

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

* * *

IN THE MATTER OF THE RULES OF THE)
PUBLIC UTILITIES COMMISSION OF THE)
STATE OF COLORADO REGULATING THE)
SERVICE OF GAS UTILITIES WITHIN THE)
STATE OF COLORADO.)

CASE NO. 5321

November 25, 1966

Appearances: Lee, Bryans, Kelly & Stansfield, Esqs.,
by Bryant O'Donnell, Esq., Denver,
Colorado, for Public Service
Company of Colorado and Western Slope
Gas Company;
Elmer Jackson, Esq., Hastings, Nebraska,
for Kansas-Nebraska Natural Gas
Company;
John R. Barry, Esq., Denver, Colorado,
for Southern Union Gas Company and
Iowa Electric Light & Power Company;
Jack Hertz, Esq., Dallas, Texas, for
Southern Union Gas Company;
W. A. Newton, Denver, Colorado, for
Rocky Mountain Natural Gas Co. Inc.;
S. W. Jervis, Colorado Springs, Colo-
rado, for Plateau Natural Gas Company;
Leonard R. Young, Colorado Springs,
Colorado, for Department of Public
Utilities of the City of Colorado
Springs;
E. R. Sherwood, Esq., Colorado Springs,
Colorado, for Colorado Interstate Gas
Company;
Keith Brown, Esq., Denver, Colorado,
for Gas Facilities, Inc.;
Robert Lee Kessler, Esq., Denver, Colo-
rado, for the Staff of the Commission.

S T A T E M E N T

BY THE COMMISSION:

On July 20, 1966 the above entitled proceeding was instituted
by the Commission on its own motion.

On this same date the Commission set this matter for hearing
after appropriate notice to all interested parties in the Hearing Room
of the Commission, 532 State Services Building, Denver, Colorado at 2:00
o'clock P.M. on October 4, 1966. At said time and place the matter was

duly heard by Commissioners Bjelland and Horton and at the conclusion of the hearing taken under advisement.

Prior to the setting of this matter for hearing, the Staff of the Commission mailed to all interested parties copies of the proposed rules and regulations, which were the subject of a conference by and between the interested parties and the Staff on May 25, 1966 in Hearing Room A of the Commission, 534 State Services Building, Denver, Colorado. Subsequent to this meeting, a second meeting was held on October 3, 1966 - again after notice to the interested parties by the Staff. This second meeting had to do with the proposed adoption of the "ASA B31.8-1963 Code for Gas Transmission and Distribution Piping Systems". (Safety Code) The principal purpose of the second meeting having to do with the adoption of the Safety Code was to discuss certain proposed changes and modifications of this code. The Staff witness testified at the hearing that at the first meeting in May the proposed rules were the subject of discussion and interested parties present at the meeting submitted suggested changes and revisions and, in addition, suggested changes and revisions were reviewed that had been sent in in writing in response to the Staff letter. At the October meeting having to do with the adoption and modification of the Safety Code, again, discussion was held with those present and the Staff as to the adoption of the Safety Code and the various suggested amendments.

At the hearing, in addition to the Staff witness, various witnesses on behalf of the utilities present, testified not only as to the proposed rules of the Commission, but also as to the proposed adoption of the Safety Code and the amendments thereto.

The Commission has heretofore prescribed rules regulating the service of gas utilities in Colorado, but this is the first time that these rules have prescribed a Safety Code in regard to the construction and maintenance of a gas transmission and distribution piping system. It was quite apparent from the exhibits and testimony at the hearing that the modifications of the Safety Code as proposed by Staff Exhibit No. 3 should not

be made at this time. However, it was equally apparent that the Safety Code should be prescribed with modifications making the Safety Code mandatory rather than permissive. Rule 18(b) of the Rules Regulating the Service of Gas Utilities will provide that the American Standard Code for Pressure Piping entitled, "Gas Transmission and Distribution Piping Systems - ASA B 31.8-1963", published by The American Society of Mechanical Engineers, be required as the minimum standard with the modifications as set forth in "Exhibit C" in our Order to follow. Our Order to follow will designate as "Exhibit A" the Rules Regulating the Service of Gas Utilities and, as "Exhibit B", the "American Standard Code for Pressure Piping for Gas Transmission and Distribution Piping Systems - ASA B 31.8-1963".

F I N D I N G S

THE COMMISSION FINDS:

That the Commission is fully advised in the premises.

That it appears from the records, files and testimony herein, that all interested parties were duly informed of this proceeding and of the proposed rules.

That the "Rules Regulating The Service of Gas Utilities" hereto annexed as "Exhibit A" and incorporated herein as fully as if the same were recited in words and figures, are just and reasonable, and compatible with the public interest, and should be adopted by the Commission.

That Rule 18(b) of said Rules require that the utility shall use the applicable provisions of the American Standard Code for Pressure Piping for "Gas Transmission and Distribution Piping Systems - ASA B 31.8-1963" as a minimum standard of accepted good engineering practice, which code is incorporated herein (except as modified by "Exhibit C") as fully as if the same were recited in words and figures, and should be adopted by the Commission.

That the American Standard Code as set forth in "Exhibit B" should be modified as set forth in "Exhibit C", which is incorporated herein by reference and should be adopted by the Commission.

O R D E R

THE COMMISSION ORDERS:




That the Rules Regulating the Service of Gas Utilities, annexed hereto as "Exhibit A" be, and become, the "Rules of the Public Utilities Commission of the State of Colorado, Regulating the Service of Gas Utilities Within the State of Colorado."

That Rule 18(b) of said Rules Regulating the Service of Gas Utilities" shall provide as follows: "Unless otherwise specified by the Commission, the utilities shall use the applicable provisions of the American Standard Code (Safety Code) for Pressure Piping entitled 'Gas Transmission and Distribution Piping Systems - ASA B 31.8-1963' as published by the American Society of Mechanical Engineers, as the minimum standard of accepted good engineering practice, as modified by 'Exhibit C'".

That the provisions of said Safety Code shall be mandatory in accordance with the amendments set forth in "Exhibit C", made a part of this Order by reference.

That this Order shall become effective January 1, 1967.

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO




Commissioners

Dated at Denver, Colorado,
this 25th day of November, 1966
et

THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

Case No. 5321

RULES REGULATING THE SERVICE OF GAS UTILITIES

Effective January 1, 1967

RULE 1

Application of Rules: (a) The following rules shall apply to any person, co-partnership, cooperative association, non-profit corporation or association, firm, corporation, their lessees, trustees, or receivers appointed by any court, now or hereafter engaged in the business of a public utility furnishing gas to domestic, commercial or industrial customers, operating under the jurisdiction of The Public Utilities Commission of the State of Colorado.

(b) The adoption of these rules shall in no way preclude the Commission from altering or amending the same in whole or in part or from requiring any other additional service equipment, facility or standard, either upon complaint or upon its own motion, or upon the application of any utility. In special cases, for good cause shown, not contrary to statute, the Commission may permit deviation from these rules insofar as it may find compliance therewith to be impossible, impracticable or unnecessary. If, for good cause shown, any utility is permitted a deviation from any of these rules, such modified rules as authorized by the Commission shall be set forth in the filed tariffs of the utility. Furthermore, these rules shall not in any way relieve any utility from any of its duties under the laws of this State.

RULE 2

Definitions: (a) The word "Utility" as used in these rules shall be construed to mean any person, co-partnership, cooperative association, non-profit corporation or association, firm, corporation, whether privately owned or otherwise, when subject to the jurisdiction of this Commission, their lessees, trustees or receivers appointed by any court whatsoever that may now or hereafter be engaged as a public utility in the business of furnishing gas to domestic, commercial or industrial customers in the State of Colorado.

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

(c) The word "Customer" as used in these rules shall be construed to mean any person, group of persons, co-partnership, firm, corporation, institution, any agency of the Federal, State or local governments, their lessees, trustees, or receivers appointed by any court, contracting for gas service from any utility for consumptive domestic, commercial, or industrial use, or at wholesale.

(d) The word "Gas" as used in these rules shall, unless otherwise specifically designated, be construed to mean manufactured gas, natural gas, other hydrocarbon gases, or any mixture of gases produced, transmitted, distributed or furnished by any gas utility.

RULE 3

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

Rule 3 (continued)

(b) Each utility shall keep a record of all interruptions of service upon its entire system or major divisions thereof, including a statement of the time, duration and cause of any such interruption. Each utility shall, except for stations operated without attendants, also keep a record of the time of the starting up or shutting down of the compressing equipment, and the period of operation of all regulators used for the maintenance of constant gas pressure. This record shall include the readings taken periodically of station meters, which readings shall be taken with such frequency as the utility or the Commission may from time to time require.

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

(d) All records under this rule shall be retained by the utility for a period of three years.

RULE 4

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

RULE 5

Testing Facilities: (a) Each utility shall provide such laboratory, meter testing shop and other equipment and facilities as may be necessary to make the tests required of it by these rules or other orders of this Commission. The apparatus and equipment so provided shall be of a form acceptable to this Commission, and it shall at all times be available for the inspection and use, on the premises of the utility, of the authorized representatives of this Commission; provided, however, that any natural gas utility rendering natural gas service to customers located partially within and partially without the State of Colorado, and where over 50% of its customers are outside the State of Colorado, the utility need maintain only meter testing equipment and facilities in Colorado, so long as the remainder of the apparatus, equipment and facilities herein provided for is maintained by it in a state contiguous to Colorado.

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

RULE 6

Records of Tests and of Meters: (a) A "meter record card" shall be maintained on each meter owned or used by the utility. Such records shall show the date of purchase, manufacturer's serial number, record of the present location, and date and results of the last test performed by the utility, which record shall be retained for the life of the meter.

(b) Whenever a meter is tested either on request or upon complaint the test record shall include the information necessary for identifying the meter, the reason for making the test, the reading of the meter if removed from service, the result of the test, together with all data taken at the time of the test in sufficiently complete form to permit the convenient checking of the methods employed and the calculations made. Such record shall be retained for a period of two years.

RULE 7

Accidents: (a) Each utility shall, as soon as possible, report to this Commission each accident happening in connection with the operation of its property, facilities or service, wherein any person shall have been killed or seriously injured, or whereby any serious property damage shall have resulted. Such report to this Commission shall describe in detail:

- (1) Date, time, place, location
- (2) Extent of injuries and other damage
- (3) Names of all parties involved
- (4) Type of accident

In addition to the above, all utilities shall immediately upon the setting of any formal investigation of the accident, notify the Commission of the date, time and place of such investigation.

(b) All accident reports submitted to the Commission by the utility shall be treated by the Commission, its staff and employees as confidential and shall not be made available to the public.

RULE 8

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, and it shall keep a record of all written complaints received which shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof. This record shall be open at all times to the inspection of the duly authorized representatives of this Commission, and unless otherwise specified in these rules shall be retained by the utility for a period of two years.

RULE 9

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

(b) Each utility supplying metered service, on request, shall explain to its customers the method of reading meters.

RULE 10

Meter Readings and Bill Forms: (a) Each service meter shall indicate clearly the cubic feet or other units of service for which charge is made to the customer. In cases where the dial reading of a meter (other than an orifice or other chart-type gas meter) must be multiplied by a factor, factors or a constant to obtain the units consumed, the proper factor, factors or constant to be applied shall be clearly marked on the face or dial of the meter, if practical. The factor, factors or constant shall be clearly marked on the customer's bill, if practical.

(b) Each utility shall, upon written request of any customer, cause the meter reader reading the meter installed upon the premises of such customer, to leave upon such meter the first time such customer's meter is read after receipt of such request a card or slip showing the date and time such reading was taken, and either the total reading expressed in cubic feet or other unit of service recorded by the meter read, or showing the position of the hands upon the dial of such meter at the time the reading was taken.

Rule 10 (continued)

(c) All bills rendered periodically to customers for metered service furnished shall show, in addition to the net amount due, the date on which the current reading was taken, the meter readings at the beginning and end of the period for which the bill is rendered, when requested by the customer or deemed necessary by the utility, and all other essential facts upon which the bill is based, including factors and/or constants, if practical, as in (a) above.

RULE 11

Meter Rentals, and Customer Deposits: (a) No meter rental, as distinguished from a minimum charge for service, shall be charged by any utility for any service meter installed by it for measurements upon which bills are rendered.

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

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

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

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

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

RULE 12

Filing of Rate Schedules, Rules and Regulations: (a) Copies of all schedules of rates and individual contracts for service, forms of routine contracts, charges for service connections and extensions of lines and of all rules and regulations covering the relations of customer and utility shall be filed by each utility in the office of this Commission.

Rule 12 (continued)

(b) Advice Notices: Advice Notices, numbered serially, shall accompany each tariff sheet filing with the Commission. This notice shall list all sheets included in the filing by number and showing the sheet or sheets, if any, being cancelled. The purpose of the filing shall be explained in a brief statement as well as a statement concerning the extent to which customers will be affected by such filing. The Advice Notice shall be in substantially the following form:

NAME OF PUBLIC UTILITY

Advice No.

Date

The Public Utilities Commission
of the State of Colorado
State Services Building
1525 Sherman Street
Denver, Colorado 80203

The accompanying tariff sheet(s) issued by (name of utility)
.....is (are) sent you for filing in compliance with the requirements of the
Public Utilities Law:

Colo. P.U.C. No.Gas

(Tabulate sheets attached as follows:)

<u>Colo. P.U.C. Sheet Number</u>	<u>Title of Sheet</u>	<u>Cancels Colo. P.U.C. Sheet Number</u>
.....
.....
	Etc.	

(Here give purposes to be accomplished by the filing and direct attention generally to the changes being made; also, state the amounts, if any, by which the utility's revenues will be affected. If customers are not adversely affected, so state.)

It is desired that this filing shall become effective on statutory (30 days) notice. (If special short term authority has been sought, pursuant to Rule 17 B(2) of the Commission's Rules of Practice and Procedure, appropriately change language).

.....
(Name and title of issuing officer)

(c) Revised Tariff Sheets: Each tariff sheet, not an original shall be designated 1st revised sheet No. cancels original sheet No. or 2nd revised sheet No. cancels 1st revised sheet No., etc., shall direct attention to the changes contained therein by the use of suitable symbols in the right margin. These symbols may be "I" increase, "D" decrease, "C" change in text, "N" new text, etc. On a contents or index page the utility shall show the meaning of the symbols used by it to point out changes contained in its revised tariff filings.

If a tariff sheet is issued under a specific authority or decision of this Commission, each sheet so affected shall show the correct number in the space provided at the foot of the sheet.

Rule 12 (continued)

(d) Number of copies to be filed: An original and one copy of each advice letter and tariff sheet shall be filed. The copy will be stamped as filed and returned to the utility.

NOTE: The utility may file as many additional copies as it wishes which will also be stamped and returned.

(e) Schedules of rates, forms of contracts and rules and regulations as filed with the Commission and available in the territory concerned shall also be on file in the local office of the utility and shall be open to inspection by the public during regular business hours.

(f) If the reasonableness of any charge, rule, regulation or practice of any utility with reference to service connections or extensions, or any rule covering the relations between customer and utility, is challenged, the Commission may, upon complaint and investigation, prescribe the proper charge, rule, regulation or practice which shall thereafter be followed.

(g) The Commission may reject any filing under this rule if the utility fails to comply with the provisions as set forth in said rule.

RULE 13

Discontinuance of Service: (a) No utility shall discontinue the service of any customer for violation of any rule of such utility except upon written notice of at least five days, advising the customer in what particular such rule has been violated for which service will be discontinued. This rule shall not apply where a by-pass is discovered on a customer's service meter, or in the event of the discovery of dangerous leakage on a customer's premises, or in the case of a customer utilizing service in such a manner as to make it dangerous for occupants of the premises, thus making an immediate discontinuance of service to the premises imperative.

(b) Delinquency in payment for service rendered to a previous occupant of the premises to be served and unpaid charges for services or facilities not ordered by the present or prospective customer shall not constitute a sufficient cause for refusal of service to a present or prospective customer; provided, however, the utility may decline to furnish service at the same premises for the use of a delinquent customer by subterfuge in any manner. Subterfuge includes, but is not restricted to an application for service at a given location in the name of another party by an applicant whose account is delinquent and who continues to reside at the premises.

RULE 14

Meters and Service Connections: (a) All meters used in connection with gas service shall be furnished, installed and maintained at the expense of the utility.

(b) Any equipment, devices, or facilities furnished at the expense of the utility or on which the utility bears the expense of maintenance and renewal shall remain the property of the utility and may be removed by it at any time after discontinuance of service.

(c) Gas Service connections to the customer's property line shall be installed and maintained at the expense of the utility. This rule shall not apply when unusual conditions are encountered, or to very long service connections. When such special cases arise, the Commission will, if necessary, prescribe the proper charge.

RULE 15

Practice under these Rules to be filed: Each utility shall file with this Commission within four months after receipt of this order, a statement, type-written, properly identified and dated, on $8\frac{1}{2}$ x 11 sheets, describing its practice under these rules as follows:

- (1) Description of test methods employed and frequency of tests or observations for determining quality and pressure of gas service furnished.
- (2) Description of meter testing equipment, including methods employed to ascertain and maintain accuracy of all testing equipment.
- (3) Rules covering testing and adjustment of service meters when installed and periodic tests after installation.

Revisions in any portion of this statement after filing will necessitate the filing of an entire new statement, properly identified and dated, cancelling the one on file.

RULE 16

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

RULE 17

Microfilming of Records: Nothing in these rules shall prevent any utility from microfilming any records it desires, provided that the microfilm shall be retained by the utility for the same period of time as specified for the original records.

RULE 18

Construction Requirement: (a) The gas plant of the utility shall be constructed, installed, maintained and operated in accordance with accepted good engineering practice in the gas industry to assure, as far as reasonably possible, continuity of service, uniformity in the quality of service furnished and the safety of persons and property.

(b) Unless otherwise specified by the Commission, the utility shall use the applicable provisions of the American Standard Code (Safety Code) for Pressure Piping entitled "Gas Transmission and Distribution Piping Systems - ASA B 31.8-1963" as published by the American Society of Mechanical Engineers, as the minimum standard of accepted good engineering practice, as modified by "Exhibit C".

RULE 19

Definition of a Cubic Foot of Gas: (a) For the purpose of testing gas under these rules, a cubic foot of gas means that amount of gas which when saturated with water vapor at a temperature of sixty degrees (60°) Fahrenheit and subjected to an absolute pressure equal to thirty inches (30") of mercury, at thirty-two degrees (32°) Fahrenheit, (14.73 pounds per square inch) occupies a volume of one (1) cubic foot.

(b) Sales, Low Pressure Distribution. For the purpose of measurement of gas to a customer, a cubic foot of gas shall be taken to be 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, however, that when gas is metered at a pressure in excess of four ounces above local atmospheric pressure a suitable correction factor shall be applied to provide for measurement of gas as if delivered and metered at a pressure of four (4) ounces above average local atmospheric pressure.

Rule 19 (continued)

(c) Sales, High or Intermediate Pressure Distribution. In cases where gas is supplied to customers through orifice or other type meters at other than standard low pressure distribution conditions, the utility shall apply suitable correction factors as it deems necessary for measurement of gas as if metered at standard delivery.

RULE 20

Heating Value of Gas: (a) Each utility supplying gas for domestic, commercial or industrial purposes shall establish and maintain either a standard or a minimum heating value for its product. The standard shall be the monthly average total heating value determined by tests of the gas taken from such point or points on the distribution system and at such test frequencies as are reasonably necessary for a proper determination. The minimum shall be the lowest monthly average total heating value of gas supplied by the utility in any given service area. The utility shall declare such standard or such minimum, expressed in Btu per cubic foot, as a part of its schedule of rates on file with this Commission.

(b) This standard heating value shall be that value which is on file with the Commission as a part of the utility's schedule of rates on the effective date of this Revised Rule 20 or that value which shall be declared by the utility, provided, however, that any change in value shall be made in accordance with the conditions hereinafter stated.

(c) If the utility finds it more practical, economical and efficient to render service with gas of another heating value than the standard heating value on file with the Commission, the utility may file a new heating value standard and a new rate schedule; and if the conditions hereinafter stated shall have been complied with and the Commission shall not have suspended the new rate schedule as provided in Colorado Revised Statutes 1963, Chapter 115, Article 6-11 of the Public Utilities Act or ruled against the change, such new heating value standard and rate schedule shall become effective thirty days from the date on which they are filed with the Commission. The conditions which must be met by a utility thus voluntarily changing its heating value standard are as follows:

The rate schedule for gas shall be so changed that every part or kind of change in the rate shall be reduced and may be increased in direct proportion to the reduction or increase of the Btu content, except that the minimum charge, service charge, or customer charge shall remain unchanged.

Readjustment of customer's appliances and devices to render unimpaired service under the new standard shall be promptly made by the utility without charge to the customers.

The utility shall be prepared to justify the standard it adopts before the Commission by such pertinent facts as may be required.

(d) The utility shall maintain the heating value of the gas with as little deviation as is practicable and such deviation is limited to the range of 5% above to 5% below the standard adopted.

(e) In the event a utility elects to file a minimum heating value for its gas, no deviation below said minimum shall be permitted. If the heating value of the gas delivered is increased to such an extent that it becomes necessary to adjust the customer's appliances, said adjustment shall be made at the expense of the utility.

Rule 20 (continued)

(f) To obtain the monthly average heating value of gas, the results of all tests of heating value made on any day shall be averaged, giving total heating value for that day. The monthly average total heating value shall be the average of all such daily averages taken during the calendar month. It is understood that all records and statements are based on tests made under standard conditions, i.e., at 60 degrees Fahrenheit and under a pressure of 30 inches of mercury.

RULE 21

Calorimeter Equipment: (a) Each utility whose gas output exceeds twenty million cubic feet per annum, shall equip itself with a complete standard calorimeter outfit and all necessary accessories acceptable to this Commission, by which it shall determine the heating value of gas at least once each week. A complete record of these tests shall be kept for a period of not less than two years from the date of such tests.

(b) The foregoing rule need not apply where the utility is purchasing gas on a heat value basis, or where the wholesaler makes available to the utility a record of the heating value of the gas delivered to the utility, and the tests by the wholesaler are made with at least such frequency as specified in part (a) above.

RULE 22

Purity of Gas: All gas supplied to customer shall be substantially free of impurities which may cause corrosion of mains or piping, or form corrosive or harmful fumes when burned in a properly designed and adjusted burner.

RULE 23

Pressure of Gas: (a) Subject to the approval of this Commission each gas utility may divide its distributing system into as many districts as it shall consider desirable, and it shall fix for each such district or for its distributing system as a whole, the normal pressure of gas which it proposes to maintain.

(b) For normal service, the gas shall be delivered by the utility at a pressure of 6 inches water column, plus or minus 2 inches water column, measured at the meter outlet.

(c) Where operating conditions are such that the utility deems a higher delivery pressure necessary, gas pressures at the meter outlet may exceed the limits prescribed in (b) preceding and the utility will require the customer to install adequate pressure regulating equipment in customer's lines so that the pressure at the outlet of such regulators shall be the proper value as to be utilized by customer's equipment.

(d) In distribution systems serving 100 or less customers, the utility shall semi-annually check distribution pressures by indicating gauges at the district regulator station or other appropriate point in the distribution system.

In distribution systems serving more than 100 and less than 500 customers, the utility shall maintain a graphic recording pressure gauge at its plant, office, district regulator station, or at some other appropriate point in the distribution system.

In distribution systems serving 500 or more customers, the utility shall maintain one or more additional recording pressure gauges and shall make frequent 24-hour records of the gas pressure prevailing at appropriate points in the system.

All such pressure records shall be appropriately annotated and kept on file available for inspection for a period of at least two years.

RULE 24

Odorization of Gas: Every gas utility distributing other than manufactured gas such as coal or water gas shall, unless the gas contains adequate natural odorant, odorize the gas at one or more points to the extent necessary to produce a detectable and recognizable odor.

RULE 25

Gas Meter Accuracy and Testing: (a) Every gas service meter, whether new, repaired, or removed from service for any cause shall be in good order and shall be adjusted to be correct to within one per cent when passing gas at twenty per cent of its rated capacity at one-half inch water column differential before being installed for the use of a customer.

(b) No diaphragm type gas service meter in sizes having rated capacity of 800 cubic feet or less per hour at one-half inch water column differential shall be allowed to remain in service more than six years from the time when last tested without being retested and, if necessary, readjusted to be correct within one per cent.

(c) No diaphragm type gas service meter in sizes having a rated capacity of more than 800 cubic feet per hour at one-half inch water column differential shall be allowed to remain in service more than five years without being retested and, if necessary, readjusted to be correct within one per cent.

(d) No rotary displacement type gas service meter in sizes having a rated capacity of 5,000 cubic feet or less per hour at one half inch water column differential shall be allowed to remain in service for more than five years without being retested and, if necessary, readjusted to be correct within one per cent.

(e) Rotary displacement type gas service meters in sizes having a rated capacity of more than 5,000 cubic feet per hour at a differential not to exceed two inches water column shall be tested and calibrated at the factory in accordance with recognized and accepted practices and shall be adjusted to be correct within two per cent slow and one per cent fast when passing gas at ten per cent of its rated capacity and shall be adjusted to be correct within one per cent slow and one per cent fast when passing gas at one hundred per cent of its rated capacity. The length of period a meter of this type and size shall be allowed to remain in service before testing shall be established by the Company's experience, and is subject to the Commission's review.

(f) Orifice metering shall be tested not less than once each year.

RULE 26

Meter Testing on Request: Each gas utility furnishing metered gas service shall at any time when requested by a customer make a test of the accuracy of any gas service meter free of charge; provided, first, that such meter has not been tested within the twelve months' period prior to such request, and second, that the customer will agree to accept the result of such test made by the utility as the basis for settling the difference claimed. No charge shall be made to the customer for any such test except as may be allowed by the Commission in special cases. A written report giving the result of every such test shall be made to the customer who requested it, the original record being kept on file at the office of the utility for a period of at least two years.

RULE 27

Tests by Commission: (a) Any gas service meter will be tested by an employee of the Commission upon written application by the customer. The application for such test shall be accompanied by a remittance of the amount fixed below as the fee for such test. If the meter is found to be fast beyond the limits prescribed in Rule 28, this fee shall be paid to the customer by the utility; otherwise, these expenses shall be borne by the customer requesting the test. The Commission's fee for gas meter tests are:

Capacity of 800 cubic feet or less per hour	\$2.00
Capacity of over 800 cubic feet per hour	4.00
Orifice meters	8.00
Rotary meters	16.00

(b) Upon written application to the Commission by any gas utility the Commission will make a test on any of the utility's service meters upon payment of the scheduled fee. This rule and the above schedule of fees apply only when there is a dispute between the customer and the company regarding the accuracy of the meter.

RULE 28

Adjustment of Bills for Meter Error: (a) If on test of any gas service meter, on request of the customer, either by the utility or the Commission, it be found more than two per cent fast, the utility shall refund to the customer such percentage of the amount of the bills of the customer for the period of six months just previous to the removal of such meter from service, or for the time the meter was in service, not exceeding six months, as the meter shall have been shown to be in error by such test.

(b) If on test of any gas service meter, on request of a customer, either by the utility or the Commission, it be found to be more than two per cent slow, the utility may collect from the customer the amount estimated to be due for gas not charged for in bills rendered for not to exceed the six months' period prior to such test.

(c) If a meter is found to have an incorrect register or multiplier, the error shall be corrected. Where the error is adverse to the customer, the utility shall refund to the customer an amount equal to the excess charged for the cubic feet of gas incorrectly metered for the period of time the meter was used in billing the customer. Where the error is adverse to the company, the utility may make a charge to the customer for the cubic feet of gas incorrectly metered for the period of time the meter was used in billing the customer.

(d) If a gas service meter is found not to register or to register intermittently for any period of time, the utility shall estimate a charge for the gas used but not metered by averaging the amounts used over similar periods, or over corresponding periods in previous years, or by any other acceptable available information.

RULE 29

Meter Testing Facilities: Each utility having more than 200 gas meters in service shall maintain one or more suitable gas meter provers of standard design, and shall keep the same in proper adjustment so as to register the condition of meters tested within one-half of one per cent. Each meter prover must be accompanied by a certificate of calibration indicating that it has been tested with a standard which has been certified by the National Bureau of Standards or some testing laboratory of recognized standing. Meter provers must be located in a large, comfortable working space, free from excessive temperature variations, equipped with all necessary facilities and accessories, and at all reasonable hours accessible for inspection and use by the duly authorized representatives of this Commission.

RULE 30

Main Extensions: Each gas utility shall file with the Commission its definite rules and regulations providing for the making of gas main extensions, and no utility shall make or refuse to make any extension except as permitted by these rules and regulations, regularly filed and approved by the Commission, and open to public inspection at each office of the utility where applications for services are received.

EXHIBIT "C" - CASE No. 5321

Amendments to ASA B31.8-1963 Code for
Gas Transmission and Distribution
Piping Systems

CHAPTER I

- 811.253 On line 3, change "may" to "shall".
- 811.262 On line 1, change "may" to "shall".
- 814 On lines 4 and 5, change "are cautioned to give attention to" so that the sentence shall read "Engineers shall investigate the low temperature properties of the materials used ..."

CHAPTER II

- 821.3 Delete the first sentence and in lieu thereof insert "Each utility shall establish and qualify a welding procedure for sound and ductile welds."
- 822.1 On line 4, change "recommended" to "required".
- 826.1 On lines 4 and 5, change "may also be advisable" to "is required".
- 827.1 On lines 5 and 6, change "may also be advisable" to "is required".
- 828.1 On line 4, change "should" to "shall".
- 828.2(a) On line 1, change "should" to "shall".

CHAPTER III

- 831.11(a) On line 2, change "may" to "shall".
- 831.11(b) On line 11, change "may" to "shall".
- 831.21(k) Delete the last sentence, beginning "Good practice indicates...." and in lieu thereof insert "The raised face of the steel flange shall be removed and bolting shall be of carbon-steel equivalent to ASTM-A 307 Grade B."
- 831.41(h) On line 6, change "should" to "shall".
- 831.42(c) On line 4, change "should" to "shall".

- 843.42 On line 2, change "should" to "shall".
- 845.23(c) On line 7, change "should" to "shall".
- 845.34(c) On line 2, change "should" to "shall".
- 845.44(a) On lines 2 and 3, change "recommended" to "required".
- 845.44(b) On line 2, change "should" to "shall".
- 845.44(c) On line 2, change "should" to "shall".
- 845.53(c) On lines 10 and 11, change "recommended" to "permitted".
On line 13, change "should" to "shall".
- 845.62 On line 4, change "should" to "shall".
- 846.12(a) On line 5, change "should" to "shall".
- 847.2(c) On line 2, change "should" to "shall".
- 849.14 Delete the first sentence and in lieu thereof insert "Services shall
be connected to either the top or the side of the main."
- 849.46(a) On line 3, change "recommended" to "required".
- 849.46(c) On line 1, change "recommended" to "permitted".

CHAPTER V

- 850.4 On line 2, change "should" to "shall".
- 851.1 On lines 2 and 10, change "should" to "shall".
- 851.2 On lines 2 and 6, change "should" to "shall".
- 851.3 On lines 4 and 8, change "should" to "shall".
- 851.4 On lines 1 and 6, change "should" to "shall".
- 851.5 On lines 1, 3 and 6, change "should" to "shall".
- 852.22 Delete lines 7 and 8, and in lieu thereof insert "The inspection
program shall include at least the following provisions:"
- 852.22(a) On lines 1 and 7, change "should" to "shall".
- 852.22(b) On line 6, change "should" to "shall".
- 852.3 Delete the last sentence on lines 8 and 9 and in lieu thereof
insert "The plan shall include the following provisions:"

831.42(D) On line 3, change "should" to "shall".

831.42(I) On line 1, change "may" to "shall".

CHAPTER IV

841.016 On line 7, change "should" to "shall".

841.16(f) On line 9, change "should" to "shall".

841.161 On line 2, change "should" to "shall".

841.21 On line 4, delete "Preferably the" and on line 6, change "should" to "shall" so that the sentence shall read "The construction specifications shall cover all phases of the work and shall be in sufficient detail to cover the requirements of this Code".

841.222 On line 4, change "should" to "shall".

On line 4, delete "either".

On line 5, change "or" to "and".

841.241(c) On line 1, change "should" to "shall".

841.261 On line 2, change "should" to "shall".

841.271 On line 2, change "should" to "shall".

841.273(a) On line 1, change "should" to "shall".

841.273(b) On line 2, change "should" to "shall".

841.282 On line 3, change "recommended" to "required".

841.284 On line 6, change "suggested" to "required".

841.285(a) On line 7, change "should" to "shall".

841.285(b) On line 5, change "should" to "shall".

841.285(c) On line 3, change "may" to "shall".

842.14 On line 7, change "should" to "shall".

842.15(c) On line 2, change "recommended" to "permitted".

843.11 On lines 2 and 7, change "should" to "shall".

855.3

On lines 2 and 7, change "should" to "shall".

APPENDIX F

Appendix F(5)

On line 2, change "should" to "shall".

Appendix F(5)(a)

On lines 3 and 5, change "should" to "shall".

Appendix F(5)(b)

On line 1, change "should" to "shall".

Appendix F(6)

On line 4, change "should" to "shall".

Appendix F(6)(a)

On lines 2 and 3, change "should" to "shall".

Appendix F(7)

On line 2, change "should" to "shall".

Appendix F(7)(a)

On lines 1 and 6, change "should" to "shall".