GENERAL ORDER NO. 43 RULES AND REGULATIONS PRESCRIBING STANDARDS FOR GAS **UTILITIES**

It is HEREBY ORDERED that the following Rules and Regulations Prescribing Standards for Gas Utilities are adopted by the Public Utility Commission, effective March 30, 1965.

These Rules and Regulations shall apply to every person, firm, company, corporation, and municipality engaged in the business of manufacturing, distributing, selling, or transmitting gas in the State of Vermont and which is or shall become subject to the jurisdiction of this Commission.

1. **Definitions**

Effective: 3/30/65

In the interpretation of these Rules the following definitions shall apply:

"Commission" shall mean the Public Utility Commission of the State of Vermont.

"Customer" shall mean any person, company, corporation, municipality, or other agency supplied with gas by any utility.

"Cubic Foot" shall mean, for the purpose of measurement to a customer, the amount of gas which occupies a volume of one (1) cubic foot under the conditions existing in such customer's meter as and where installed, provided such meter is not subjected to abnormal temperature conditions unless the meter is designed with temperature compensation. For the purpose of measurement for testing, "Cubic Foot" shall mean that quantity of gas which occupies one (1) cubic foot at a temperature of sixty degrees Fahrenheit (60 F), when saturated with water vapor, and under a pressure of thirty (30) inches of mercury.

"Gas" shall mean any manufactured fuel gas, including propane-air mixtures, propane or natural gas, or any combination thereof.

"Liquefied Petroleum Gas" shall mean a fuel gas composed predominantly of any or a mixture of the following:

Propane, Propylene, Normal Butane, Iso Butane, and Butylenes

"Total Heating Value" shall mean the number of British Thermal Units (BTU) produced by the combustion, at constant pressure, of the amount of gas that would occupy a volume of one (1) cubic foot at a temperature of sixty degrees Fahrenheit (60 F) and under a pressure equivalent to that of thirty (30) inches of mercury, with air at the same temperature and pressure as the gas, when the products of combustion are cooled to the initial temperature of the gas and air, and when the water formed by the combustion is condensed to the liquid state.

"Utility" shall mean any person, firm, association, partnership, company, corporation, their lessees, trustees, or receivers appointed by any court, who come within the jurisdiction of the Public Utility Commission and own, operate, or manage any plant or equipment, or any part of same, for the manufacture and/or furnishing of gas for domestic, commercial, and industrial users within the State.

2. **Modifications or Revisions**

Upon its own motion, or upon application, and for good cause shown, the Commission may modify, suspend, or repeal the provisions of any Rule herein. Application may be made to the Commission for the modification of any Rule or for temporary or permanent exemption from its provisions, provided however, that no utility shall submit such application for modification or exemption unless submitted therewith is a full and complete justification for the proposed change.

Effective: 3/30/65

3.

No utility shall render service to any customer until a complete tariff containing rules, regulations, terms and conditions, and rate schedules, shall be published and filed with the Commission in accordance with the Rules governing the filing of tariffs as prescribed by the Commission.

4. Application for Service

Filing of Tariffs

An applicant desiring service under the utility's filed tariff may be required to make application for such service in writing, in accordance with the forms prescribed by the utility.

Whenever an applicant desires service of a character for which there is no rate of general application on file, a contract shall be executed between the applicant and the utility, and it shall become effective only after prior approval by the Commission.

5. Information to Customers

Each utility shall, upon request, give to its customers such information and assistance as is reasonable, in order that the customers may secure safe and efficient service at the most advantageous rate.

Each utility shall, upon request, explain to any customer the method of reading his meter and the calculation of his bill.

6. <u>Deposit Requirements</u>

A utility, to protect against loss, may require a satisfactory deposit before rendering service to any customer. This deposit shall be not less than five dollars (\$5.00) nor more than the estimated bill to cover a period of sixty (60) days of normal billing.

7. Measurement of Service

All gas sold by a utility shall be charged for on a metered basis except when otherwise authorized by the Commission.

8. Meter Reading and Bill Forms

Each service meter of the displacement type shall indicate clearly the quantity of gas registered. When gas is measured under high pressure or when the quantity is determined by calculation from recording devices, the utility shall, upon request, supply to the customer all information needed to make clear to the customer the method used to determine the quantity of gas registered. All meter constants shall be plainly marked on the meter.

All service meters shall be read insofar as practical at regular intervals.

Bills shall be rendered at regular intervals and shall show the meter readings at the start and the end of the period for which the bill is rendered, the amount of gas registered, the date and the amount of the bill.

All bill forms for Domestic and General Service customers shall have thereon a notice to the effect that all rates are on file at the office of the utility and also with the Public Utility Commission.

Each utility having prepayment meters in service shall, upon request, at the end of each collection period inform the customer of the meter readings at the start and at the end of the period, and the amount of money taken from the meter for the period corresponding to the readings.

Each utility shall keep an accurate account of all charges for service billed to each customer and shall maintain records showing information from which each bill rendered may be readily computed.

9. <u>Complaints by Customers</u>

Each utility shall make a prompt investigation of complaints received from customers including unsatisfactory pressure conditions, leaks and any other unsatisfactory or hazardous conditions. A record shall be kept including the name of the complainant, the date and character of the complaint, and the action required. This record shall not include data on service calls. The records of complaints shall be kept on file at least two (2) years and shall not be destroyed until a

summary has been made for permanent record indicating the character of complaints made and the number of each type received each month.

10. **Change in Character of Service**

Effective: 3/30/65

In the event that any substantial change is contemplated by any utility in the composition of the gas, the pressure, or other service conditions that would necessitate adjustment of gas appliances, the appliances of all customers in the affected area shall be readjusted for the new conditions with a minimum of delay by the utility and without charge to the customers. In the event of any such proposed change the Commission shall be notified before the change is made.

11. **Discontinuance of Service**

A. By Customer. A customer may be required to give reasonable notice of his intention to discontinue service in accordance with tariff provisions and shall be responsible for all charges for service until the expiration of such notice period.

B. By Utility

- (1) For Non-payment of Bills. A utility may require, in accordance with tariff provisions, that bills be paid within a specified time after presentation. Service may be disconnected for non-payment of bill following the expiration of the grace period provided the customer has been given written notice at least five (5) days prior to disconnection of service. If the service is disconnected for non-payment of bill the utility may make a reasonable charge to reconnect the service, the amount of such charge to be specified in the terms of the filed tariff.
- (2) For Violation of Rules. No utility shall discontinue service to a customer for violation of any rule without written notice to the customer at least five (5) days prior to the disconnection of service except that service may be terminated immediately and without such notice when the violation of the rules is such as to cause a hazard to life and/or property. Such notice to a customer concerning proposed discontinuation of service for violation of any rule shall specify to the customer the character of the violation.
- (3) For Fraudulent Use of Service. Any utility may discontinue service without notice to the customer whenever a fraudulent use of the service by the customer is detected.

12. **Heating Value Requirements**

Every gas utility shall file with the Commission, along with the rate schedule, the standard of heating value of the gas furnished to the public. This heating value shall be expressed in British thermal units (BTU) per cubic foot and the monthly average heating value shall equal or exceed the heating value filed with the Commission. At no time shall the heating value of the gas deviate by more than plus or minus five percent (+/- 5%) from the heating value filed with the Commission.

13. **Calorimeter Equipment**

Each utility, unless specifically directed otherwise by the Commission, shall maintain a standard calorimeter outfit or a Thermeter for the regular determination of the heating value of the gas sold.

The accuracy of all calorimeters and Thermeters as well as the method of making heating value tests shall be subject to the determination and approval of the Commission.

Every recording Thermeter or calorimeter used to determine the heat content of gas or to control the gas mixing equipment shall be tested for accuracy by a qualified person or service agency and a copy of the report of each such test shall be sent to the Commission. Each recording Thermeter or calorimeter shall be tested or accuracy at least three (3) times annually at approximately four (4) month intervals or more frequently if necessary to maintain accuracy.

14. **Heating Value Tests**

Effective: 3/30/65

The heating value of the gas shall be determined periodically as directed by the Commission to obtain an accurate record of the average heating value and of the fluctuation in heating value.

The average monthly heating value of the gas shall be determined by taking the average of the daily heating value readings for the month. If a utility's calorimeter or thermeter is of the recording type this record shall be used in calculating the average monthly heating value.

Heating value reports shall be kept on file for the examination of a representative of the Commission.

15. **Gas Purity Requirements**

- A. Hydrogen Sulphide. All gas distributed in this State shall be free from hydrogen sulphide. The gas shall be considered as hydrogen sulphide free if a strip of white filter pater, moistened with a solution containing five percent (5%) by weight of lead acetate, is not distinctly darker than a second strip of filter paper freshly moistened with the same solution after the first paper has been exposed to the gas for one (1) minute in an apparatus of approved form, through which the gas flows at the rate of approximately five (5) cubic feet per hour, the gas not impinging directly from a jet upon the filter paper.
- B. Total Sulphur. No gas distributed in this State shall contain more than thirty (30) grains of total sulphur in each one hundred (100) cubic feet.
- C. Any utility supplying manufactured gas in which hydrogen sulphide is normally a component shall make daily tests of the gas leaving its holders for the presence of hydrogen sulphide.

16. Gas Pressure Requirements

The pressure at the outlet of the customer's meter shall be adequate and reliable for safe and efficient operation of the customer's equipment and shall be held within standards of variation prescribed by the Commission.

Every gas utility shall make such determinations and keep such records of pressures as will enable it to have a substantially accurate knowledge of the pressures existing throughout the distribution system.

17. **Interruptions of Service**

Each utility shall use all reasonable means to avoid interruptions to service but should such interruptions occur, service shall be restored in the shortest time possible consistent with safety.

Each utility shall keep a record of all interruptions to service affecting a major group of customers. This record shall include the date and time of the interruption, the approximate number of customers affected, the duration of the interruption, the cause, and the steps taken, if any, to prevent a recurrence.

When service must be interrupted to perform necessary work on piping or equipment such work shall be scheduled at a time that will cause a minimum of inconvenience to customers except in an emergency when there is no choice. When possible, customers who will be affected by such interruption in service shall be notified in advance.

18. **Meter Installations**

All gas sold by utilities shall be charged for on the basis of the quantity metered unless otherwise authorized by the Commission.

Unless otherwise authorized by the Commission, each utility shall provide and install at its own expense and shall continue to own, maintain and operate all equipment necessary for the regulation and measurement of gas to its customers. Where additional meters are furnished by the utility to be used for the convenience of the customer, a charge for such meters may be made in accordance with a tariff schedule filed with the Commission.

19. Inspection and Accuracy of Meters

No new meter shall be placed in service unless the utility is assured that the register ratio and register constant are correct.

All meters removed from service and which are to be reinstalled shall be inspected for correctness of register ratio and register constant and any worn or damaged parts shall be replaced. This requirement shall be considered as met if a meter has been relocated after limited use and there is no evidence of damage to the meter.

Every gas service meter, whether new or repaired, shall be correct to within two percent (2%) before being installed. For the purpose of determining compliance with this rule, the registration of a displacement meter shall be determined by one test at a rate of flow of approximately one-fifth to one-fourth of the rated capacity of that meter and one test at a rate of flow of approximately the rated capacity of the meter. The tests at the two rates shall agree within one percent (1%). The accuracy of the meter at the lower rate of flow shall be considered as its accuracy in determining compliance with this rule and for the purpose of computing bill adjustments.

All tests to determine the accuracy of any gas service meter shall be made with a meter prover, unless, because of the unusual capacity or construction of the meter, such method of test shall be considered impractical and another method of test shall be approved by the Commission.

All gas meters shall be tested for correct connection and proper mechanical condition in the permanent position at the time of installation or within sixty (60) days thereafter. (Section 2813 of Title 30, Vermont Statutes Annotated.)

20. Meter Prover

Effective: 3/30/65

Each utility furnishing metered gas service shall maintain the equipment and facilities necessary for accurate testing of all types and sizes of meters employed for the measurement of gas to its customers unless arrangements approved by the Commission shall have been made to have such testing done elsewhere. Each utility shall provide and maintain a meter prover of approved type and of a capacity of not less than five (5) cubic feet for the testing of the most numerous class of customers' meters. Each meter prover shall be supplied with all accessories needed for accurate meter testing and shall be located in a room suitable for the work to be done. The utility shall maintain this equipment in good condition and correct adjustment so that it can determine the accuracy of any service meter to within one half of one percent (1/2%). It is permissible for any utility to utilize the services of a meter prover in conjunction with other utilities in the interest of economy.

The accuracy of all provers and the methods of operation may be established from time to time by the Commission.

21. **Meter Test Requested by Customer**

Upon demand of any customer each gas utility shall test without charge the meter used to measure gas sold to such customer, provided the customer does not request such test more frequently than once in twelve (12) months. (Section 2812 of Title 30, Vermont Statutes Annotated.)

When a customer demands a meter test within twelve (12) months after the date of meter installation or after the last previous test, he may be required by the utility to deposit a reasonable amount to cover the cost of the meter test. The amount so deposited with the utility shall be refunded or credited to the customer if the meter on test shows a positive average error of four percent (4%) or over, otherwise the deposit may be retained by the utility. The customer may be present when the utility tests his meter or he may select a representative to be present. A written report giving the results of such test shall be made to the customer by the utility within a reasonable time after completion of the test. (Section 2814 of Title 30, Vermont Statutes Annotated.)

22. **Inaccurate Meters**

Each utility shall remove from service any gas meter that has an error in measurement in excess of four percent (4%). (Section 2815 of Title 30, Vermont Statutes Annotated.)

23. **Adjustment of Bill for Inaccurate Meter**

If a meter is found to be in error and reads in excess of four percent (4%) positive error the utility shall make a refund to the customer for the excess gas billed form the date two months prior to the last meter reading.

If a meter is found to be in error and reads in excess of four percent (4%) negative average error the utility may bill the customer for the unbilled gas from the date two months prior to the last meter reading.

24. **Meter Records**

Effective: 3/30/65

Each utility shall keep numerically arranged and properly classified records giving for each meter owned and used by the utility for any purpose the identification number, date of purchase, name of the manufacturer, serial number, type, rating, and name and address of each customer on whose premises the meter has been in service, with the date of installation and removal. These records shall be kept in a manner so that the date of the last test is readily ascertainable. The above requirements shall be met in connection with all meters purchased and installed from the date of adoption of this Order and where information is available the above requirements shall be met in connection with all meters owned by the utility prior to this date.

25. **Maintenance of Plant and Equipment**

Each utility shall inspect its plant, distribution system, and facilities in such manner and with such frequency as may be necessary to insure a reasonably complete knowledge as to their condition and adequacy at all times. Such record shall be kept of the conditions found as the utility shall consider necessary for the proper maintenance of its system, unless in special cases a more complete record be specified by the Commission.

Each utility shall keep a daily record of the operation of its physical plant, so far as practical, in such detail as may be necessary to substantially disclose its operations.

Utilities engaged in the storage, handling, processing and distribution of liquefied petroleum gases, or mixtures thereof, shall comply with the standards prescribed in the National Fire Protection Association codes "Standard for the Storage and Handling of Liquefied Petroleum Gases" - NFPA No. 58 - 1963 and "Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants" - NFPA No. 59 - 1963. (These are published by the National Fire Protection Association, 60 Batterymarch Street, Boston 10, Mass.)

26.

A complete record shall be kept of all tests and inspections required by these Rules.

All records of tests shall contain complete information concerning the test, including the date and place where the test was made, the name of the person making the test, and the test results.

Each utility shall keep a customer's ledger or other record, which shall contain an accurate account of all revenues derived from each customer. In addition it shall contain the dates of the period for which each bill is rendered, the meter readings on those dates, reference to the applicable rate schedule, and any additional data necessary in computing the bill.

All records required by these Rules shall be preserved by the utility for such period as the Commission may designate. Such records shall be kept within the State at the local office or a central office of the utility and shall be available at reasonable hours for examination by the Commission or its representatives.

27. **Accidents and Emergencies**

Each utility shall, as soon as possible, report to the Commission any accident occurring in connection with the operation of its property, facilities or service, wherein any person shall suffer injury or death or whereby any damage shall have been caused to property. The first report shall be supplemented by as full a statement as possible of the cause and details of the accident and the precautions, if any, which have been taken to prevent similar accidents. Accidents shall be reported to the Commission in the manner prescribed in Section 207 of Title 30, Vermont Statutes Annotated. Effective: 3/30/65 Vermont General Order 43
Public Utility Commission Page 7 of 7

Every utility operating a gas pipeline or a gas distribution system in the State of Vermont shall file with the Commission and with all villages, towns or cities wherein such facilities are located, the names, addresses and telephone numbers of responsible officials of such utility who may be contacted in any emergency. In the event that any changes are made in the names, addresses or telephone numbers of such persons to be contacted in an emergency prompt notification shall be given to the Commission and village, town or city authorities.