 oz. = .5 lb.	13 oz. = .8125 lb.
4 oz. = .25 lb.	9 oz. = .5625 lb.	14 oz. = .875 lb.
5 oz. = .3125 lb.	10 oz. = .625 lb.	15 oz. = .9375 lb.

The formula for determining the percent that a meter is fast is as follows:

$$\frac{(\text{Meter Reading} - \text{Prover Reading}) \times 100}{\text{Prover Reading}} = \% \text{ error fast}$$

Example: To calculate percent error fast assume meter registers ten gallons (10 gals.) while volume water passed weighs 75 lbs. 1 oz. 10 gals. at 8.35 lbs. per gallon equals 83.5 lbs. 75 lbs. 1 oz. equals 75.0625 lbs.

$$\frac{(83.5 - 75.0625) \times 100}{75.0625} = \frac{843.75}{75.0625} = 11.24\% \text{ error fast}$$

The formula for determining the percent that a meter is slow is as follows:

$$\frac{(\text{Prover Reading} - \text{Meter Reading}) \times 100}{\text{Prover Reading}} = \% \text{ error slow}$$

Example: To calculate percent error slow assume weight of water passed weighs 92 lbs. 8 oz. while meter registers ten gallons (10 gals.) 92 lbs. 8 oz. equals

92.5 lbs. ten gallons (10 gals.) at 8.35 lbs. per
gallon equals 83.5 lbs.

$$\frac{(92.5 - 83.5) \times 100}{92.5} = \frac{900}{92.5} = 9.72\% \text{ error slow}$$

6.04 PERIODIC TEST

- (1) Meters of disc or current (turbine) type in a system supplying filtered, clear spring or well water shall be periodically tested as follows:
 - 3/4" or less at least once every 7 years
 - 1" at least once every 5 years
 - 1½", 1¾", 2" at least once every 4 years
 - 3" at least once every 2 years
 - 4" and larger at least once each year
- (2) "Periodic Test Periods" for testing meters in the system of utilities supplying water of high turbidity, or of peculiar characteristics, will be determined by the Commission from time to time.
- (3) Meters of the current and compound type shall be cleaned at intervals as agreed upon by the utility and the Engineering Division of the Public Service Commission.
- (4) The time frame for periodic tests may be modified by this Commission from time to time upon the submission of evidence by the utility to substantiate any request for modification.

6.05 COMPLAINT TESTS

- (1) Procedure - Upon formal written application to the Public Service Commission by any customer, a test shall be made upon the customer's meter by an inspector of the Commission. The utility owning the meter shall be notified that such test is to be made and shall have a representative present to open the meter, assist in the test, adjust and seal the meter after test. A report giving results of the test shall be made to the customer and the utility, and a complete record of the test shall be kept in the office of the Director of the Engineering Division of the Commission. If the said meter shall be found to register not more than two percent fast, the cost of such test shall be borne by

the customer but if the meter shall be found to register incorrectly to the customer's prejudice more than two percent, the cost of such test shall be borne by the utility. See Rule 6.03 for accuracy requirements and test procedures. A representative of the customer may be present when the complaint test is made.

- (2) Charge - All additional tests shall be made as soon as practicable. The charges for making such tests shall be equal to the actual cost of labor and transportation incurred by the utility.

6.06 REQUEST TESTS

- (1) Action Required - If any customer shall request in writing a test of the accuracy of the meter used by him, and the meter is not due for periodic test, the utility shall notify the customer of the conditions under which the test will be made by the utility or by a referee. If the customer shall then request the utility to proceed with the test and remits an amount equal to one-half ($\frac{1}{2}$) of the scheduled cost of a referee test (See Rule 6.05) but not less than Five Dollars (\$5.00), the utility shall make the test promptly. If, when tested, the meter is found to be more than two percent (2%) fast, the amount advanced shall be promptly refunded to the customer. If the meter is not found to be more than two percent (2%) in error, the utility shall retain the amount advanced by the customer for the test.
- (2) Customer's Privilege - A customer may be present when the utility conducts the test on his meter or, if he desires, may send an expert or other representative appointed by him.
- (3) Report to Customer - A report giving the name of the customer requesting the test, the date of the request, the location of the premises where the meter had been installed, the type, make, size and serial number of the meter, the date of removal, the date tested, the result of the test, and the amount of refund if the meter was found more than two percent (2%) fast, shall be supplied to such customer within ten (10) days after the completion of the test.

6.07 METER TESTING EMPLOYEES

- (1) Meterman Required - Every utility shall have in its employ or have access to the services of one or more competent metermen whose duty it shall be to perform such tests as may be necessary to determine the accuracy of the utility's meters.
- (2) Certification of Metermen - A utility desiring to certify an employee as a meterman must secure a qualification card from the Commission; have same executed by the applicant and returned to the Commission; together with a certification by a responsible representative of the utility as to the facts contained on the card. The Commission will thereupon issue a card to the employee, if the applicant's qualifications are satisfactory, stating that the qualification card has been received and filed, and that the employee is authorized to test meters of the type shown on the card.
- (3) Experience Required - No employee of a utility shall be authorized to test meters unless he has had at least six (6) months' experience in a utility water-meter shop, or equivalent experience, part of which time must have been spent working on the type meter for which authority to test has been requested. All tests must be made by an authorized meterman.
- (4) Reports to Commission -
 - (a) Each utility shall file on or before February 1st, each year, a list of the men in its employ authorized to test meters.
 - (b) The utility shall notify the Commission and shall take up and return the meterman's card when a certified meterman ceases to be in its employ.

7.00 SAFETY REQUIREMENTS

7.01 ACCIDENTS

Every utility shall keep a record of every accidental happening in connection with the operation of its plant, station, property, and equipment, whereby any person shall have been killed, or seriously injured, or any property

PSC
Leg. Rule/Adm. Reg. 24-1
Series VII

damaged or destroyed, with full statement of the cause of such accident, and the precautions taken to prevent similar accidents in the future.

ADDENDA

(Front)

QUALIFICATION CARD FOR WATER METERMAN

Name _____ Age _____ Date _____
 Address _____
 Title _____
 Employer _____ Shop Location _____
 Supervisor-Name _____ Title _____

GENERAL EXPERIENCE

Type of Work	Company	Years
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***METER EXPERIENCE**

Type Meter	Nature of Work	Company	Years
Testing—			
Disc or Displacement	_____	_____	_____
Current	_____	_____	_____
Compound	_____	_____	_____
Fire Protection	_____	_____	_____
Testing and Repairing—			
Disc	_____	_____	_____
Current	_____	_____	_____
Compound	_____	_____	_____
Fire Protection	_____	_____	_____
Remarks:	_____		

*State, under remarks, in detail the type or kind of work done on meters.

Should this application be approved, I will test all water meters in accordance with the Water Service Rules of the Public Service Commission of West Virginia, and will not seal or approve for installation any meter that does not meet all of the requirements of the Water Service Rules.

 Signature

(Back)

**CERTIFICATE BY RESPONSIBLE REPRESENTATIVE
OF THE UTILITY**

I, _____ of
Name Title

the _____ certify
Water Company

that I have read the questions and answers on this card, relative to the experience of
_____ and that they are true and correct to
Name of Employee

the best of my knowledge and belief. I further certify that the above named employee is
competent to test _____
Disc Current Compound

meters and will, in my opinion, faithfully and honestly discharge the duties of meterman.

Signature

TO BE FILED BY THE PUBLIC SERVICE COMMISSION

The above employee has been authorized to test Water Meters as shown below:

	Testing	Testing and Repairing
Disc	_____	_____
Current	_____	_____
Compound	_____	_____

Engineer

(Front)

WATER METERMAN'S CARD
PUBLIC SERVICE COMMISSION OF WEST VIRGINIA
Charleston, West Virginia

No. _____

Date _____

Name of Employee

is hereby authorized to test the following type or types of water meters:

Testing

Testing and Repairing

Disc
Current
Compound
Utility
Shop Location

	Testing	Testing and Repairing
Disc	_____	_____
Current	_____	_____
Compound	_____	_____
Utility	_____	_____
Shop Location	_____	_____

Engineer

(over)

(Back)

This card must be returned to the Engineering Department, Public Service Commission of West Virginia by the _____
when _____ leaves the employ of
the company or ceases to serve as meterman.

WATER UTILITY REPORT
REPORT OF METERS, CUSTOMERS AND REFUNDS
TO THE
ENGINEERING DIVISION
THE PUBLIC SERVICE COMMISSION OF WEST VIRGINIA
CHARLESTON

THIS REPORT TO BE MADE MONTHLY BY UTILITIES HAVING 300 OR MORE METERS
 THIS REPORT TO BE MADE QUARTERLY BY UTILITIES HAVING LESS THAN 300 METERS

Name of Utility _____ Address _____
 Names of Towns Covered by This Report _____
 Period Covered by Previous Report _____ To _____
 Period Covered by This Report _____ To _____
 *Number of Old Meters from Service Tested During This Period Were:
 More than 2% slow _____ ; 1% to 2%, inclusive, slow _____ ; less than 1% slow _____
 Total Slow _____
 More than 2% fast _____ ; 1% to 2%, inclusive, fast _____ ; less than 1% fast _____
 Total Fast _____
 **Number of New Meters, or Old Meters not from Service Tested During this Period _____
 Total Meters Tested During this Period _____
 Number of Tests Made at Customer's Request as per This Report _____
 Number of Tests Made at Commission's Request as per This Report _____
 Number of Meters Past Due for Test _____

	Metered Customers	Unmetered Customers	Total Customers
Number Domestic Customers Served	_____	_____	_____
Number Commercial Customers Served	_____	_____	_____
Number Industrial Customers Served	_____	_____	_____
Total Domestic, Commercial, Industrial Customers	_____	_____	_____
Number Public Fire Protection Customers Served .	_____	_____	_____
Number Private Fire Protection Customers Served .	_____	_____	_____
TOTAL NUMBER OF CUSTOMERS—			
ALL CLASSES	_____	_____	_____

*Number of Refunds to be Made Account Fast Meters Found During This Period _____
 Total Amount of Refund Account of Fast Meters Found During This Period _____
 *Number of Customers to be Billed Account Slow Meters Found During This Period _____
 Total Amount to be Billed Account of Slow Meters Found During This Period _____
 Report Covering Meter Tests Approved By: _____ Report Covering Customers and Refunds
 Approved By: _____

 Title

 Title

NOTES:
 All spaces on this report MUST be filled in using "O" or the word "none" where applicable.
 *Make special note if any Meters more than 2% fast or slow recorded above were used to measure service for company's use, free customers, customers who had a minimum bill for the 3 months previous to date of test, or any other special condition.
 **All New Meters must be tested and a record made of their condition before being installed, but a report of their percent condition is not required.