

ORIGINAL

Decision No. 26512

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of the Investigation on
the Commission's own motion into the
reasonableness of the rates, rules,
regulations, charges, classifications,
contracts, practices, service and
operation, or any of them, applicable to
natural gas service on the system of
PACIFIC GAS AND ELECTRIC COMPANY.

Case No. 3424.

In the Matter of the Investigation on
the Commission's own motion into the
reasonableness of the rates, rules,
regulations, charges, classifications,
contracts, practices, service and opera-
tion, or any of them, applicable to
artificial gas service on the system of
PACIFIC GAS AND ELECTRIC COMPANY.

Case No. 3607.

C. P. Cutten and Chaffee E. Hall, and McCutchen, Olney,
Mannon and Greene, by Warren Olney and Allan P.
Matthew, for Pacific Gas and Electric Company.
John J. O'Toole and Dion R. Holm, for the City and
County of San Francisco.
Archer Bowden, City Attorney, for City of San Jose.
J. J. Deuel and L. S. Wing, for California Farm Bureau
Federation, and for Poultry Producers of Central
California.
C. W. Durbrow and C. O. Amonette, for Southern Pacific
Company.
C. Stanley Wood, City Attorney, and John W. Collier,
Deputy City Attorney, for the City of Oakland.
Arnold Rumwell, City Attorney, Stanley Morrison, Advisory
Counsel, and E. C. Thomas, Mayor, for the City of
Palo Alto.
Hugh B. Bradford, City Attorney, and James S. Dean,
City Manager, for the City of Sacramento.
J. Leroy Johnson, City Attorney, for the City of
Stockton.
Herman Kopplou, for California Housekeeping Association.
R. L. Mills, for San Francisco Retail Coal Dealers' Assn.
J. C. Ewing, for the City Coal Company.
J. J. Schlaepfer, for Bureau of Hotels and Restaurants.
Charles Clifford, for City of Santa Rosa, City of
Sebastopol; California Bakers' Association,
Western Can Company, Wellman Peck & Company.
Miss M. M. Tarpey, in propria persona.
W. D. Tillotson, City Attorney, for the City of Redding.

Fred C. Hutchinson, City Attorney, and Chester C. Fisk,
Assistant City Engineer, for the City of Berkeley.
Dewey E. Huggard and G. E. Troxell, for Kensington Park.
Carl Barnard, City Attorney, for the City of Santa Rosa.
Edward P. E. Troy, as a citizen of San Francisco and
consumer of Pacific Gas and Electric Company.
C. A. Meinert, for the Committee from the North Fair
Oaks Improvement Association.
Coyle Bybee, for the City of Chico.
W. P. Rich, for the City of Marysville.
J. T. Sallee, for U. S. Government, Presidio at Monterey.
Gerald H. Totten, for U. S. Government, Presidio at
San Francisco.
H. F. Wilkinson, for U. S. Government, Fort Mason.
George C. Barland, for U. S. Government, Hamilton Field.

SEAVEY, Commissioner:

O P I N I O N

History of Proceedings:

Case No. 3424 was instituted by this Commission on November 21, 1932, for investigation of the natural gas rates, etc. of the Pacific Gas and Electric Company (hereinafter referred to as the Company). The first hearing date was December 20, 1932, at which time the usual preliminary testimony was introduced by the Commission's gas and electric engineer, showing the basis for the order of investigation. Following this, hearings were had on April 12, May 16, 17, 19, June 1, 2, 3, 13, 14, 15, 29, August 15, 16, 24, 29, September 5, 6, 7, 8, 12, 13, 14, 19, 20, 21, 22, 23, 26, 27, 28 and 29, and this, together with consolidated matters, were before the Commission en banc for oral argument on October 16 and 17, 1933.

In all, 81 exhibits were introduced presenting in great detail the underlying data of this proceeding, and 3,729 pages of testimony and argument were transcribed. Many witnesses testified

upon various issues pertinent to a general rate case. (1)

1. REVENUE: C.C.Brown, Gas & Elect.Eng., and C.T.Mess, Asst.Eng. of the Comm's.Staff; N.Randall Ellis as to San Francisco, for City of San Francisco; B.B.Beckett, Rate Eng., for P.G.& E.Co. OPERATING EXPENSE: C.C.Brown and C.E.Crenshaw, S.S.Bloom and E.F.McNaughton, Asst. Engrs., and J.Taylor Jordan, Accountant, of the Comm's Staff; Paul L. Beck and N. Randall Ellis, for City of San Francisco; W.G.Vincent, Vice-Pres. and Exec.Eng., B.B.Beckett, Frank Wills, Eng. of Production, Gas Dept., Fred F.Doyle, Mgr.Nat.Gas Div., R.S.Fuller, Eng.of Distribution, Gas Dept., N.R.Sutherland, Mgr.Commercial Dept., H.M.Crawford, Gen.Sales Mgr. and E.W.Hodges, Comptroller, for P.G.& E.Co. DEPRECIATION EXPENSE: (NATURAL GAS LINES) B.E.Travis, Asst. Eng. and C.C.Brown, of Comm's Staff; Ralph E.Davis, Consulting Eng., for P.G.& E.Co.; L.C.Uren, Petroleum Eng., for City of Berkeley. (PRODUCTION EQUIPMENT) B.E.Travis, of Comm's Staff; G.M.Thomas, Asst.Val.Eng., and Frank Wills, for P.G.& E.Co. (OTHER PROPERTY) B.E.Travis, of Comm's Staff; G.M.Thomas, for P.G.& E.Co. HISTORICAL COST: John Edw.Cooper, Val.Eng. of Comm's Staff; G.M. Thomas, for P.G.& E.Co.; N.Randall Ellis and Paul L. Beck, as to San Francisco, for City of San Francisco. WORKING CAPITAL AND MATERIALS & SUPPLIES: John Edw.Cooper and C.C.Brown, of Comm's Staff; E.W.Hodges, Comptroller, for P.G.& E.Co. NON-USEFUL CAPITAL: C.C.Brown and John Edw.Cooper, of Comm's Staff; Chester C. Fisk, Asst.City Eng., for City of Berkeley; Frank Wills and G.M.Thomas, for P.G.& E.Co. AMORTIZATION OF NON-USEFUL CAPITAL: G.M.Thomas, for P.G.& E.Co. STOCKTON AND SACRAMENTO NATURAL GAS WELLS: C.C.Brown, of Comm's Staff; Willis S. Yard, Vice-Pres. in Chg. of Gas Construction and Operation, for P.G.& E.Co. REPRODUCTION COST: George A.Pracy, Supt.Distributing Div., San Francisco Water Dept., for City of San Francisco; Jas.T.Ryan, Val.Eng., for P.G.& E.Co. ACCRUED DEPRECIATION: Jas.T.Ryan, for P.G.& E.Co. LAND: E.P.McAuliffe, Land Appraiser, of Comm's.Staff; G.M.Thomas, for P.G.& E.Co. GOING VALUE: Lester S.Ready, Consulting Eng., for City of Oakland; W.G.Vincent, Vice-Pres.and Exec.Eng., for P.G.& E.Co. COST OF MONEY: W.C.Fankhauser, Financial Expert, of Comm's.Staff; E.W.Hodges, Compt., for P.G.& E.Co. COST OF FINANCING OR RATE OF RETURN REQUIRED: Professor Paul F. Cadman, Dean Witter, Investment Banker, George Leib, Investment Banker, and E.J.Beckett, Asst.Treas., for P.G.& E.Co.; C.M.Derby, a stockholder, for himself. OPERATING RESULTS: C.C.Brown and J.T.Jordan, of Comm's Staff; B.B.Beckett, for P.G.& E.Co. RATE COMPARISONS & SPREAD: C.C.Brown and Loren W.East, Asst.Eng., of Comm's.Staff; Lester S.Ready, for City of Oakland; N.Randall Ellis, Civil Eng., for City of San Francisco; Chas. Clifford, for Santa Rosa and Sebastopol; G.E. Troxell, for residents of Kensington Park; B.B.Beckett, for P.G.& E. Co. BROODER RATES: John Lawler, Peter C.Dane, B.A.Marcus, B.Farbman and L.S.Wing, for Poultry Producers of Central California; B.B.Beckett, for P.G.& E.Co. CITY OF PALO ALTO RATES: Lester S.Ready, for City of Palo Alto; B.B.Beckett, for P.G.& E.Co. RATES FOR U.S.GOVERNMENT AT ARMY POSTS: John T.Sallee, Capt. Quartermaster Corps., Presidio at Monterey; Gerald E. Totten, Major Quartermaster Corps., Presidio at San Francisco; E.F.Wilkinson, Capt. Quartermaster Corps., Fort Mason; George C.Barland, Eng., Hamilton Field. DOMESTIC SCHEDULES: J.J. Schlaepfer, for San Francisco Restaurant Assn.; Herman Kopplou, consumer; A.V.Donovan, consumer; and Bennett L. Williams, consumer. SERVICE CHARGE: N.Randall Ellis, for City of San Francisco; B.B. Beckett, for P.G.& E.Co. MERCHANDISING ACTIVITIES: J.L.D.Keppy, Gas Appliance Dealer, Berkeley; J.E.Jevons, Plumbing, Heating & Gas Appliances, Berkeley; S.W.Newman, Pres. Chas.Brown & Sons, and E.M. Crawford, Gen.Sales Mgr., for P.G.& E.Co.

On May 29, 1933 an interlocutory opinion and order was issued, Decision No. 25971, disposing of certain informal complaints as to service of marsh gas in the cities of Sacramento and Stockton until the final decision should be issued. This will be referred to later in the opinion and order.

On June 16, 1933 an order was issued directing the Company to show cause on June 29, 1933 why interim rates lower than those then obtaining should not be put into effect during the pendency of the proceeding. On the date set the Company appeared and stipulated⁽²⁾ that the rates fixed and effective upon final order of the Commission should take effect retroactively upon meter read-

2. Mr. Matthew: "The Company moves that it be allowed until September 5, 1933, as the date upon which it shall commence the presentation by it of evidence in the proceeding now pending before the Commission for the ascertainment and fixing of the rates for gas which the Company may charge its consumers and that the order to show cause why pending the conclusion of such proceeding the Commission should not fix interim rates be discharged;

"And in that behalf of the Company stipulates and agrees that it will complete its presentation of evidence in said proceeding before October 1, 1933, and that the rates which the Commission establishes in said proceeding may, if they be lower than the rates now in force, be made retroactive by the Commission in such manner as it may provide so as to apply to all meter readings that would be made according to the Company's normal course of business on or after July 16, 1933, and before November 15, 1933. The Company while reserving all legal rights it may have to question and contest on all other grounds the validity of the rates which the Commission may fix in said proceeding and of the order of the Commission fixing the same, hereby expressly waives the right to question or contest the validity of said rates on the ground that they are retroactive as aforesaid or the validity of said order on the ground that it provides that the rates fixed by it shall be so retroactive.

"The Company further stipulates and agrees that in case the Commission fixes rates in said proceeding lower than the rates now in force and makes such rates retroactive as aforesaid, the Company will, if the rates so fixed by the Commission are not contested by the Company in legal proceedings to that end, or if their validity is sustained in case they are so contested, account in the manner and method directed by the Commission and under its orders for the difference during the period for which said rates are retroactive between the amounts collected by the Company under the rates now in force and the amounts it would have collected according to the rates fixed by the Commission."

ings on and after July 16, 1933, and before November 15, 1933, whereupon the said order to show cause was dismissed by order of this Commission on July 5, 1933 by Decision No. 26128. On November 6, 1933 the Company, through its counsel, filed with the Commission a further stipulation agreeing that the said date of November 15, 1933 might be deemed changed to January 1, 1934, the earlier stipulation in all other respects to remain in force unchanged.

Case No. 3607 was instituted on June 16, 1933 for investigation of the artificial gas rates, etc. of the Company. This was done to bring before the Commission the entire gas operations of the Company and permit all consumers an opportunity to be heard.

There were consolidated for hearing in this proceeding four complaints, Cases Nos. 3627, 3636, 3653 and 3656, filed by the United-States Government against the Company asking for a ten per cent reduction in the cost of service respectively for the Presidio at Monterey, the Presidio at San Francisco, Fort Mason and Hamilton Field. These four complaints will be disposed of by separate order, but the pertinent testimony adduced in this record through the presentation of these complaints will be considered in this proceeding in fixing a schedule of rates for the several classes of service, of which schedules the United States Government may avail itself, along with other consumers of the Company, unless particular rates are accorded by the Company under this Commission's General Order No. 45.

Policies and Practices.

Service Charge:

Two methods are being used by public utilities in this state, and allowed by the Commission, to equalize the rates as between the substantial user and the convenience user, in an endeavor

to cause the convenience user to pay some adequate portion of the fixed charges necessary to give him service, where otherwise a large part of his costs would be borne by the substantial users. These methods are known generally as the "minimum charge" and the "service charge" forms of rates. The first provides for a minimum charge per month with the use up to a certain prescribed amount of the commodity served. This covers up the service charge. The second is a true two-part rate with the service charge frankly shown. The Commission has heretofore indicated its belief that where properly applied the second form of rate is the more equitable and straight forward. It was offered by the Company when natural gas service was inaugurated and was authorized by the Commission not only because of the belief that it was the more equitable, but because it would act as a better stabilizer of revenue at a time when a sudden and most important change in gas service was being made.

This "service charge" is generally misunderstood among a large part of the domestic consumers and is productive of considerable complaint. It undoubtedly interferes to a great extent with good public relations and if too high, even when still below the computed cost of service, has a tendency to retard the use of gas. Inasmuch as the critical period in the development of natural gas in this area is past, there can be no serious objection to either a reduction in the fixed charge or the installation of a minimum charge form of rate, which latter form is in effect in some of the other large utilities in the state with apparent satisfaction. It is recommended that the minimum charge be adopted at this time.

Municipal Boundaries:

This Company, in its schedules for gas service, has for years divided its service area between incorporated and unincorporated territory in accounting for a differential between congested

and uncongested services. In former years, when most city boundaries encompassed all closely inhabited territory, this practice was not questioned. But in later years, with much territory being as closely built up outside as inside city limits, considerable inequities have undoubtedly arisen. In this proceeding one such territory known as Kensington Park in Contra Costa County was represented by counsel and a witness⁽¹⁾ giving testimony as to such conditions. It is apparent that, on only the record of one isolated instance and lacking any definitely defined boundary lines for that or other unknown situations, the Commission cannot make a finding at this time. It is clear, however, that corrective steps should be taken to remedy the situation. It is recommended that the Company be ordered to make a survey and report to the Commission within a reasonable time to permit appropriate action being taken.

Urban Territory vs. Hinterland:

The seemingly inevitable but wholly unnecessary direct division of interest between city and country in the matter of spread of rates came up sharply in this record. The territory served by the Company with natural gas is comprehensive of the central part of California from the great valleys on the east to the bay and coastal region on the west. It is homogeneous in economic and other social interests and naturally contributory to the San Francisco-Oakland metropolitan area.

The cities of the Bay area made the bulk of their showing by carving-out incorporated territory for special treatment. The City of Oakland asked that the whole metropolitan area be used as a unit. San Francisco and San Jose gave testimony and argued for separate treatment for their municipal territories in accordance with their interpretation of a recent decision of the United States

Supreme Court in Wabash Valley Electric Co. vs. Young, et al. (1933) 77 Law Ed. 348, holding that rates may be fixed separately for municipal territory. Nothing in this record discloses any similarity in the situation here with that in Indiana and the consequent applicability of the decision referred to, nor does the court indicate any inherent and legal right of the City to receive such treatment.

From their set-ups the cities show a disparity in the earnings of the Company upon the actual property in use outside as compared with the earnings on the property inside. An equal or greater disparity may be shown, however, between earnings upon different portions of property wholly within the city to which are attached individual or classes of services. But it is clearly impossible for this Commission or any other body to go into a detailed refinement of rates based simply upon return on the individual pieces of property installed. Neither would it be proper or right to do so. Many other things help to determine a just spread of rates, such as load factor, use as to peak conditions, possibility of load building, trends of general commercial usages, development and sustenance of basic industries, interdependence of contiguous territories, value of service. It of course is not intended by the cities that these or other criteria would be ignored or that any action be taken which in any way would be destructive of the community of interest which has been built up and exists between the centers of population and the hinterland.

It will be the endeavor to make all adjustments in the spread of rates that the record indicates are equitable, but no change in the general policy heretofore adopted will be recommended.

Commission Experts:

It is the policy of this Commission that its experts and other members of the staff in collecting data, presenting evidence and giving expert opinions, do so from the standpoint purely of the general public interest. Because of this policy, which must be maintained, the Commission to a certain extent had been handicapped in rate cases in getting into the record a comprehensive representation from the standpoint of the entire consuming public. It is true considerable aid has been rendered by representatives of cities and other public bodies, but these have been admittedly restricted because of lack of funds to meet expenses and employ a sufficient number of experts. Occasionally those experts limit their testimony to those phases of the proceeding in which their employers are particularly interested. The larger utilities have never been at a loss to protect their own interests. Because of these conditions the Commission two years ago created the position of director of research to coordinate the presentation of rate matters and to act virtually in the capacity of a public defender at the hearings thereon. This matter is discussed at this time because counsel for the Company severely criticised Mr. Walter W. Cooper, Director of Research, apparently for being over-zealous in the consumers' interests. We wish there to be no question as to Mr. Cooper's status. It was publicly announced at the time of his appointment what functions he would perform, which fact may have been overlooked by counsel. At any rate, it should be pleasing to the consumers of this Company to know that the new policy inaugurated by the Commission has proven to be very effective and in the public interest.

Salaries of Company Officials:

It has generally been the practice of the Commission to treat salaries of executive officers of utilities along with other items of general and administrative expenses, determining what is the total of the account reasonably to be charged to operating expenses. In exceptional cases attention has been called to specific salaries that were out of line.⁽³⁾ The facts in this case warrant notice. The president of this Company has been receiving a salary of \$75,000 per annum, raised to that figure during the period when we were in the midst of one of the most severe depressions this country has ever experienced. Other executive salaries are on a more or less comparable basis with that of the president. These salaries have been so maintained until the latter part of this period of depression when they suffered a discount of 10 per cent. Before this the lower brackets of salaries and wages had been substantially reduced. Counsel for Company plead that the salaries of management should not be attacked, that the executive officers had done excellent work and that the amount of such salaries could have no appreciable effect upon the rates.

We cannot agree wholly with counsel on any of these counts. While the management has been generally effective under normal and prosperous conditions, we cannot say it has risen to the occasion in this time of stress. For instance, when the depression was surely upon us, we believe the Company should have reduced all operating expenses to the minimum compatible with proper service, should have reduced dividends to correspond more nearly with the earnings in other legitimate businesses, having in mind only the safety of

3. Application of Great Western Power Co., 22 C.R.C. 814, 832-33, in which proceeding \$35,000 was cut from general officers' payroll. Also see App. of S.F. Napa & Calistoga Ry., 13 C.R.C. 95, 100; App. of Madera Canal & Irrig. Co., 13 C.R.C. 528, 537; App. of Star Auto Stage, 19 C.R.C. 411, 414, and others.

future financing, and with the savings thus made should have builded better public relations by voluntarily giving part of those savings to the consumers who severely felt the depression and a portion to the reserves of the Company for the security of the service. It is evident also that management in reducing salaries and wages should have started effectively at the top where least felt and have gone down gradually, instead of starting rigorously at the bottom, followed by such hesitating steps toward the top. As to the plea of the insignificant affect which salaries have upon rates, it need only be said that if this policy were pursued with all items of operating expenses regulation might as well discontinue.

The gas and electric engineer of the Commission testified that in his opinion the executive salaries during the depression should have been reduced 50 per cent in the higher brackets, with lesser percentages in the lower brackets. The higher executive salaries will be allowed in operating expenses by starting at the top with a forty per cent reduction on the 1931 salary level. This appears to be reasonable under the record herein.

Whatever mild admonitions herein are addressed to management primarily should find resting place with the Board of Directors of this Company, which body is representative of the larger ownership interests and is clothed with the final power to determine Company policies.

Value, Rate Base and Return:

During its entire history in establishing reasonable rates for utilities similar to this Company, to determine a proper rate base this Commission has used the actual or estimated historical costs of the properties undepreciated, with land at the present market value. Consistent with this, it has used the sinking fund method to

determine the allowance for depreciation to be included in operating expenses.

This historical method has dominated the Commission's findings for several principal reasons. It is well grounded upon established facts, is not subject to the vagaries of pet theories, unlimited imagination and abrupt fluctuation of current prices and passing conditions, and therefore indicates a truer measure of value upon which, through the application of rates, a return may be allowed to reimburse the owner for his enterprise and insure the integrity of his capital honestly and prudently invested. At the same time it prevents unwarranted demands upon the consumer through the projections of future rates on ephemeral values and stabilizes rates so that economic shocks from such changes are reduced to a minimum.

It is an economical procedure, where the books of the companies are reasonably well kept, as obtains in practically all of the major utilities of this state, full compliance with which will prevent unwarranted expenditures of money by the Commission, the public and the company, which inures to the benefit of both the consumers and the utility.⁽⁴⁾ It is a more rapid procedure insuring quicker compliance with necessities as they arise.

4. In the case of the San Joaquin Light & Power Corp., 37 C.R.C. 530, that utility expended about \$250,000 in a reproduction cost new appraisal which was practically abandoned by all parties as of value in the matter of establishing rates, although it may have some value to the owners in the matter of the transfer of physical properties which was and is pending.

In The Pacific Tel. & Tel. Co. case, 33 C.R.C. 737, involving rates in the San Francisco Bay area, the Company expended more than \$400,000 and the Commission and cities in excess of \$150,000 in inventory and reproduction cost estimates, the greater portion of which total sum was wasted so far as rate determination was concerned, because the final answer was predicated upon the practices of the Commission and acquiesced in by the Company.

Since regulation was undertaken through the medium of the Commission, this Company has acquiesced in the methods above described but at the same time qualifying its acceptance by a reservation intended to preserve what it contended was its legal rights. During this period of 20 years this Company has developed and prospered as have other major California utilities.⁽⁵⁾ Just what legal rights this Company possesses that the Commission has not preserved for it during this period in a meticulous care for the public interest does not appear in any of our records. In fact, counsel for the Company in argument admit that the Commission has carefully supervised and safeguarded the accounting, the financing and the property of the Company so that it could adequately supply to its consumers a service which is one of the dominant public necessities. But, as is the habit of counsellors for utilities, they fear greatly that the Commission will depart from its policies. It is not, however, the policy of prudent investment from which they fear we will depart. Indeed, as will be seen in an examination of the testimony, the Company was careful not to put in the record anything substantial upon which this Commission could depart from this policy. In fact, the Company does not want the Commission to depart from its well established policy, except as to the rate of return allowed. The Commission proceeds in this matter with the objective of regulating return in a way that will amply guard against unreasonable rates and protect future financing and the investment; also, at the same time, that there will be conformity within reason to the general economic conditions and a production of results which

5. During these years the Company has regularly paid its bond interest, the dividends on its preferred stock and a return to investors of more than 8 per cent on the average market price of common stock. Its depreciation reserve has increased from \$2,433,000 to \$34,734,000 and its surplus from \$2,495,000 to \$27,595,000. Revenues of the gas department grew from \$6,550,000 to more than \$22,000,000 per annum.

will compare in some degree to the return enjoyed by comparable business. This latter measure, if there is such a thing as business comparable to that of the utilities, of course, even though enunciated by the Supreme Court of the United States, cannot be taken too literally, otherwise confiscation and bankruptcy would follow at a time like the present. This and other findings of the courts must be considered and applied from a practical and sympathetic standpoint and in consideration of all of the facts of record.

In this case a return will be allowed substantially in excess of the reasonably determined cost of money in order that there be provided a safety factor in accordance with the principles adopted by this Commission to protect the financial structure as well as to allow for intangible values not covered by business development costs allowed in the operating expenses.

Tables:

The following tables I to IV summarize the evidence presented in the case as a whole:

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TABLE I

COMPARISON OF ESTIMATES SUBMITTED BY PACIFIC GAS AND
ELECTRIC COMPANY AND STAFF OF CALIFORNIA RAILROAD COMMISSION

REVENUE
NATURAL GAS TERRITORY

	Company Estimate: 1933 Adjusted to Reflect the Future	Commission : Staff Estimate: Average Year : 1933	Difference : Company Over: Commission : Staff
Revenue from Firm Consumers:			
Commercial Building Heating	\$ 1,088,365.	\$ 688,000.	\$ 400,365.
Resale	132,632.	122,400.	10,232.
Other Firm Revenue	17,622,561.	18,643,200.	1,020,639.*
Total Revenue from Firm Consumers	\$18,843,558.	\$19,453,600.	\$610,042.*
Revenue from Surplus Consumers	\$2,316,339.	\$2,231,000.	\$85,339.
Interdepartment Revenue:			
Firm	\$ 16,687.	\$ 15,300.	\$ 1,387.
Surplus for Company Plants	401,548.	995,500.	593,952.*
Total Interdepartment Revenue	\$418,235.	\$1,010,800.	\$592,565.*
Revenue from San Joaquin Light and Power Corporation	\$101,713.	\$119,600.	\$17,887.*
Miscellaneous Revenue	\$45,526.	\$49,350.	\$ 3,824.*
TOTAL NATURAL GAS REVENUE	\$21,725,371.	\$22,864,350.	\$1,138,979.*

* Commission Staff over Company

TABLE II

COMPARISON OF ESTIMATES SUBMITTED BY PACIFIC GAS AND ELECTRIC COMPANY
AND STAFF OF CALIFORNIA RAILROAD COMMISSION
OPERATING EXPENSES, DEPRECIATION, AMORTIZATION AND AMOUNT AVAILABLE FOR RETURN

	Company Estimate : 1933 Adjusted to Reflect the Future	Commission : Staff Estimate : "Average Year 1933"	Difference : Company Over : Commission : Staff
Production:			
Operation	\$ 155,261.	\$ 143,300.	\$ 11,961.
Purchased Gas	3,285,491.	3,624,600.	339,109.*
Maintenance	50,603.	53,440.	2,837.*
Total Production	\$3,491,355.	\$3,821,340.	\$329,985.*
Transmission:			
Operation	230,941.	266,470.	35,529.*
Maintenance	55,921.	36,950.	18,971.
Total Transmission	\$286,862.	\$303,420.	\$16,558.*
Distribution:			
Operation	\$1,226,185.(1)	\$1,269,830.	\$ 43,645.*
Maintenance	1,187,444.(2)	765,760.	421,684.
Total Distribution	\$2,413,629.	\$2,035,590.	\$378,039.
Commercial	\$968,009.	\$1,036,200.	\$68,191.*
New Business	778,497.	746,000.	32,497.
General and Administrative	642,668.	528,612.	114,056.
Insurance	48,600.	75,738.	27,138.*
Injuries and Damages	119,467.	77,680.	41,787.
Uncollectible Accounts	155,520.	134,000.	21,520.
Taxes	2,541,203.(3)	2,358,000.(3)	183,203.
Depreciation - 6% Sinking Fund Basis:			
Production	\$ 574,767.	\$ 286,028.	\$288,739.
Natural Gas Transmission System	728,844.	320,793.	408,051.
Distribution	940,873.	872,007.	68,866.
General	19,225.	15,488.	4,437.
Additions to Capital	27,512.	26,786.	726.
All Departments	63,718.	67,905.	4,187.*
Total Depreciation	\$2,355,639.	\$1,589,007.	\$766,632.
Amortization:			
Cut-over Expense	\$421,393.(4)	-	\$421,393.
Extraordinary Maintenance	112,283.(4)	-	112,283.
Non-useful Capital	238,092.(5)	-	238,092.
Total Amortization	\$771,768.	-	\$771,768.
TOTAL EXPENSE, DEPRECIATION AND AMORTIZATION	\$14,573,217.	\$12,705,587.	\$1,867,630.
Total Natural Gas Revenue (Table I)	\$21,725,371.	\$22,864,350.	\$1,138,979.*
Expense, Depreciation and Amortization, as above,	\$14,573,217.	\$12,705,587.	\$1,867,630.
Net Available for Return from Natural Gas Territory	\$7,152,154.	\$10,158,763.	\$3,006,609.*
Net for Return from Manufactured Gas Territory Operations	7,844.	41,351.	33,507.*
Net Earning on Working Capital	30,459.	-	30,459.
NET AVAILABLE FOR RETURN	\$7,190,457.	\$10,200,114.	\$3,009,657.*
Deduct - Reduction in Net Revenue due to temperature adjustment of Revenue for First 7 Months	\$ 349,808.	-	\$ 349,808.
NET AVAILABLE FOR RETURN ADJUSTED TO PROVIDE A BASIS FOR RATES FOR THE FUTURE	\$6,840,649.	\$10,200,114.	\$3,359,465.

*Commission Staff over Company.

Notes:

- (1) Excludes amortization of cut-over costs.
- (2) Excludes amortization of prior expenditures for extraordinary maintenance, but includes approximately \$450,000. for extra leakage mitigation work.
- (3) Company figure includes State Gross Revenue Tax on the basis of 9 per cent while Commission Staff figure is computed on the basis of 7-1/2 per cent of revenue for the estimated year.
- (4) To amortize over a 3-year period the amounts remaining unamortized as of July 1, 1933; namely, \$1,264,181.20 and \$336,849.54.
- (5) To amortize non-useful capital in production plants in the amount of \$1,002,917. over a 5-year period.

TABLE XII

COMPARISON OF CERTAIN ESTIMATES OF USEFUL LIFE AND CORRESPONDING
DEPRECIATION ANNUITY ON THE 6 PER CENT SINKING FUND BASIS

		Probable		Depreciation Annuity		
		Life-Years		Difference		
				Company		
Account		Commis-		Commission		
No. :		Company:		Staff :		
Title		sion Staff:		Company :		
				Staff :		
				Commission		

PRODUCTION EQUIPMENT:-						
1050	Production Structures	20	30	\$	42,757.	\$ 20,975. \$ 21,782.
1051	Boiler Plant Equipment	15	25		56,275.	21,589. 34,686.
1052	Production Equipment	15	20		326,296.	170,735. 155,561.
1053	Storage Equipment	30	40		60,720.	31,226. 29,494.
1054	Misc. Production Equipment	10	10		16,059.	18,785. 2,726.*
1055	By-Product Struc. & Equip.	20	20		26.	77. 51.*
1060	Prodn. Structures Natural Gas	20	20		292.	292. -
1061	Gas Wells & Equip. Nat. Gas	10	30		32,711.	5,454. 27,257.
1062	Field Collect. System Nat. Gas	10	30		7,325.	1,221. 6,104.
1063	Field Meas. System Nat. Gas	15	15		81.	81. -
1065	Misc. Prodn. Equip. Nat. Gas	10	10		89.	89. -
Sub-Total					\$542,631.	\$270,524. \$272,107.
Undistributed		Avg.	Avg.		32,136.	15,504. 16,632.
Total					\$574,767.	\$286,028. \$288,739.

TOTAL PRODUCTION EQUIPMENT-DEPRECIABLE CAPITAL				\$16,981,873.	\$15,952,009.	\$1,029,864. (1)
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NATURAL GAS TRANSMISSION SYSTEM:-						
1160	Transmission Structures	15	20	\$	23,459.	\$ 14,842. \$ 8,617.
1161	Compressor Station Equip.	15	20		28,662.	18,134. 10,528.
1163	Transmission Mains	15	25		603,337.	256,025. 347,312.
1164	Meter & Reg. Station Equip.	15	20		8,361.	5,290. 3,071.
1165	Transmission Roads & Trails	15	25		649.	275. 374.
1166	Misc. Transmission Equip.	15	10		4,034.	7,124. 3,090.*
Sub-Total					\$668,502.	\$301,690. \$366,812.
Undistributed		15	Avg.		42,290.	19,103. 23,187.
Land-Group "A" Lines		15	-		18,052.	- 18,052.
Total - Natural Gas Transmission					\$728,844.	\$320,793. \$408,051.

TOTAL NATURAL GAS TRANSMISSION SYSTEM - DEPRECIABLE CAPITAL				\$16,965,611.	\$16,545,409.	\$420,202. (2)
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* Commission Staff exceeds Company.

Notes:

- (1) Difference due to difference in determination of non-useful equipment.
- (2) Difference represents lands treated as non-depreciable by Commission Staff.

TABLE IV

COMPARISON OF ESTIMATES

ESTIMATED HISTORICAL COST - 1933

	Company Estimate			Commission Staff Estimate			Difference Company Over Commission Staff
	Natural	Manufactured	Total	Natural	Manufactured	Total	
	Gas Territory	Gas Territory		Gas Territory	Gas Territory		
Tangible Capital:							
Production	\$18,710,217.	\$1,502,985.	\$20,213,202.	\$18,710,217.	\$1,502,985.	\$20,213,202.	\$ -
Transmission	16,545,409.	456,170.	16,981,579.	16,545,409.	456,170.	16,981,579.	-
Distribution	56,649,957.	2,060,631.	58,730,588.	56,649,957.	2,060,631.	58,730,588.	-
General	417,743.	7,966.	425,729.	417,743.	7,966.	425,729.	-
Sub-total	\$92,523,326.	\$4,027,772.	\$96,551,098.	\$92,523,326.	\$4,027,772.	\$96,551,098.	-
Land:							
Production	2,712,318.	41,198.	2,753,514.	2,712,318.	41,198.	2,753,514.	-
Transmission	733,647.	-	733,647.	733,647.	-	733,647.	-
Distribution	336,701.	15,927.	352,628.	336,701.	15,927.	352,628.	-
General	44,734.	575.	45,309.	44,734.	575.	45,309.	-
Total Land	\$3,827,300.	\$57,698.	\$3,884,998.	\$3,827,300.	\$57,698.	\$3,884,998.	-
Total Tangible	\$96,350,626.	\$4,085,470.	\$100,436,096.	\$96,350,626.	\$4,085,470.	\$100,436,096.	-
Intangible Capital:	368,240.	-	368,240.	361,491.	-	361,491.	16,749.
TOTAL CAPITAL	\$96,718,866.	\$4,085,470.	\$100,804,336.	\$96,712,117.	\$4,085,470.	\$100,797,587.	\$16,749.
Overhead Adjustment	(321,218.)	(7,006.)	(328,223.)	(320,325.)	(23,483.)	(343,808.)	15,585.
Non-Operative Capital	(1,738,344.)	-	(1,738,344.)	(2,758,808.)	-	(2,758,808.)	1,024,864.
Sub-total	\$94,654,304.	\$4,078,465.	\$98,732,769.	\$93,423,634.	\$4,061,987.	\$97,485,621.	\$1,057,198.
All Department - Non-landed	3,265,160.	136,195.	3,401,345.	3,308,178.	168,092.	3,466,270.	64,925.*
All Department - Land	605,066.	33,681.	638,747.	620,256.	23,759.	644,014.	5,297.*
Total All Department	\$4,070,216.	\$169,846.	\$4,240,062.	\$4,128,433.	\$191,851.	\$4,310,284.	\$70,222.*
TOTAL AS OF 12/31/32	\$98,634,520.	\$4,248,311.	\$102,882,831.	\$97,552,017.	\$4,243,639.	\$101,795,655.	\$988,976.
Additions and Betterments:							
Non-landed	774,989.	18,101.	793,090.	-	-	-	-
Land	18,014.	468.	18,482.	-	-	-	-
TOTAL ADDITIONS & BETTERMENTS	\$793,003.	\$18,569.	\$811,570.	-	-	\$1,000,000.	\$188,430.*
Operative Work in Progress	615,391.	74,690.	690,071.	-	-	615,309.	25,839.*
Consumers' Advances	(141,000.)	-	(141,000.)	-	-	(159,160.)	18,160.
Sub-total	\$99,701,914.	\$4,341,568.	\$104,043,472.	-	-	\$103,262,004.	\$791,468.
Donations in Aid of Construction	-	-	-	-	-	(34,315.)	34,315.
Materials and Supplies	-	-	2,622,657.	-	-	638,828.	(1,210,609.)
Working Cash Capital	-	-	-	-	-	773,300.	-
Sub-total	-	-	\$106,666,109.	-	-	\$104,629,807.	\$2,036,302.
Going Value	-	-	12,000,000.	-	-	-	12,000,000.
TOTAL			\$118,666,109.**			\$104,629,807.**	\$14,036,302.

(Red Figures)

*Commission Staff over Company.

**If the present market value of land as shown in Exhibit 69 (revised) is substituted for the historical cost of land as used in this comparison, the sum of \$4,627,366 should be deducted from the Company total for natural gas territory and \$91,349 for manufactured gas territory, a total of \$4,718,715, and the following items respectively added, \$4,479,878, \$58,815 and total \$4,538,693, a net total reduction of \$180,622, making the total at the bottom of the table \$118,485,497; and from the Commission Staff total should be deducted for natural gas territory \$4,647,655 and \$81,457 for manufactured gas territory, a total of \$4,729,112, with sums added as given above, making a net reduction of \$190,919, resulting in a total at the bottom of the table of \$104,436,888.

The Evidence.

Reproduction Cost Estimate:

Testimony regarding the cost to reproduce the properties here under consideration was presented by the Company's valuation engineer on several price bases, all being developed through the application of price translation factors, and not through the application of appropriate prices to an inventory of the property. In each pricing period offered the estimate to reproduce was higher than the historical cost. For the first six months' period of 1933 the reproduction cost was shown as 8 per cent higher than historical. A perusal of price trend charts introduced by the Company elsewhere in the proceedings indicate that the estimate must be in error. It is not conceivable that a property, 80 per cent of which has been constructed in the high price period following 1919, could not be reproduced for a lesser cost under prices prevailing in the first 6 months of 1933. Witness for the City of San Francisco⁽¹⁾ clearly indicated why the estimate was erroneous when he showed that the method used ignored certain factors tending in later years to decrease cost, such as improvement in construction materials and methods, increased use of mechanical equipment and a lessening in the width of the excavations and pavement cut. The estimates of cost to reproduce are not at all convincing and cannot be of positive value in this proceeding.

Going Value:

The consulting engineer for Oakland⁽¹⁾ testified that under the practice of the Commission in the allowance of development cost in operating expenses and of return above the cost of money going value was fully accounted for and no additional amount should be added.

The testimony of the Company on going value was put in by its vice-president and executive engineer, ⁽¹⁾who qualified as having had a general engineering experience prior to 1912 when he became valuation engineer and later executive engineer and vice-president for the Company; an extended experience in rate matters; studied and followed the decisions of commissions and courts in the analysis and presentation of development cost and going value; has been familiar with the terms and conditions of the acquisition by the Company of various properties and has had major responsibility in the conducting of many of the negotiations for the purchase or sale of such properties of the Company. The fact that during the major part of his mature life he has been an employee and officer of the Company, that his testimony was in no way corroborated, and that the transfer of properties with which he was familiar are all Company properties, practically all of which were acquisitions to extend territory or remove competition, renders his testimony of \$12,000,000 for going concern of the natural gas service of very doubtful probative value. The testimony of other Company witnesses was conflicting with a determination for a substantial going value. A dismal picture for the future was painted in the matter of new business and revenue. The Company's expert called to testify regarding the probabilities of the principal natural gas field supplying this territory only would allow a life of 15 years, 3 years of which has already passed. It is difficult to imagine a purchaser putting up anything for going value under such prospects.

The Company's position regarding the claim for going value seems a little uncertain. Counsel in Chief indicated ⁽⁶⁾that it was

6. Judge Olney, at page 3653 of the transcript, said:

"Now, in that -- those figures include in the rate base \$12,000,000 for going concern, and a difference of \$1,200,000 in regard to working capital, or a difference altogether of \$13,200,000. Those amounts may be deducted and still the return to the Company on the rate base, even if they are deducted -- and I understand the Commission never allows them -- even if they are deducted, the rate here will still be one to which no possible exception can be taken as an exorbitant rate of return."

not expected the Commission would allow going value, while associate counsel contended⁽⁷⁾ that going value should be allowed.

Even if going value could be found here in a definite amount there are no proper elements of physical value found to which it might be related to obtain fair value. Under the record there is no tenable depreciated reproduction cost figure and it is wholly inconsistent to attempt to relate going value to undepreciated historical cost.

However, the Commission here will use more optimism than the Company has shown and accredit this property with a reasonable recognition of going value through allowance as an operating expense of over \$800,000 a year for development expense, which is approximately 7 per cent on the Company's claimed going value figure, and by the additional allowance of return over reasonable cost of money.

Capital Accounts:

Except for its unproductive incursions into reproduction cost and going value, the Company built its capital showing consistently along the lines followed by the Commission engineers in this and other rate cases. There is no substantial difference in the basic figures in the two studies presented here for the total historical cost of the combined properties. Table IV shows in tabulated form a comparison of the two studies, from which it

7. Mr. Matthew, at page 3656 of the transcript said:

"Now, as to going value, it is our contention that going value should be allowed in the amount of some \$12,000,000."

and at page 3658 of the transcript:

"Now, since going value is a property right -- and by 'property right' it means it is something that belongs in the rate base - I think it is the duty of the Commission, under your oaths of office, to give it recognition in the rate base. * * * Of course, it should not be understood that I think resort should be had to going value in order to find support for oppressive rates, to defend rates clearly unreasonable, but, on the other hand, going value should not be ignored merely to find occasion for compelling reductions in rates which otherwise must be found reasonable."

will be seen that aside from claimed addition of going value the principal difference in the final figures is in the item of non-operative capital. In the matter of market value of land, an agreed figure was arrived at resulting in a net amount of \$190,919 to be deducted.

Property to be Retired:

A sharp difference of opinion came up between the Company and Commission engineers as to the need of retaining certain of the generating plants and equipment heretofore used in the production of artificial gas. A portion of this equipment has been converted to produce high B.T.U. Diesel oil gas as standby service in the case of lack of sufficient natural gas at peak periods, or for emergency because of possible line break. The necessity of stand-by plant for emergency because of complete break in the two lines appears extremely remote and unimportant, although the interruption of one of the two lines at peak use might cause some inconvenience. At present and for several years in the future the record indicates that the present lines can be brought to capacity to take care of peak demand for domestic and other essential usages of natural gas. While a small amount of artificial gas was manufactured during the severely cold winter of 1932-33, a proper shut-off of a corresponding amount of surplus gas usage as provided for in the contracts would have rendered such manufacture unnecessary. Surplus gas users are compensated for necessary shut-off by extremely low rates, and so long as there is sufficient natural gas to supply the essential peak needs no cost for manufactured gas should go into expenses upon which essential gas rates are predicated except the costs of keeping the equipment in condition to start if the very remote emergency should arise.

In considering the property now no longer useful and appropriately to be excluded from the rate base it follows from the use of

the historical investment as a rate base that the Company, if not already reimbursed through contributions to the depreciation reserve, is entitled to look to the consumers for reimbursement for the remainder of the sum prudently invested in their service but rendered useless before depreciation provisions equal the original cost. The Commission's engineers considered the existing depreciation reserve adequate to permit the charge of the entire amount determined to be non-useful against the reserve. On the testimony of the valuation engineer for the Company⁽¹⁾ the depreciation reserve, although being accumulated on the sinking fund basis, is equal to the accrued depreciation in the property. However, it is not deemed reasonable to require that the entire amount of capital admitted by the Company to be non-useful be charged against the reserve. As a matter of equity only that part of the capital to be retired, which reasonably has been accumulated in the depreciation reserve, should be charged to that account and the remainder amortized. After careful analysis of the claims of the Company in this regard, on this record and for the present only it is determined that \$1,733,344 shall be eliminated forthwith from fixed capital and for a period of five (5) years the sum of \$150,000 per annum shall be allowed in operating expenses for the purpose of amortizing the undepreciated portion of this investment. The Company should submit to the Commission for its approval entries to accomplish this purpose.

The marsh gas wells in Sacramento and Stockton have been shown to be of little value as stand-by; a burden upon the whole service; a nuisance from the standpoint of operation, and a constant irritation and source of suspicion in the minds of the consuming public. The Commission has heretofore found the use of these gas wells to result in discrimination. (Decision 26127, dated July 5, 1933.) The Company will be ordered to cease mixing the gas

from these wells with the other natural gas supply. The Company contends it has contractual obligations as to furnishing water for public purposes, but this appears to be non-utility service. The Commission has no objection to the Company's continuing these contracts and selling the gas from its wells so long as it does not in any way intermingle the same with the other natural gas service. The capital representing these wells will be taken from the rate base and set up as non-operative capital or eliminated, being written off through the depreciation reserve.

Life of Gas Supply:

On occasions during the last ten years gas utilities have invariably presented evidence as to a very short life to the California gas supply in rate cases and long lives in matters regarding the issuance of securities. These two irreconcilable positions of the utilities in all instances have been adjusted by the Commission to reasonable normal projections into the future, both to protect consumers against exorbitant rates and to compel equity back of the investments of those who purchase utility securities. This Company now before us is no exception to the rule.

The expert witness ⁽¹⁾ for the Company has had a long and varied experience in connection with natural gas and oil studies and investments, particularly in the eastern and southern fields. His experience in California has been very limited with the exception of a detailed study made by him several years ago of the dry gas fields of Buttonwillow, which enters into this picture in a relatively minor way. He based his estimate of gas in the Kettleman fields largely upon data and experience in the Santa Fe Springs field. The record shows clearly that the two fields are not comparable to the extent of making an accurate estimate of life. And in addition conservation

control has come into effect since the Santa Fe Springs field was developed. His method of estimate was also lacking in specific details.

The expert for the City of Berkeley⁽¹⁾ was as highly qualified generally along the lines of his testimony as the Company's expert. He, however, had a decided advantage in his long and specific experience with the conditions in practically all of the California fields. His method of arriving at the production of Kettleman field was exhaustive in detail and his testimony carried conviction as to the conservative nature of his underlying data. Counsel for Company made considerable of the point that City witness estimated a 92 per cent recovery from the field. Counsel apparently overlooked the fact that the witness had allowed for gas to fill the voids before arriving at his percentage, and also the fact that Company's own witness estimated a recovery of 90 per cent without making any specific deduction for residual gas.

Commission's gas and electric engineer,⁽¹⁾ who has had an extensive experience in the California fields, testified generally as to the life of the gas field, without having made any analytical study, to the following effect:

"I think it is the general belief that there is sufficient gas there, with the other known sources of supply to last for 15 or 20 years at least, possibly longer."

He also analyzed the estimates of the other two witnesses, showing a probable effective life ranging from 23 to 58 years. The testimony alone on the life of a reasonably necessary gas supply from known available fields would indicate a life of around 30 years. However, as the uncontroverted testimony of Commission's depreciation witness⁽¹⁾ showed a life of the transmission line of 25 years, the life of the gas supply beyond that period cannot affect the answer in this case.

Depreciation:

Tables II and III indicate the differences between Company and Commission witnesses⁽¹⁾ in the matter of lives and resultant depreciation charges, both parties having presented their estimates on the sinking fund basis. In the light of the determination as to the life and supply in the gas fields, it is clear that as to production and transmission mains and property incidental thereto the estimates of the Commission's staff should stand except that depreciation allowance should be made for pipe line rights of way which will be eliminated with the end of the life of the lines. As to the estimates on storage equipment the Commission engineer was weak in supporting his change from a 30 year life on other Company storage to 40 years on this system. So, too, was the position of the Company weak in recently reducing to 30 years the life of storage equipment which for many years it had estimated at 40 years. A life of 35 years will be allowed in this case.

The Commission witness was not consistent in ascribing a longer life to consumers' meters and regulators than to district meters and regulators. The testimony indicates that a life of 25 years for both would be reasonable.

Extraordinary Maintenance:

A considerable difference, about \$400,000, is shown in operating expenses on account of estimates made by Company engineers for what they denominate extraordinary maintenance in effecting stoppage of leaks in cast iron pipes. They estimate that altogether in the coming few years they will expend about \$6,000,000 to put permanent collars on the cast iron pipe joints. At the rate of retirement of such pipe it is doubtful if this total sum, even if a proper expenditure, would eventually be needed. There is also grave doubt that such a sum for such purpose should be charged

entirely to maintenance. The charge of a portion to capital account would extend its benefits over the life of its use and could be justified if it reflected savings in other items of operating expense, - that is to say, if it was a prudent investment. The Commission engineers⁽¹⁾ in their estimates have increased normal maintenance in some substantial additional amount but not enough to account for the amount that may reasonably be charged to maintenance in the near future. We will add to the Commission engineers' estimates the sum of \$250,000 to stand as a measure of that item of expense.

Cut-Over Expenses:

A similar issue arose in the recent case of the San Joaquin Light and Power Corporation, 38 C.R.C. 822, 827, in which the Commission held as follows:

"There is no merit in the contention that the above mentioned supplementary orders relative to company accounting practice in amortizing said cut-over expense should be interpreted as being a guarantee or commitment that operating expenses should be augmented in succeeding years in the fixation of rates. Permission to defer the inclusion of the cut-over expense in operating expenses as and when incurred was merely a financial convenience to the company and purely an accounting matter. The orders heretofore issued relative to this expense were issued ex parte without notice to the affected cities or other parties in interest and obviously could not fairly be interpreted as applicable to future rate proceedings or otherwise prejudicial to the rate payers. Equitable dealing as between company and consumer must control the disposition of this matter and no allowance for cut-over expense beyond 1933 will be made."

Counsel for Company argued at length for the amortization of this expense over a future period as part of operating expenses on the ground that equity and fair dealing warranted such action. In addition to the reason given in the San Joaquin case against such action, it should be noted, as brought out in argument by the research director, that:

"The earnings of the Company as a whole in 1930 were such that this expense might have been charged just as incurred, to operating expenses, and still have permitted the Company, after paying 8 per cent on its common stock, to pass approximately \$3,000,000 to surplus. From the standpoint of financial appearances, subsequent developments have indicated that the Company made a great mistake by deferring the charging of these costs. Future ratepayers should not be burdened merely to satisfy the vanity of company managers in presenting a favorable statement in reports to stockholders."

Based upon equity and fair dealing, the cut-over expenses will be disallowed in fixing present and future rates.

Working Cash Capital and Materials and Supplies:

The Company's claim to working capital considerably exceeded that of the Commission engineers, but the method upon which its claim was presented does not form a reasonable basis for determination of the amount of working capital upon which a return should be allowed. The Commission engineers conformed to the customary methods prevailing for some years in Commission practice and it is believed their results are more nearly correct as to the amount to be included in the rate base. It may be said that the method of computation advanced by the Company if set up on anything approaching a normal earning basis would closely approximate the sum estimated by Commission engineers.

Other Expenses:

Taxes have been included on the basis of the rates of taxation in effect under present laws.

While there were other differences between the Company and Commission engineers, a consideration of these leads to the opinion that they will largely offset each other.

City of Palo Alto:

Comprehensive testimony was put in the record by the consulting engineer⁽¹⁾ for the City of Palo Alto and considerable rebuttal by the Company witness.⁽¹⁾ From this conflict of testimony it

is shown that the demand charge is the major portion of the annual bill; that the principal use in the city is domestic and commercial; that because of the higher B.T.U. content in the natural gas and the added use for heating in winter the load factor in domestic and commercial use has decreased as it has in the rest of the system; that consequently under the form of resale schedule in effect the average cost per thousand cubic feet of gas has increased considerably and will probably continue to increase unless Palo Alto equalizes its peak needs by storage.

The testimony indicates that the City should have some consideration given it that will reduce its costs and that a form of rate should be continued under which it may further reduce its burden by storage. The schedules attached to the order will so provide.

Brooder Rates:

The California Farm Bureau Federation, for and in conjunction with the Poultry Producers of Central California, through numerous witnesses⁽¹⁾ presented considerable testimony regarding the rates for gas in brooder use, which was extensively rebutted by Company testimony. The evidence indicates that the Company has failed to develop this business in such substantial way as seems possible and that the rate which is in effect now is inequitable as compared with that for other loads. These two matters should be corrected by adjustments in the schedules.

Revenue and Average Year:

In Table I will be found a comparison of estimates of revenue for the natural gas territory. It has been the continuing policy of the Commission, under which this and other utilities have prospered, in fixing rates to project average or normal conditions in arriving at probable future revenue and expense and temper the past trends by a judgment as to the effect of unusual conditions

upon the reasonable future. The Commission's staff has used that method here. The data collected by them having been assembled earlier in this year, they define what is called the 1933 average year as follows:

"An average 1933 year is a year reflecting, first, growth of system consumers based on records and experiences of the utility over a long period of time; second, M.C.F. sales and revenues predicated upon normal temperature conditions, reasonable future expectancies of increased use per consumer and resulting decreased revenues per M.C.F. sales; and, third, operating expenses estimated to reasonably correspond to the estimated sales."

A longer period of time was taken here than in many instances because of the short period of use of natural gas. The back years were related to and weighted in on a natural gas basis. This undoubtedly worked somewhat to the advantage of the Company, giving a lower line than would have been the case if natural gas actually had been used. With the advent of natural gas there was here, as in all other parts of California, an unusual development of the use of such gas, especially for heating.

The Company, on the other hand, estimated on the basis of 1933 actual, with revenues normalized only as to temperature, for seven months and estimated for five months. This, of course, gives extraordinary effect to the one and probably lowest year of the depression. In view of the depressed conditions presently prevailing and the consequent impossibility of accurately forecasting revenues for a long period in the future, it is reasonable in this case to adopt an estimate of gross revenues closely approximating the actual for the year last past. The estimate of gross revenues for the first year in which the new rates will be applied, (computed at rates presently in effect) will be \$22,500,000.

Operating expenses will be allowed on a basis consistent with this estimate of revenue and in the light of the preceding dis-

cussion with respect to specific classes of expense.

Comparison of Rates:

The evidence in this case indicates a considerable disparity between the rates on this system and those on the large gas systems in the south. ⁽⁸⁾ The lower rates existing in the south, in face of the fact that natural gas in the field and at the city gates costs the Pacific Company less than the Southern Companies, largely can be ascribed to the much longer use of natural gas, both as partly mixed gas and latterly wholly as straight natural gas, for a period of over fifteen years as compared with an approximate three year period on this Company's system. The possibilities of development of use in California is much greater with natural than with artificial gas. The situation with respect to the average use on the system of this Company should rapidly improve and in view of the clearly demonstrated fact that this territory is recognized as having much better possibilities for gas use, the rates here in the not distant future should come to a lower level than in the south, if Company management rises to the opportunity.

Stocks, Bonds, Reserves and Surplus:

As of December 31, 1932, the Pacific Gas and Electric

8. A comparison of Pacific Gas and Electric Company rate schedule G-1-N with Los Angeles Gas & Electric Corp. rate schedule G-1, natural gas service, as shown by testimony of Commission's Gas and Electric Engineer on pages 876 to 878 of the transcript, is compiled as follows:

Consumption per mo. in cu.ft.	Amt. of bill for P.G. & E. Co. Rate G-1-N	Amt. of bill for L.A.G. & E. Corp. Rate G-1.	Excess P.G. & E. Co. over L.A.G. & E. Corp. Amount	Per Cent.
0	\$.60	\$.80	\$.20*	25.0*
1,000	1.45	1.28	.17	13.2
2,000	2.30	1.97	.33	16.6
3,000	3.15	2.66	.49	18.4
4,000	4.00	3.35	.65	19.4
5,000	4.85	3.94	.91	23.0
10,000	8.60	6.89	1.71	24.6

* L.A.G. & E. Corp. in excess of P.G. & E. Co.

Company had outstanding in the hands of the public and alive in sinking funds \$245,202,000 of bonds, (\$15,084,000 in sinking and other funds), \$129,750,731.91 of preferred stock and \$156,909,381.67 of common stock. (Does not include \$48,433.33 of common stock held by a subsidiary company.) The \$245,202,000 of bonds consist of \$20,675,000 of 6% bonds, \$44,948,000 of 5½% bonds, \$39,443,000 of 5% bonds and \$90,136,000 of 4½% bonds. Of the 5% bonds \$2,203,000 were due March 1, 1933 and \$4,943,000 of 4½% due November 1, 1933. The former have been and the latter will be paid out of the current income of the Company. The \$129,750,731.91 of preferred stock consists of \$101,119,781.91 of 6% and \$28,630,950 of 5½% cumulative preferred stock.

As of December 31, 1932, the Company had a depreciation reserve of \$34,734,513.18, a casualty and insurance reserve of \$3,000,621.12, a reserve of \$308,021 to amortize its investment in the Standard Pacific Gas Line, a \$1,622,007.07 reserve resulting from purchase of properties of Northern California Power Company Consolidated, a reserve of \$403,336.77 for uncollectible bills and a reserve of \$907.51 for amortization of mine tailings storage. The reserves aggregated a total of \$40,069,406.65. As of the same date the Company had surplus appropriated for sinking fund of \$1,077,914.26 and unappropriated surplus of \$27,595,165.63. Generally speaking the reserves and the surplus have been built up out of earnings.

Some of the Company's outstanding bonds and stock were issued to acquire securities of subsidiary companies, or to refund bonds or preferred stock of subsidiary companies. It is therefore neither fair nor proper to look only to the properties of the Company used in its public utility operations for earnings with which to pay interest on bonds and dividends on stock. For 1932 the

Company reports a gross corporate income of \$32,912,683.02, which is the amount available for interest, dividends and surplus. Of this amount 78.53 per cent, or \$25,848,147.69, was contributed by the public utility properties and 21.47 per cent, or \$7,064,535.33, by the non-operating income.

The \$32,912,683.02 was disbursed by the Company for the following purposes:

Interest on bonds	\$12,051,732.42	
Other interest	85,218.60	
Amortization of debt discount and expense ...	600,730.24	
Miscellaneous charges	97,315.85	
Sub-total	\$12,834,997.11	
Dividends on preferred stock:		
6% preferred	\$5,523,241.11	
5½% preferred	1,493,584.29	7,016,825.40
Dividends on common stock at \$2.00 per share	12,510,702.64	
Surplus	550,157.87	
Total	\$32,912,683.02	

Recently the Company has reduced the dividend on its common stock from \$2.00 to \$1.50 per share.

The above interest charges do not include \$190,349.93 of interest charged to construction. The total interest charge, however, includes \$275,219.45 interest on 5% bonds paid on March 1, 1933 and \$247,231.25 of interest on 4½% bonds due November 1, 1933.

In its annual report for the year 1932, the Company calculates its depreciation allowance on a 6 per cent sinking fund basis and includes in operating expenses \$1,822,201.00 for interest on the balance in the depreciation reserve.

Cost of Money:

A reasonable determination of the cost of money to this Company is of importance to this case as being an indication to some extent of the necessary rate of return to be allowed.

In Exhibit 71 the Company reports an average cost of money of 6.68% and in Exhibit 72 an average cost of 6.48%. The former is

a consolidated statement covering issues of securities of Pacific Gas and Electric Company and its subsidiaries from 1912 to 1932. The latter covers security issues of the Pacific Gas and Electric Company sold for cash from 1912 to 1932. The consolidated statement (Exhibit 71) has no place in this proceeding. So far as cost of common stock money is concerned, counsel for the Company stated he relied on Exhibit 72 and not on Exhibit 71. The cost of bond and preferred stock money shown in Exhibit 71, is unduly high because bond discount, expense and premium on retired issues and written off on the books of the several companies has been resurrected and reinstated for the purpose of showing the cost of bond money. Discounts on preferred stocks of subsidiary companies have been applied to preferred stock of Pacific Gas and Electric Company issued at par in exchange for stock of subsidiary companies. Too, stock selling expense, which is an organization expense, was improperly charged to stock discount.

Exhibit 72, though confined to security issues of the Company, does not measure the current cost of money to the Company. For instance, it shows an annual charge of \$1,398,660 to amortize bond discount and expense, whereas the Company in its 1932 annual report shows an actual charge of \$600,750.24. The exhibit shows \$36,720,000 of bonds and notes issued from 1912 to 1920 at an average cost of 9.12%. All of these have been paid from income or through the issue of other securities. If they are eliminated, as they should be, the average cost of bond money is 5.75% instead of 6.27%, as shown in Exhibit 72. In arriving at the net proceeds from the sale of preferred stock, the Company deducts \$522,139 of stock selling expense which is a proper charge to organization rather than stock discount.

Exhibit 14 presented by the Commission's staff, was criticized because it covered bond issues sold prior to 1912, for some of which it showed no discount and expense, and because it did not include common stock. Common stock was purposely omitted because the Company saw fit to grant to its stockholders privileged subscriptions rather than sell the stock at its market value; and further, because it was felt that the dividend paid on common stock did not determine the cost of common stock money. Bond issues prior to 1912 cannot be wholly ignored, as was done by the Company. The interest rate of the bonds is known. It is the principal factor in the cost of bond money. The annual amortization of bond discount and expense is of minor importance. Thus, if one were to assume a 20% discount, not supported by any testimony, on the bonds for which no discount is shown in Exhibit 14, the average cost of bond money would only be increased from 5.72% to 5.73%.

The Company has invested in its properties a depreciation reserve of \$34,734,513. This reserve has been built up in the main on a 6% sinking fund basis. The Company does not in either Exhibit 71 or Exhibit 72 refer to this investment. It is set up in Exhibit 14 presented by the Commission's staff.

Upon considering the record in this proceeding, we find the maximum cost of money, as shown by it, to be 6.19%. We find the reasonable cost of money to be 6.10%.

Manufactured Gas Territory:

This utility still serves manufactured gas in the northern portion of its gas territory and maintains and operates oil gas generating plants at Willows, Grass Valley, Colusa, Red Bluff, Redding and Eureka and a water-gas generating plant at Marysville.

The schedules under which this area is served are subject to automatic increase or decrease in accordance with the increase or

decrease in the market price of fuel oil, all as set forth in Decision No. 9125, dated June 21, 1921.

It appears that the fuel oil clauses applicable to the schedules should be based upon present conditions and present oil prices. Necessary changes to effect this will be shown in Exhibit "A" attached hereto.

Testimony and evidence introduced in this proceeding establishes the fact that the manufactured gas portion of the gas department operations of this utility is not making an excessive return on the investment and that no adjustment in rates for the service of manufactured gas is warranted at this time.

Adjusted Results:

The adjustments having been made in accordance with the preceding recommendations, the following results are accepted as reasonable:

Revenue	\$22,500,000
Deduct:	
Operating expenses & taxes,	\$11,836,000
Depreciation expense	1,769,119
Amortization of non-useful capital	150,000
Total Deductions	13,755,119
Available for Return	\$ 8,744,881
Rate Base	\$105,000,000
Fair Return	7,000,000
Return earned in excess of fair return	\$1,744,881 ⁽⁹⁾
Reduction in revenue effected by rates ordered herein	2,100,000.

9. This sum represents the reduction which should be made in the net earnings of the Company. Rates of course may be reduced a greater amount as the reduction in revenue in turn produces a reduction in the state gross revenue tax and in Federal income tax. Thus the gross reduction possible in order to still preserve a \$7,000,000 return to the Company is approximately \$2,225,000.

The reduction thus contemplated and effected in this order is made with due regard to conditions prevailing at the present time. The rates established will be reasonable and fair to the public and will assure the Company a fair return on its properties. The reasonableness of the set-up shown in the above table is apparent from a comparison with the estimates of the Company based upon the revenues received during the first seven months of this year and the last five months estimated on a temperature corrected basis and depreciation expense and amortization only modified to conform to the findings in this opinion. (10)

10. Revenue, Expense and Depreciation as Estimated
in Exhibit 49 by the Company, except as noted.

Revenue\$22,347,012

Expense:

Purchased gas	\$3,285,491
Production	486,328
Transmission	292,890
Distribution	2,477,944 (1)
Commercial	1,010,008
New Business	811,396
General and Administrative	661,465
Insurance	50,000
Injuries and Damages	122,908
Uncollectible Accounts	160,000

Taxes:

State Gross Revenue	1,834,993
Federal Income	631,707
Other	136,240
Sub-Total ...	\$11,961,370
Depreciation	1,769,119 (2)
Amortization of Non-useful Capital .	150,000 (3)

Total Operating Expenses, Taxes,
Depreciation & Amortization of
Non-Useful Capital 13,880,489

Available for return\$ 8,466,523 (4)

- (1) Excludes cut-over expense and amortization of extraordinary maintenance included by Company in Exhibit 49 in the amount of \$1,046,008.
- (2) Depreciation expense on a 6 per cent sinking fund basis found reasonable in this opinion. Company estimate for same item \$2,453,876.
- (3) Allowance for amortization of non-useful capital found reasonable in this opinion. The Company requested an allowance of \$238,092.
- (4) Assuming a return of \$7,000,000 upon the rate base herein found reasonable, this indicates a reduction in rates of approximately \$1,868,000 to be warranted after allowing for reduced federal income and state gross revenue taxes following such reduction in revenue.

I recommend the following form of order:

O R D E R

Having instituted a proceeding upon its own motion inquiring into the rates, rules, regulations, charges, classifications, contracts, practices, service and operation applicable to gas service on the system of Pacific Gas and Electric Company, and the proceeding having been submitted and being now ready for decision,

THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA hereby finds as a fact:

1. That the domestic and commercial rates for natural gas now being charged and collected by Pacific Gas and Electric Company are unjust and unreasonable, and have been so unjust and unreasonable since and beginning with meter readings as of July 16, 1933, to the extent that they have exceeded the rates herein found reasonable.

2. That the rates charged and collected for artificial gas service have not been proven either excessive or discriminatory.

3. That the record discloses the necessity for inquiry and determination regarding the territorial application of the rate schedules.

4. That the mixing of high B.T.U. gas with low B.T.U. gas from local wells at Sacramento and Stockton is discriminatory and unreasonable, and against the interest of the consuming public and the Company.

Basing its order on the foregoing findings of fact and on such other findings and statements of facts as are set forth in the opinion preceding this order, or in this order,

IT IS HEREBY ORDERED that Pacific Gas and Electric Company shall:

1. Charge and collect for domestic and commercial natural gas sales as measured by meter readings on and after December 15, 1933, the rates set forth in Exhibit "A", which rates are herein found to be reasonable rates.

2. Refund to all domestic and commercial consumers the difference between the rates actually charged and collected and the rates herein found as reasonable for the period covered by the meter readings on and after the 16th day of July to and including the 14th day of December, 1933. Such refund to be made by cash or credit on the bills of consumers in accordance with further order of this Commission.

3. Discontinue on and after December 15, 1933 the practice of serving mixed local well natural gas with other natural gas in the cities of Sacramento and Stockton, or elsewhere.

4. Within sixty (60) days after the effective date of this order Pacific Gas and Electric Company shall file with the Commission for its approval journal or other entries transferring from fixed capital to other appropriate accounts under the uniform system of accounts now in effect its investment in the generating equipment and gas wells referred to in the foregoing opinion as being excluded from the rate base.

5. Make a study and report to the Commission on or before June 30, 1934 as to the conditions on its entire system relating to inequitable application of rate schedules.

The proceedings in Case 3424 will be kept open for further order of this Commission relative to the refunds to consumers, the question of extraordinary maintenance and the study of territorial application of rate schedules.

Except as otherwise provided, the effective date of this order shall be November 28, 1933.

The foregoing opinion and order are hereby approved and ordered filed as the opinion and order of the Railroad Commission of the State of California.

Dated at San Francisco this ¹⁵ day of November, 1933.

C. C. Leary
Samuel B. Dwyer
W. H. Quinn
M. B. Harris
W. H. Quinn
Commissioners.

EXHIBIT "A"

SCHEDULE C-1CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following cities and incorporated towns:

San Francisco Division:

San Francisco.

East Bay Division:

Alameda, Albany, Berkeley, Emeryville, Oakland and Piedmont.

RATE:

First	200 cu. ft. or less per meter per month	\$0.80
Next	3,800 cu. ft. per meter per month -----	7.0¢ per 100 cu.ft.
Next	26,000 cu. ft. per meter per month -----	6.0¢ per 100 cu.ft.
Next	170,000 cu. ft. per meter per month -----	5.2¢ per 100 cu.ft.
All over	200,000 cu. ft. per meter per month -----	5.0¢ per 100 cu.ft.

SCHEDULE C-1-DLARGE RESIDENTIAL COMBINATION SERVICENATURAL GASAVAILABILITY:

Available upon application, for service to single family residences having central heating plants and located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers.

TERRITORY:

This rate applies to the following cities and incorporated towns:

San Francisco Division:

San Francisco.

East Bay Division:

Alameda, Albany, Berkeley, Emeryville, Oakland and Piedmont.

RATE:

First	200 cu. ft. or less per meter per month	\$0.80
Next	3,800 cu. ft. per meter per month -----	7.0¢ per 100 cu.ft.
Next	26,000 cu. ft. per meter per month -----	6.0¢ per 100 cu. ft.
All over	30,000 cu. ft. per meter per month -----	3.5¢ per 100 cu. ft.

SCHEDULE C-1-ECOMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in San Francisco, Daly City, Colma, Lawndale, South San Francisco and intervening territory; also in Alameda, Albany, Berkeley, Emeryville, Oakland, Piedmont, Richmond, El Cerrito, San Pablo and vicinity; and in San Leandro.

RATES:

Fixed Charge: Based on aggregate hourly burner capacity or rating as follows, per year:

First 400,000 B.t.u. (see Note below) or less.....	\$72.00
Next 1,000,000 B.t.u. per 100,000 B.t.u.....	7.00
Next 2,000,000 B.t.u. per 100,000 B.t.u.....	3.50
Excess over 3,400,000 B.t.u. per 100,000 B.t.u.....	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu. ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 sq. ft. of radiation. Similarly, 1,000,000 B.t.u. (approximately 870 cu. ft. of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 sq. ft. of radiation, etc.

Commodity Charge (to be added to Fixed Charge):

First 50,000 cu. ft. used per month.....	3¢	per 100 cu. ft.
Next 200,000 cu. ft. used per month.....	2.5¢	per 100 cu. ft.
Next 400,000 cu. ft. used per month.....	2¢	per 100 cu. ft.
All excess over 650,000 cu. ft. used per month..	1.5¢	per 100 cu. ft.

Minimum Monthly Charge: The Fixed Charge.

SCHEDULE C-2

CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

Within the East Bay Division:

Richmond, El Cerrito, Hayward, San Leandro, Alvarado, Center-ville, Decoto, Irvington, Newark, Niles, San Lorenzo, San Pablo, Mission San Jose, Warm Springs and contiguous suburbs of each supplied from local distribution system in each community and intervening territory; also the unincorporated territory adjacent to the cities to which Schedule C-1 is applicable.

Within the San Jose Division:

Atherton, Belmont, Burlingame, Hillsborough, Lomita Park, Menlo Park, Millbrae, Palo Alto, Redwood City, San Bruno, San Carlos, San Mateo, San Jose, Los Gatos, Mountain View, Sunnyvale, Santa Clara, Agnew, Campbell, Willow Glenn, Los Altos, Cupertino, Saratoga, Milpitas, Alviso and contiguous suburbs of each supplied from local distribution system in each community and intervening territory.

Within the San Francisco Division:

Colma, Daly City, Lawndale, South San Francisco and contiguous suburbs of each supplied from local distribution systems in each community and intervening territory.

RATE:

First 200 cubic feet, or less, per meter per month:

Incorporated territory.....\$0.85
Unincorporated territory..... 1.15

Next	3,200 cubic feet per meter per month.....	7.9¢ per 100 cu.ft.
Next	28,000 cubic feet per meter per month.....	6.1¢ per 100 cu.ft.
Next	170,000 cubic feet per meter per month.....	5.2¢ per 100 cu.ft.
All over	200,000 cubic feet per meter per month.....	5.0¢ per 100 cu.ft.

SCHEDULE G-2-DLARGE RESIDENTIAL COMBINATION SERVICENATURAL GASAVAILABILITY:

Available upon application, for service to single family residences having central heating plants and located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers.

TERRITORY:

This rate applies to the following localities:

Within the East Bay Division:

Richmond, El Cerrito, Hayward, San Leandro, Alvarado, Centerville, Decoto, Irvington, Newark, Niles, San Lorenzo, San Pablo, Mission San Jose, Warm Springs and contiguous suburbs of each supplied from local distribution system in each community and intervening territory; also the unincorporated territory adjacent to the cities to which Schedule G-1 is applicable.

Within the San Jose Division:

Atherton, Belmont, Burlingame, Hillsborough, Lomita Park, Menlo Park, Millbrae, Palo Alto, Redwood City, San Bruno, San Carlos, San Mateo, San Jose, Los Gatos, Mountain View, Sunnyvale, Santa Clara, Agnew, Campbell, Willow Glenn, Los Altos, Cupertino, Saratoga, Milpitas, Alviso and contiguous suburbs of each supplied from local distribution system in each community and intervening territory.

Within the San Francisco Division:

Colma, Daly City, Lawndale, South San Francisco and contiguous suburbs of each supplied from local distribution systems in each community and intervening territory.

RATE:

First 200 cubic feet or less per meter per month:

Incorporated territory,..... \$0.85
Unincorporated territory,..... \$ 1.15

Next 3,800 cu. ft. per meter per month,..... 7.9¢ per 100 cu.ft.
Next 26,000 cu. ft. per meter per month,..... 6.1¢ per 100 cu.ft.
All over 30,000 cu. ft. per meter per month,..... 3.5¢ per 100 cu.ft.

SCHEDULE C-2-H

COMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in San Bruno, Los Gatos, San Jose, Hayward, Livermore, Pleasanton and intervening territory and contiguous suburbs supplied from the local distribution system of each; Salinas, Monterey, Pacific Grove, Carmel-by-the-Sea, and intervening territory and contiguous suburbs supplied from the local distribution system of each; all territory in the San Joaquin Valley served by the Company and not provided for on other commercial building heating schedules.

RATES:

Fixed Charge: Based on aggregate hourly burner capacity, as follows, per year:

First 400,000 B.t.u. (see note below) or less,.....	\$72.00
Next 1,000,000 B.t.u. per 100,000 B.t.u.,.....	7.00
Next 2,000,000 B.t.u. per 100,000 B.t.u.,.....	3.50
All excess over 3,400,000 B.t.u. per 100,000 B.t.u.,.....	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu.ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 sq.ft. of radiation. Similarly 1,000,000 B.t.u. (approximately 870 cu. ft. of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 sq.ft. of radiation, etc.

Commodity Charge: (to be added to Fixed Charge):

First 50,000 cu.ft. used per month,.....	3.2¢ per 100 cu.ft.
Next 200,000 cu.ft. used per month,.....	2.7¢ per 100 cu.ft.
Next 400,000 cu.ft. used per month,.....	2.2¢ per 100 cu.ft.
All excess over 650,000 cu.ft. used per month,....	1.7¢ per 100 cu.ft.

Minimum Monthly Charge: The Fixed Charge.

SCHEDULE C-2(a)-ECOMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in Stockton and Tracy and contiguous suburbs supplied from the local distribution system of each.

RATES:

Fixed Charge: Based on aggregate hourly burner capacity, as follows, per year:

First	400,000 B.t.u. (see note below) or less	-----	\$72.00
Next	1,000,000 B.t.u. per 100,000 B.t.u.	-----	7.00
Next	2,000,000 B.t.u. per 100,000 B.t.u.	-----	3.50
All excess over	3,400,000 B.t.u. per 100,000 B.t.u.	---	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu.ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 square feet of radiation. Similarly, 1,000,000 B.t.u. (approximately 870 cubic feet of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 square feet of radiation, etc.

Commodity Charge: (to be added to Fixed Charge):

First	50,000 cubic feet used per month	-----	3.0¢ per 100 cu.ft.
Next	200,000 cubic feet used per month	-----	2.5¢ per 100 cu.ft.
Next	400,000 cubic feet used per month	-----	2.0¢ per 100 cu.ft.
All excess over	650,000 cubic feet used per month	---	1.5¢ per 100 cu.ft.

Minimum Monthly Charge: The Fixed Charge.

SCHEDULE C-4CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

Sacramento Division:

City of Sacramento and contiguous suburbs supplied from Sacramento distribution system.

San Joaquin Division:

City of Stockton and contiguous suburbs supplied from Stockton distribution system.

RATE:

First 200 cubic feet or less per meter per month:

	Incorporated territory	\$0.85
	Unincorporated territory	1.15
Next	3,800 cu. ft. per meter per month	8.3¢ per 100 cu. ft.
Next	25,000 cu. ft. per meter per month	6.7¢ per 100 cu. ft.
Next	170,000 cu. ft. per meter per month	6.0¢ per 100 cu. ft.
All over	200,000 cu. ft. per meter per month	5.0¢ per 100 cu. ft.

SCHEDULE C-4-DLARGE RESIDENTIAL COMBINATION SERVICENATURAL GASAVAILABILITY:

Available upon application, for service to single family residences having central heating plants and located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers.

TERRITORY:

This rate applies to the following localities:

Sacramento Division:

City of Sacramento and contiguous suburbs supplied from Sacramento distribution system.

San Joaquin Division:

City of Stockton and contiguous suburbs supplied from Stockton distribution system.

RATE:

First	200 cubic feet or less per meter per month:	
	Incorporated Territory,.....	\$.85
	Unincorporated Territory,.....	1.15
Next	3,800 cubic feet per meter per month,.....	8.3¢ per 100 cu.ft.
Next	26,000 cubic feet per meter per month,.....	6.7¢ per 100 cu.ft.
All over	30,000 cubic feet per meter per month,.....	3.5¢ per 100 cu.ft.

SCHEDULE C-4-H

COMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) along or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in the City of Sacramento and contiguous suburbs supplied from the Sacramento city distribution system.

RATES:

Fixed Charge: Based on aggregate hourly burner capacity or rating as follows, per year:

First 400,000 B.t.u. (see Note below) or less,.....	\$72.00
Next 1,000,000 B.t.u. per 100,000 B.t.u.,.....	7.00
Next 2,000,000 B.t.u. per 100,000 B.t.u.,.....	3.50
Excess over 3,400,000 B.t.u. per 100,000 B.t.u.,.....	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu.ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 sq. ft. of radiation. Similarly 1,000,000 B.t.u. (approximately 870 cu.ft. of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 sq. ft. of radiation, etc.

Commodity Charge: (to be added to Fixed Charge):

First 50,000 cu. ft. used per month,.....	3.25¢ per 100 cu.ft.
Next 200,000 cu. ft. used per month,.....	2.75¢ per 100 cu.ft.
Next 400,000 cu. ft. used per month,.....	2.25¢ per 100 cu.ft.
All excess over 650,000 cu. ft. used per month,.....	1.75¢ per 100 cu.ft.

Minimum Monthly Charge: The Fixed Charge.

SCHEDULE G-4-(a)-E

COMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in Roseville, Woodland, Davis, Dixon, and intervening territory and contiguous suburbs supplied from the local distribution system of each.

RATES:

Fixed Charge: Based on aggregate hourly burner capacity or rating as follows, per year:

First	400,000 B.t.u. (see note below) or less -----	\$72.00
Next	1,000,000 B.t.u. per 100,000 B.t.u. -----	7.00
Next	2,000,000 B.t.u. per 100,000 B.t.u. -----	3.50
All excess over	3,400,000 B.t.u. per 100,000 B.t.u. -----	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cubic feet of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 square feet of radiation. Similarly, 1,000,000 B.t.u. (approximately 870 cubic feet of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 square feet of radiation, etc.

Commodity Charge: (to be added to Fixed Charge):

First	50,000 cu. ft. used per month -----	3.5¢ per 100 cu. ft.
Next	200,000 cu. ft. used per month -----	3.0¢ per 100 cu. ft.
All excess over	250,000 cu. ft. per month ----	2.5¢ per 100 cu. ft.

Minimum Monthly Charge: The Fixed Charge.

SCHEDULE C-5CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

Cities of Salinas, Monterey and Pacific Grove and contiguous suburbs of each community supplied from the distribution systems located within each community.

RATE:

First	200 cubic feet or less per meter per month:	
	Incorporated territory.....	\$1.00
	Unincorporated territory.....	1.30
Next	3,800 cubic feet per meter per month....	10.5¢ per 100 cu.ft.
Next	26,000 cubic feet per meter per month....	7.2¢ per 100 cu.ft.
Next	170,000 cubic feet per meter per month....	6.0¢ per 100 cu.ft.
All over	200,000 cubic feet per meter per month....	5.0¢ per 100 cu.ft.

SCHEDULE C-6CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

North Bay Division:

City of Vallejo and contiguous suburbs supplied from Vallejo distribution system.

RATE:

First	200 cubic feet or less per meter per month:	
	Incorporated territory.....	\$0.90
	Unincorporated territory.....	1.20
Next	3,800 cubic feet per meter per month....	10.5¢ per 100 cu.ft.
Next	26,000 cubic feet per meter per month....	7.5¢ per 100 cu.ft.
Next	170,000 cubic feet per meter per month....	6.0¢ per 100 cu.ft.
All over	200,000 cubic feet per meter per month....	5.0¢ per 100 cu.ft.

SCHEDULE C-7CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

Sacramento Division:

Woodland, Davis and contiguous suburbs of each; the unincorporated town of Broderick and all consumers supplied from the Sacramento-Woodland transmission line.

City of North Sacramento and contiguous suburbs supplied from North Sacramento distribution system.

San Joaquin Division:

City of Lodi and contiguous suburbs supplied from Lodi distribution system, also all consumers supplied from Stockton-Lodi transmission line.

North Bay Division:

Cities and towns of San Rafael, San Anselmo, Corte Madera, Fairfax, Ross, Kentfield, Larkspur, San Quentin, Sausalito, Mill Valley, Cotati, Penn Grove, Novato, Petaluma, Sebastopol, Santa Rosa, and all contiguous suburbs of each community, supplied from the distribution system in each community, also all consumers supplied from the San Rafael-Santa Rosa and San Rafael-Sausalito transmission lines.

City of Napa and contiguous suburbs supplied from Napa distribution system, also all consumers supplied from Vallejo-Napa transmission line.

Coast Valleys Division:

City of Carmel and contiguous suburbs supplied from Carmel distribution system, also all consumers supplied from Monterey-Carmel transmission line.

RATE:

First	200 cubic feet or less per meter per month:	
	Incorporated territory.....	\$1.10
	Unincorporated territory.....	1.35
Next	3,800 cubic feet per meter per month....	11.5¢ per 100 cu.ft.
Next	26,000 cubic feet per meter per month....	7.9¢ per 100 cu.ft.
Next	170,000 cubic feet per meter per month....	6.0¢ per 100 cu.ft.
All over	200,000 cubic feet per meter per month....	5.0¢ per 100 cu.ft.

Note: In the case of summer cottages and similar short season consumers, the minimum annual charge will be ten times the above minimum monthly charge.

SCHEDULE C-7-E

COMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately motored flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in Santa Rosa, Sebastopol, Sausalito, Belvedere, Fairfax, Vallejo, Benicia, Napa, Sonoma and intervening territory and contiguous suburbs supplied from the local distribution system of each.

RATES:

Service Charge: Based on aggregate hourly burner capacity, as follows, per year:

First 400,000 B.t.u. (see Note below) or less.....	\$72.00
Next 1,000,000 B.t.u. per 100,000 B.t.u.....	7.00
Next 2,000,000 B.t.u. per 100,000 B.t.u.....	3.50
All excess over 3,400,000 B.t.u. per 100,000 B.t.u.....	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu.ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 sq. ft. of radiation. Similarly, 1,000,000 B.t.u. (approximately 870 cu. ft. of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 sq.ft. of radiation, etc.

Commodity Charge: (to be added to Service Charge):

First 50,000 cu.ft. used per month.....	3.7¢ per 100 cu.ft.
Next 200,000 cu.ft. used per month.....	3.2¢ per 100 cu.ft.
All excess over 250,000 cu.ft. used per month.....	2.7¢ per 100 cu.ft.

Minimum Monthly Charge: The Service Charge.

SCHEDULE G-8CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

North Bay Division:

City of Benicia and contiguous suburbs supplied from Benicia distribution system, also all consumers supplied from Vallejo-Benicia transmission line, east from end of present 3-inch Vallejo distribution line.

Sacramento Division:

City of Roseville and contiguous suburbs supplied from Roseville distribution system, also all consumers supplied from Sacramento-Roseville transmission line, north of North Sacramento.

RATE:

First	200 cu.ft. or less per meter per month:	
	Incorporated territory,.....	\$1.20
	Unincorporated territory,.....	1.40
Next	3,800 cu.ft. per meter per month,.....	11.5¢ per 100 cu.ft.
Next	26,000 cu.ft. per meter per month,.....	8.0¢ per 100 cu.ft.
Next	170,000 cu.ft. per meter per month,.....	6.0¢ per 100 cu.ft.
All over	200,000 cu.ft. per meter per month,.....	5.0¢ per 100 cu.ft.

SCHEDULE C-2CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

East Bay Division:

Cities of Livermore and Pleasanton and contiguous suburbs of each, also the suburban territory supplied from the Livermore-Pleasanton tap line.

San Joaquin Division:

City of Tracy and contiguous suburbs.

RATE:

First	200 cu.ft. or less per meter per month:	
	Incorporated Territory,.....	\$2.10
	Unincorporated Territory,.....	1.30
Next	3,800 cu.ft. per meter per month,.....	10.5¢ per 100 cu.ft.
Next	26,000 cu.ft. per meter per month,.....	8.0¢ per 100 cu.ft.
Next	170,000 cu.ft. per meter per month,.....	6.0¢ per 100 cu.ft.
All over	200,000 cu.ft. per meter per month,.....	5.0¢ per 100 cu.ft.

SCHEDULE G-10CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the following localities:

East Bay Division:

Unincorporated town of Sunol and all other unincorporated towns and territory not included in other rate areas.

North Bay Division:

Cities of Healdsburg, Sonoma, St. Helena, Calistoga and contiguous suburbs of each.

Unincorporated towns of Windsor, Fulton, Vineburg, Shellville, Boyes Springs, Agua Caliente, El Verano, Glen Ellen, Yountville, Rutherford, Oakville, and all other unincorporated towns and territory, not included in other rate areas.

Sacramento Division:

City of Dixon and contiguous suburbs.

Unincorporated towns of Elk Grove, Florin and all other unincorporated towns and territory not included in other rate areas.

San Joaquin Division:

Cities of Manteca, Ceres, Patterson, Newman, Oakdale, Riverbank and contiguous suburbs of each.

Unincorporated towns of French Camp, Ripon, Salida, Hughson, Galt, Thornton and all other unincorporated towns and territory not included in other rate areas.

RATE:

First 200 cu. ft. or less per meter per month:

	Incorporated territory,.....	\$1.25
	Unincorporated territory,.....	1.50
Next	3,800 cu.ft. per meter per month,.....	13.0¢ per 100 cu.ft.
Next	26,000 cu.ft. per meter per month,.....	8.0¢ per 100 cu.ft.
Next	170,000 cu.ft. per meter per month,.....	6.0¢ per 100 cu.ft.
	All over 200,000 cu.ft. per meter per month,.....	5.0¢ per 100 cu.ft.

In the case of summer cottages and similar short season consumers the minimum annual charge will be ten times the above minimum monthly charge.

SCHEDULE G-10-ECOMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in Healdsburg, St. Helena, Calistoga, and contiguous suburbs supplied from the local distribution system of each, and to all other unincorporated towns and territory in the North Bay Division not included in other rate areas.

RATES:

Service Charge: Based on aggregate hourly burner capacity or rating as follows, per year:

First	400,000 B.t.u. (see Note below) or less,.....	\$72.00
Next	1,000,000 B.t.u. per 100,000 B.t.u.,.....	7.00
Next	2,000,000 B.t.u. per 100,000 B.t.u.,.....	3.50
All excess over	3,400,000 B.t.u. per 100,000 B.t.u.,.....	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu.ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 sq.ft. of radiation. Similarly 1,000,000 B.t.u. (approximately 870 cu.ft. of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 sq.ft. of radiation, etc.

Commodity Charge (to be added to Service Charge):

First	50,000 cu.ft. used per month,.....	4.0¢ per 100 cu.ft.
Next	200,000 cu.ft. used per month,.....	3.5¢ per 100 cu.ft.
All excess over	250,000 cu.ft. used per month,.....	3.0¢ per 100 cu.ft.

Minimum Monthly Charge: The Service Charge.

SCHEDULE G-11

CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

City of Modesto and contiguous suburbs supplied from Modesto distribution system or from the incoming transmission line south of Granger Ave. (Lateral No. 3).

RATE:

First 200 cu. ft. or less per meter per month:			
	Incorporated territory,.....	\$0.90	
	Unincorporated territory,.....	1.20	
Next	3,800 cu. ft. per meter per month,...	9.5¢	per 100 cu.ft.
Next	26,000 cu. ft. per meter per month,...	7.0¢	per 100 cu.ft.
Next	170,000 cu. ft. per meter per month,...	6.0¢	per 100 cu.ft.
	All over 200,000 cu.ft. per meter per month,...	5.0¢	per 100 cu.ft.

SCHEDULE G-11-D

LARGE RESIDENTIAL COMBINATION SERVICE
NATURAL GAS

AVAILABILITY:

Available upon application, for service to single family residences having central heating plants and located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers.

TERRITORY:

City of Modesto and contiguous suburbs supplied from Modesto distribution system, or from the incoming transmission line south of Granger Ave. (Lateral No. 3).

RATE:

First 200 cu. ft. or less per meter per month:			
	Incorporated territory,.....	\$0.90	
	Unincorporated territory,.....	1.20	
Next	3,800 cu.ft. per meter per month,....	9.5¢	per 100 cu.ft.
Next	26,000 cu.ft. per meter per month,....	7.0¢	per 100 cu.ft.
	All over 30,000 cu.ft. per meter per month,....	3.5¢	per 100 cu.ft.

SCHEDULE G-11-E

COMMERCIAL BUILDING HEATING SERVICE:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for the heating of buildings (other than residences, separately metered flats and apartments) alone or in combination with water heating service through the same meter.

TERRITORY:

This schedule is applicable in the City of Modesto and contiguous suburbs supplied from the Modesto distribution system.

RATES:

Fixed Charge: Based on aggregate hourly burner capacity or rating as follows, per year:

First 400,000 B.t.u. (see note below) or less.....	\$72.00
Next 1,000,000 B.t.u. per 100,000 B.t.u.....	7.00
Next 2,000,000 B.t.u. per 100,000 B.t.u.....	3.50
Excess over 3,400,000 B.t.u. per 100,000 B.t.u.....	1.40

Explanatory Note: "B.t.u." is an abbreviation for British Thermal Unit, which is the standard unit for rating gas appliances. A burner capacity of 400,000 B.t.u. (approximately 350 cu. ft. of natural gas) per hour is ordinarily sufficient for about seven horsepower of boiler rating, or 940 sq. ft. of radiation. Similarly, 1,000,000 B.t.u. (approximately 870 cu. ft. of natural gas) per hour, is sufficient for about 17.5 horsepower or 2,350 sq. ft. of radiation, etc.

Commodity Charge: (to be added to Fixed Charge):

First 50,000 cu. ft. used per month.....	3.0¢ per 100 cu. ft.
Next 200,000 cu. ft. used per month.....	2.5¢ per 100 cu. ft.
Next 400,000 cu. ft. used per month.....	2.0¢ per 100 cu. ft.
All excess over 650,000 cu. ft. used per month..	1.5¢ per 100 cu. ft.

Minimum Monthly Charge: The Fixed Charge.

SCHEDULE C-12

GENERAL SERVICE:

Applicable to all classes of natural gas service for lighting, heating and cooking uses.

TERRITORY:

Applicable to service in the City of Turlock and contiguous suburbs supplied from Turlock distribution system.

RATES:

First 200 cu. ft. or less per meter per month:	
	Incorporated territory\$0.90
	Unincorporated territory 1.20
Next	3,800 cu. ft. per meter per month ...10.0¢ per 100 cu.ft.
Next	28,000 cu. ft. per meter per month ... 7.0¢ per 100 cu.ft.
Next	170,000 cu. ft. per meter per month ... 6.0¢ per 100 cu.ft.
All over	200,000 cu. ft. per meter per month ... 5.0¢ per 100 cu.ft.

SCHEDULE C-16CHARACTER OF SERVICE:

Artificial gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies to the City of Eureka and immediate suburbs.

RATE:

Service Charge: Per meter per month.....\$1.00

Commodity Charge (to be added to Service Charge):

First	5,000 cu. ft. per meter per month.....	\$1.25 per 1,000 c.f.
Next	5,000 cu. ft. per meter per month.....	1.00 per 1,000 c.f.
Next	20,000 cu. ft. per meter per month.....	.90 per 1,000 c.f.
All over	30,000 cu. ft. per meter per month.....	.80 per 1,000 c.f.

Minimum Charge: The Service Charge constitutes the minimum charge.

The above commodity rates are subject to increase on the basis of 3¢ per 1,000 cubic feet for each 10% increase in the cost of oil above the price of \$1.25 per barrel at the plant, upon approval of the Railroad Commission of the State of California, change to be to the nearest cent, provided that, in no case shall the rate be based on an oil cost exceeding \$2.10 per barrel.

SCHEDULE C-16-HDOMESTIC HEATING SERVICE:

Available, upon application, for the heating of residences, alone or in combination with service for cooking and/or water heating through the same meter.

TERRITORY:

This rate applies to the City of Eureka and contiguous suburbs supplied from the Eureka distribution system.

RATE:

Service Charge: Per meter per month.....\$1.00

Commodity Charge: (to be added to Service Charge):

First	3,000 cu. ft. per meter per month.....	\$1.25 per 1000 c.f.
Next	7,000 cu. ft. per meter per month.....	.65 per 1000 c.f.
All over	10,000 cu. ft. per meter per month.....	.50 per 1000 c.f.

Minimum Charge: The service charge.

SCHEDULE C-19CHARACTER OF SERVICE:

Wholesale natural gas service of a heating value as specified and under conditions provided in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies only to natural gas sold at wholesale to the City of Palo Alto.

RATE:

Demand Charge: \$2.50 per month per M.C.F. of maximum day demand, plus,

Commodity Charge: 18¢ per M.C.F. for all gas taken.

SPECIAL CONDITIONS:

(a) The maximum day demand to be used in computing the demand charge for any month will be the greatest number of cubic feet of gas taken by the City in any 24-hour period during that month or the preceding eleven months, considering, however, only the months of November to February, inclusive. During all other months the maximum demand will be the highest established during the preceding months of November to February, inclusive.

(b) The gas will be delivered to the City at the present meter station near the intersection of Middlefield Road and Embarcadero Road in Palo Alto at such pressure as is available in the Company's transmission main serving adjacent territory but not less than 12 lbs. per square inch. Actual meter registration will be adjusted to standard pressure and temperature (14.73 lbs. per square inch absolute and 60° F.)

SCHEDULE G-20

CHARACTER OF SERVICE:

Natural gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

All the rural territory adjacent to and traversed by the Bay Transmission Line from a point near Coyote in Santa Clara County south to a point near Paicines in San Benito County.

RATE:

First	400 cu. ft. or less per meter per month-----	\$1.00
Next	2,600 cu. ft. per meter per month -----	21.0 ¢ per 100 cu.ft.
Next	5,000 cu. ft. per meter per month -----	11.8 ¢ per 100 cu. ft.
Next	7,000 cu. ft. per meter per month -----	11.0 ¢ per 100 cu.ft.
Next	125,000 cu. ft. per meter per month -----	7.0 ¢ per 100 cu.ft.
Next	200,000 cu. ft. per meter per month -----	6.0 ¢ per 100 cu.ft.
All over	400,000 cu. ft. per meter per month -----	5.0 ¢ per 100 cu.ft.

SCHEDULE G-21

SPECIAL HEATING SERVICE:

Available upon application for the heating of residences or buildings alone or in combination with water heating service through the same meter.

TERRITORY:

All the rural territory adjacent to and traversed by the Bay Transmission Line from a point near Coyote in Santa Clara County south to a point near Paicines in San Benito County.

RATE:

6.0¢ per 100 cubic feet.

MINIMUM CHARGE:

\$200.00 per year for the service year ending October 31, payable on a cumulative basis at the rate of \$40.00 per month, commencing with the month of November.

SCHEDULE C-57CHARACTER OF SERVICE:

Artificial gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies in the following localities:

Colgate Division:

Marysville, Yuba City, Oroville, Gridley, and Suburbs of each, and unincorporated territory served from Marysville-Oroville-Chico transmission line.

De Sabla Division:

Chico and Suburbs, and unincorporated territory served from Marysville-Chico transmission line.

RATES:

First	500 cu. ft. or less per meter per month	\$0.90
Next	4,500 cu. ft. per meter per month.....	1.54 per 1000 cu.ft.
Next	5,000 cu. ft. per meter per month.....	1.16 per 1000 cu.ft.
Next	10,000 cu. ft. per meter per month.....	.91 per 1000 cu.ft.
Next	80,000 cu. ft. per meter per month.....	.60 per 1000 cu.ft.
All over 100,000 cu. ft. per meter per month.....		.50 per 1000 cu. ft.

The above rates for gas in excess of the first 500 cubic feet per meter per month are subject to increase or decrease respectively, of one mill per 1,000 cubic feet for each 3.65¢ that the price of coal is greater or less than \$7.40 per ton, delivered at the Marysville Gas Plant; and also of one mill per 1,000 cubic feet for each .85¢ that the average cost of oil is greater or less than \$1.4027 per barrel delivered at said plant, upon approval of the Railroad Commission of the State of California. The rates for gas will be computed to the nearest cent and each change will become effective in bills based on regular meter readings taken on and after 30 days from date of change in full price.

SCHEDULE G-57-E

DOMESTIC HEATING SERVICE:

Available, upon application, for the heating of residences, alone or in combination with service for cooking and/or water heating through the same meter.

TERRITORY:

This schedule is applicable in Marysville, Oroville, Chico, and contiguous suburbs and intervening territory served off of Marysville-Oroville-Chico transmission line.

RATES:

Service Charge: per month (Incorporated)..... \$3.10
(Unincorporated)..... 3.30

Commodity Charge: (To be added to service charge)

Per 100 cubic feet of gas used..... 5.0¢

Minimum Charge: The service charge.

The above rates for gas are subject to increase or decrease, respectively, of one mill per 1,000 cubic feet for each 4.3¢ that the price of coal is greater or less than \$7.40 per ton delivered at the Marysville Gas Plant; and also of one mill per 1,000 cubic feet for each 1.0¢ that the average cost of oil is greater or less than \$1.4027 per barrel delivered at said plant, upon approval of the Railroad Commission of the State of California. The rate for gas will be computed to the nearest cent and each change will become effective on bills based on regular meter readings taken on and after 30 days from date of change in fuel price.

SCHEDULE G-58CHARACTER OF SERVICE:

Artificial gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies in the following localities:

Drum Division:

Nevada District:

Grass Valley, Nevada City and Suburbs.

Shasta Division:

Redding and Suburbs.

Red Bluff and Suburbs.

RATE:

First	500 cu.ft. or less per meter per month...	\$0.90
Next	4,500 cu.ft. per meter per month.....	1.56 per 1000 cu.ft.
Next	5,000 cu.ft. per meter per month.....	1.23 per 1000 cu.ft.
Next	10,000 cu.ft. per meter per month.....	.93 per 1000 cu.ft.
Next	60,000 cu.ft. per meter per month.....	.83 per 1000 cu.ft.
Next	70,000 cu.ft. per meter per month.....	.78 per 1000 cu.ft.
Next	350,000 cu.ft. per meter per month.....	.71 per 1000 cu.ft.
All over	500,000 cu.ft. per meter per month.....	.66 per 1000 cu.ft.

The above rates for gas in excess of the first 500 cubic feet per meter per month are subject to increase or decrease, respectively, of 1.0% per 1000 cubic feet for each 2.8¢ that the average cost of oil delivered to all plants generating gas served under this schedule is greater or less than \$1.54 per barrel, upon approval of the Railroad Commission of the State of California. The rates for gas will be computed to the nearest cent and each change will become effective on bills based on regular meter readings taken on and after 30 days from date of change in oil price.

SCHEDULE C-59

CHARACTER OF SERVICE:

Artificial gas for light, heat and power service will be supplied, of a heating value as specified and under conditions provided for in Rules and Regulations filed with the Railroad Commission of the State of California.

TERRITORY:

This rate applies in the following localities:

Colgate Division:

Colusa and Suburbs.

De Sable Division:

Willows and Suburbs.

RATE:

First	500 cu. ft. or less per meter per month	\$0.20
Next	4,500 cu. ft. per meter per month.....	1.56 per 1000 cu. ft.
Next	5,000 cu. ft. per meter per month.....	1.23 per 1000 cu. ft.
Next	10,000 cu. ft. per meter per month.....	.93 per 1000 cu. ft.
Next	80,000 cu. ft. per meter per month.....	.70 per 1000 cu. ft.
All over	100,000 cu. ft. per meter per month.....	.60 per 1000 cu. ft.

The above rates for gas in excess of the first 500 cubic feet per meter per month are subject to increase or decrease respectively, of 1.0¢ per 1,000 cubic feet for each 2.8¢ that the average cost of oil delivered to all plants generating gas served under this schedule is greater or less than \$1.34 per barrel, upon approval of the Railroad Commission of the State of California. The rates for gas will be computed to the nearest cent and each change will become effective on bills based on regular meter readings taken on and after 30 days from date of change in oil price.

SCHEDULE C-IND.FIRM INDUSTRIAL GAS SERVICENATURAL GASAVAILABILITY:

Available, upon application, to industrial establishments located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers.

TERRITORY:

Entire territory served by the Company with natural gas.

RATES:

First	20,000 cu.ft. per meter per month, the general service schedule applicable.
Next	80,000 cu.ft. per meter per month,....5.0¢ per 100 cu.ft.
Next	100,000 cu.ft. per meter per month,....4.5¢ per 100 cu.ft.
All over	200,000 cu.ft. per meter per month,....3.0¢ per 100 cu.ft.

SCHEDULE CS-1SURPLUS NATURAL GAS SERVICEAVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4,200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

San Francisco, Colma, South San Francisco, and intermediate and adjacent territory north of the southern boundary of South San Francisco; all East Bay territory north of a line drawn at right angles to Washington Avenue at the southern boundary of San Leandro and south of the Sobrante Grant line between San Pablo and Pinole; Monterey, Pacific Grove, Carmel, Salinas and intermediate and adjacent territory; also all consumers having barge delivery of oil at Richmond base price.

RATE:

First	50,000 cu.ft. per month.....	40¢ per 1000 cu.ft.
Next	50,000 cu.ft. per month.....	30¢ per 1000 cu.ft.
Next	900,000 cu.ft. per month.....	17¢ per 1000 cu.ft.
Next	2,000,000 cu.ft. per month.....	14¢ per 1000 cu.ft.
All excess over	3,000,000 cu.ft. per month.....	13¢ per 1000 cu.ft.

Minimum Charge: \$240.00 per year.

SCHEDULE GS-2

SURPLUS NATURAL GAS SERVICE

AVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4,200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces. if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

San Bruno, Los Gatos, San Jose, San Lorenzo, Livermore and intermediate and adjacent territory not included in Schedule GS-1.

RATES:

First	50,000 cu. ft. per month	-----	40.7¢ per 1,000 cu.ft.
Next	50,000 cu. ft. per month	-----	30.7¢ per 1,000 cu.ft.
Next	900,000 cu. ft. per month	-----	17.7¢ per 1,000 cu.ft.
Next	2,000,000 cu. ft. per month	-----	14.7¢ per 1,000 cu.ft.
All excess over 3,000,000 cu. ft. per month			--- 13.7¢ per 1,000 cu.ft.

Minimum Charge: \$240.00 per year.

SCHEDULE CS-3

SURPLUS NATURAL GAS SERVICE

AVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

All territory served by the Company in the San Joaquin Valley as far north along the Stockton-Sacramento transmission line as the Cosumnes River.

RATES:

First	50,000 cu.ft. per month,.....	40¢ per 1000 cu.ft.
Next	50,000 cu.ft. per month,.....	30¢ per 1000 cu.ft.
Next	900,000 cu.ft. per month,.....	17¢ per 1000 cu.ft.
Next	2,000,000 cu.ft. per month,.....	14¢ per 1000 cu.ft.
All excess over	3,000,000 cu. ft. per month,....	13¢ per 1000 cu.ft.

Minimum Charge: \$240.00 per year.

SCHEDULE GS-4SURPLUS NATURAL GAS SERVICEAVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

The cities of Sacramento, Roseville, Woodland, Dixon and intermediate territory and contiguous suburbs supplied from the local distribution system of each; also all territory along the Sacramento-Stockton transmission line as far south as the Cosummes River.

RATES:

First	50,000 cu.ft. per month,.....	42¢ per 1000 cu. ft.
Next	50,000 cu.ft. per month,.....	32¢ per 1000 cu.ft.
Next	900,000 cu.ft. per month,.....	19¢ per 1000 cu.ft.
Next	2,000,000 cu.ft. per month,.....	16¢ per 1000 cu.ft.
All excess over	3,000,000 cu.ft. per month,.....	15¢ per 1000 cu.ft.

Minimum Charge: \$240.00 per year.

SCHEDULE GS-6

SURPLUS NATURAL GAS SERVICE

AVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

The cities of Vallejo, Benicia and intermediate territory, and contiguous suburbs supplied from the local distribution system of each.

RATES:

First	50,000 cu. ft. per month,.....	41.7¢ per 1000 cu.ft.
Next	50,000 cu. ft. per month,.....	31.7¢ per 1000 cu.ft.
Next	900,000 cu. ft. per month,.....	18.7¢ per 1000 cu.ft.
Next	2,000,000 cu. ft. per month,.....	15.7¢ per 1000 cu.ft.
All excess over	3,000,000 cu. ft. per month,.....	14.7¢ per 1000 cu.ft.

Minimum Charge: \$240.00 per year.

SCHEDULE GS-7SURPLUS NATURAL GAS SERVICEAVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

Sausalito, San Rafael, Petaluma, Sebastopol, Santa Rosa, Sonoma, Napa, St. Helena, Calistoga and intermediate territory, and contiguous suburbs supplied from local distribution system of each.

RATES:

First	50,000 cu. ft. per month.....	44 ¢ per 1000 cu. ft.
Next	50,000 cu. ft. per month.....	34 ¢ per 1000 cu. ft.
Next	900,000 cu. ft. per month.....	21 ¢ per 1000 cu. ft.
Next	2,000,000 cu. ft. per month.....	18 ¢ per 1000 cu. ft.
All excess over	3,000,000 cu. ft. per month	17 ¢ per 1000 cu. ft.

Minimum Charge: \$240.00 per year.

SCHEDULE GS-10

SURPLUS NATURAL GAS SERVICE

AVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4,200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

The City of Healdsburg and vicinity, and all other unincorporated territory in North Bay Division not included in other rate areas.

RATES:

First	50,000 cu.ft. per month.....	46¢ per 1000 cu.ft.
Next	50,000 cu.ft. per month.....	36¢ per 1000 cu.ft.
Next	900,000 cu.ft. per month.....	23¢ per 1000 cu.ft.
Next	2,000,000 cu.ft. per month.....	20¢ per 1000 cu.ft.
All excess over	3,000,000 cu.ft. per month.....	19¢ per 1000 cu.ft.

Minimum Charge: \$240.00 per year.

SCHEDULE GS-11SURPLUS NATURAL GAS SERVICEAVAILABILITY:

Available, upon application, to consumers located along existing mains having a delivery capacity in excess of the then existing requirements of domestic and commercial consumers, for surplus natural gas used for the following purposes where operation can be readily continued on other fuels in case of shut off of gas supply:

1. Boiler fuel for boilers producing steam primarily for other than building heating.
2. Building heating with a minimum payment guarantee of \$4200 per year.
3. Heating of green houses.
4. Glass melting tanks, including glass works feeder furnaces if in combination with gas for melting tanks.
5. Steel and iron melting furnaces and forging furnaces.
6. Vitreous enameling furnaces.
7. Drying ovens and evaporators.
8. Kilns, incinerators and calciners.
9. Asphalt melting tanks.

TERRITORY:

All territory served by the Modesto Gas Company.

RATES:

First	50,000 cu. ft. per month,.....	40¢ per 1000 cu. ft.
Next	50,000 cu. ft. per month,.....	30¢ per 1000 cu. ft.
Next	900,000 cu. ft. per month,.....	17¢ per 1000 cu. ft.
Next	2,000,000 cu. ft. per month,.....	14¢ per 1000 cu. ft.
All over	3,000,000 cu. ft. per month,.....	13¢ per 1000 cu. ft.

Minimum Charge: \$240.00 per year.