

ORIGINAL

Decision No. 46268

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

(AMENDED TITLE)

In the matter of the application of  
PACIFIC GAS AND ELECTRIC COMPANY for  
an order of the Public Utilities  
Commission of the State of California  
authorizing it to withdraw and cancel  
all of its filed and effective rate  
schedules applicable to natural gas  
service and its Rule and Regulation  
No. 15 (Gas Main Extensions), and to  
file and make effective in lieu thereof  
the natural gas rate schedules, and  
revised Rule and Regulation attached to  
and made a part hereof.

Application No. 31466  
(Amended)

Appearances and list of witnesses  
are set forth in Appendix "1".

FINAL OPINION

Pacific Gas and Electric Company, operating a public utility gas system in portions of central and northern California, on June 7, 1950, filed the above-numbered application for authority to increase natural gas rates in the year 1951 by an estimated \$15,553,800. On September 27, 1950 it filed an amended application requesting that this amount be increased to \$18,158,000 for the year 1951 and \$19,278,000 for 1952 by reason of the increase in federal income tax rates between said filing dates. At the close of the hearing on November 22, 1950, applicant made a motion asking for interim rate relief starting January 1, 1951.

On January 23, 1951, the Commission rendered its first interim opinion and order on the amended application which authorized applicant to surcharge existing rates by 11.5%, with certain exceptions, estimated to yield additional revenues of about \$7,000,000 per year. The second interim opinion, rendered

on May 22, 1951, authorized the revision of Rule and Regulation No. 15, Gas Main Extensions, in order to reflect the present-day levels of gas rates and of unit prices of labor and materials. The third interim opinion, rendered on May 29, 1951, authorized amortization of the acquisition adjustment account of the Pacific Gas and Electric Company and directed a change in the depreciation practices for the gas department, which principle also will be applied to other departments of the company, to a "remaining life" basis. The net effect of the third interim opinion was to reduce, at that time, applicant's requested gas rate increase by approximately \$1,900,000 annually.

Twenty-one days of public hearings were held at San Francisco before Commissioner Harold P. Huls and Examiner M. W. Edwards, during the period October 11, 1950 to June 19, 1951, on the application amending the original application filed June 7, 1950. During the final series of hearings which started June 15, 1951, the company contended that no reduction from its last requested increase of \$18,158,000 for 1951 would be warranted by the conditions then pertaining.

This opinion and order will make final disposition of the amended application. It is not deemed necessary to review all of the matters covered in the three interim orders. Copies thereof were served on all parties of record in this proceeding. The interim increase of \$7,000,000 was the minimum amount on an emergency interim basis necessary to help compensate for the decrease in rate of return occasioned by the investment of \$63,321,000 in the Topock-Milpitas transmission line for the transportation of out-of-state gas and the sharp increase in the average cost of California gas from 15.663 cents per Mcf to 20.295 cents per Mcf. The \$7,000,000 interim increase was based on the company's showing and the record as developed by the

interested parties and the staff. Since granting that increase, our staff has completed its study of applicant's operations and its analysis has been received in evidence. Likewise, the positions of interested parties and protestants now have been placed in the record.

Applicant's Operations

The Pacific Gas and Electric Company is engaged in the business of furnishing gas, electric, water, and steam utility services. Its electric operations cover the greater part of northern and central California, and its gas operations cover much of the same area. Its water and steam utility services are of relatively minor significance, producing less than 1% of the entire gross revenue. As of June 30, 1950 the company served 1,296,584 electric customers and 996,295 gas customers. Gas revenues at the pre-interim level of rates accounted for approximately 30% of the utility's total revenue. The company estimates that approximately 88% of its gas customers are also electric customers. Within the general territory in which the company serves, there is a population of approximately five million - persons.

Natural gas is obtained from some 35 separate fields located at various points in central and northern California, and from Texas. Practically all fields in its service area are interconnected by transmission lines to the system load center except the field in the Eureka area in Humboldt County, which serves an isolated system. Out-of-state gas is brought to the system load center through the Topock-Milpitas high pressure natural gas transmission line, 34 inches in diameter and 501 miles in length. This line was completed on December 26, 1950, except for compressor stations due for completion in 1951, and was

interconnected at points north of Bakersfield with the existing interconnected transmission system. The company expects that 36% of its requirements in 1951 and over 50% in 1952 will be obtained from out-of-state sources.

✓ Company's Position

The utility estimates that during the 2-year period of 1951 and 1952 the number of its gas customers will increase from 1,033,424 in December, 1950 to 1,127,836 in December, 1952, or 9.1%, that its sales on an average temperature basis will increase from 206,607,000 Mcf in 1950 to 284,442,000 Mcf in 1952, or 37.8%, and that its average operative cost of plant plus working capital will increase from \$243,457,000 in 1950 to \$334,020,000 in 1952, or 37.5%.

The utility also estimates that during the same period, after reflecting the effect of the 11.5% interim rate increase on 1952 estimated sales, its gas department revenues will increase from \$76,058,000 in 1950 to \$112,939,000 in 1952, or 48.4%, but that after reflecting an increase in expenses from \$62,436,000 in 1950 to \$99,162,000 in 1952, or 59.0%, the indicated rate of return for 1952 will be only 4.12%. Applicant requests a 6% rate of return on an undepreciated rate base, including its full claimed allowance for working cash, which return level it claims is necessary in order to attract capital into its business.

After reflecting all of the favorable as well as the unfavorable factors with regard to future revenue and expenses, the utility estimates that the rates proposed in its amended application would return only 6.05% in 1952. Therefore, it did not revise downward its request for an increase of \$18,158,000 in accordance with the indications stated in the third interim order.

Customer Representation

Customers' representatives were present at each of the public hearings and several presented testimony relative to this matter. The representative for a number of cities in the San Joaquin Valley took the position that the San Joaquin Power Division should be considered separately for rate-making purposes because of the proximity of certain gas fields, and that, therefore, none of the costs of the Topock-Milpitas line or the Stanpac line, running between Kettleman Hills field and the San Francisco Bay Area, should be allocated to the San Joaquin District. Another representative for cities located in the northern part of the state took a similar position with reference to the cost of the Topock-Milpitas line because of the availability of local supply. These representatives would assess all of the cost of out-of-state gas to the customers in the San Francisco Bay Area.

Counsel for the Department of the Army, the Department of Defense, and all of the government's executive agencies questioned the proposed rate level for sale of gas to the electric department of the company for generating electricity in its steam-electric plants, and suggested that a higher rate be used, equivalent to the level of the interruptible rates. He recommended that the proposed increase in the cost of out-of-state gas be not included in the estimates for 1952 expenses because this matter is subject to the action of another regulatory commission. He requested exclusion of certain standby gas plants from the rate base and urged that no increase in the 5.9% rate of return formerly authorized by this Commission be allowed.

The position taken by counsel for the California Manufacturers Association was that the proposed increase of 26.53% in firm industrial rates was not substantiated by the record, and

that a small amount more than the interim increase of 11.5% is justified only if the Commission grants the applicant's request in full.

He opposed the company's proposal to increase the interruptible rates because assertedly it was not justified from a cost of service standpoint. He claimed that since June 7, 1950 the interruptible rate rose from 29% to 35% due to escalation in connection with the rise in the market price of fuel oil.

The representative of the City and County of San Francisco took the position that interruptible rates should be tied to the price of fuel oil, that the depreciated investment in standby gas plants should be excluded from the rate base, that a claimed \$4,132,245 overpayment of federal income taxes in 1943, 1944, and 1945, expected to be rebated to the company, be used in lieu of a rate increase or to reduce the allowance for income tax expense, and that a rate of return of 5.25% will enable the company to attract new capital and meet all of its financial requirements.

The representative of the City of Oakland urged that the gas rate applicable to steam-electric generating plants be based upon the costs incurred in the present and prospective operations of the gas department, that the inclusion in the rate base of property for which a full depreciation accrual has been made is not in the public interest, and that the Commission use a depreciated rate base in determining the reasonableness of the earnings of the utility.

#### Evidence on Earnings

Both the applicant and the Commission's staff presented analyses of the earnings of Pacific Gas and Electric Company, gas department, for the year 1950 and estimated year 1951. The company also presented estimates for 1952. For the adjusted

year 1950, the company's computation showed a rate of return of 5.27% while the staff's showed 5.75% on an undepreciated rate base and 6.02% on a depreciated rate base. Even after reflecting the interim level of rates, all computations showed a lowering of rate of return in 1951, with the company's figure dropping to 4.70% and the staff's to 4.63% on an undepreciated rate base and 4.53% on a depreciated rate base. Both sets of estimates are summarized below:

EARNING ESTIMATES OF GAS DEPARTMENT  
(WITH 47% FEDERAL INCOME TAX RATE)

Item	Company Exhibit No. 60			Staff Exhibit 57	Staff Exhibit 58
	Full Year 1951 at Interim Rates	Year 1952 at Interim Rates*	Year 1952 with Proposed Rates*	Year 1951 at Interim Rates	Year 1951 at Interim Rates
Oper. Revenues	\$100,806,000	\$112,939,000	\$125,628,000	\$ 99,066,218	\$ 99,066,218
Expenses					
Operating	71,009,000	83,408,000	83,484,000	70,725,504	70,725,504
Taxes	11,991,000	11,563,000	17,760,000	11,017,000	11,017,000
Depr. & Amort.	3,523,000	4,191,000	4,191,000	3,540,092	6,798,054
Total Exp.	86,523,000	99,162,000	105,435,000	85,282,596	88,540,558
Net Revenues	14,283,000	13,777,000	20,193,000	13,783,622	10,525,660
Rate Bases					
Undepreciated	303,771,000	334,020,000	334,020,000	297,560,000	-
Depreciated	-	-	-	-	232,401,000
Rate of Return	4.70%	4.12%	6.05%	4.63%	4.53%

\* The 1952 results include the increased cost of out-of-state gas requested by El Paso Natural Gas Company from the Federal Power Commission for a full year, while the 1951 results include only two months at the increased figure.

The company took no particular exception to the staff's estimates of revenues and expenses but did question the difference in undepreciated rate base figures for 1951 of approximately \$6,200,000. Practically all of this difference, it stated, is due to the difference in the company's claim of \$10,250,000 for working cash and the staff's allowance of \$3,700,000. It objected to the staff's use of a depreciated rate base for determination of its earning rate. Counsel for applicant requested that the Commission give an answer as to how these important subjects are going to be handled in the future so that the utility will know where it stands.

✓ Over the years, many issues have been raised, certain of which remain to be solved. In this connection, progress can be reported as to the issues of amortization of acquisition adjustment costs, allocation of general expense between departments of the company, and adoption of the reasonable annual depreciation allowances, discussed in Decision No. 43368 in Application No. 29777 (49 CPUC 108) which now satisfactorily have been resolved and do not remain as issues in the present proceeding.

Working Cash

The company defined the term "working cash requirements" as the amount of cash funds, or their equivalent, which the company necessarily employs in the conduct of its business. It seeks the same rate of return on this money as if it were invested in plant. It computed the working cash portion of the rate base to be \$10,250,000 for the year 1951. This amount is comprised of two items: (1) operating working cash, \$5,750,000, and (2) cash funds held for construction, \$4,500,000. The gross requirement of \$10,250,000 is based upon the average monthly balances of cash and United States government securities on hand, with deductions for capitalized value of interest received on United States government securities and an adjustment for taxes accrued in advance of payment. The operating working cash is based upon one month's cost of purchased natural gas plus two months' other operating expenses, exclusive of taxes and depreciation, less an adjustment for taxes accrued in advance of payment, plus the estimated minimum average balance required to sustain bank accounts. By deducting the operating working cash from the gross requirement, a figure



was obtained which the company claims represents average cash held for construction between the dates securities are sold and the proceeds invested in plant.

Following the method adopted by the Commission in the previous rate proceeding involving applicant's gas department, the staff computed a working cash allowance of \$3,700,000 to be included in the 1951 rate base. The method used by the staff was to allow as the gross requirement one average month's cost of purchased gas plus two average months' other operating expenses exclusive of uncollectibles, depreciation, and taxes, and to make a deduction from this gross amount in recognition of the fact that substantial sums are accrued for taxes well in advance of payment and that such funds are intermingled with other corporate funds and used for working cash purposes.

The staff witness used a different definition from that of the company for working cash, viz: an allowance made by a regulatory body in the rate base for the amount of funds that may have been contributed by investors for purposes of operating efficiency and expediency. Under cross-examination, this witness admitted that the working cash formula he used did not make any allowance for costs that may be incurred by the company for carrying substantial sums of cash or its equivalent pending expenditure for construction purposes. This treatment is in accordance with the Commission's opinion in Decision No. 43368. In the staff witness' opinion, such funds held in advance for construction should be compensated for by the allowance for interest during construction.

Another method investigated by the staff witness, to check the adequacy of his allowance for operating working cash, was one employed by the staff in certain recent gas cases involving

southern California utilities which takes into account the experienced average time lag between delivery of service by the company and receipt of payment, the lags experienced by the company in paying its bills, and the required amounts for cash balances and certain other balance sheet items. This method was not presented in detail, but under cross-examination by counsel for applicant the witness testified that the average amount of funds available from operations for working cash was \$4,775,000 compared with a gross operating cash requirement for gas operations of \$4,576,000. This method showed that sufficient funds are available from operations so that the investors, in effect, are not called upon to advance any money for operating working cash.

As the Commission previously has stated, "the purpose of a working cash allowance in the rate base is to compensate the investors for capital which they have supplied to enable the company to operate efficiently and economically and for which they would not otherwise be compensated".<sup>1/</sup> The Commission also has stated that "any construction cash capital needed is an element of the cost of capital and is not includible in rate base".<sup>2/</sup>

In our opinion, the capitalization of the cost of funds held for major construction purposes may properly be accomplished through the charges for interest during construction. While the studies of both the company and the staff have been helpful in arriving at a conclusion, there is a need for more complete factual analyses of working cash requirements before recommending a specific method for the future. Based upon the present record, we find that an allowance of \$3,700,000 is adequate for inclusion in the 1951 rate base.

<sup>1/</sup> Decision No. 41416, re Pacific Tel. and Tel. Co.,  
48 Cal PUC 1, 22.

<sup>2/</sup> Decision No. 43368, re Pacific Gas and Electric Co.,  
49 Cal PUC 107, 117.

Depreciated Rate Base

Applicant also requested a policy determination as to the use of a depreciated or an undepreciated rate base in the future. Counsel for applicant claimed that a depreciated rate base distorted the results obtained by using an undepreciated rate base with the regular depreciation annuity allowance. Under the modified sinking fund method with a depreciated rate base, the interest component as well as the annuity is allowed as a depreciation expense and the depreciation reserve is deducted from the original cost of capital to determine net plant for inclusion in the depreciated rate base.

Under either of these methods, the same rate of return will be shown if the interest rate on the depreciation reserve is identical with the rate of return. In the past it has been common practice to use a rate of interest on the depreciation reserve, with an undepreciated rate base, of one-half per cent or more below the authorized rate of return.

If the rate of return were to be measured or determined entirely by a company's financial requirements, it would be immaterial whether an undepreciated or a depreciated rate base were to be used. However, there are other factors which lead us to favor the depreciated base, as follows:

1. A depreciated rate base is more realistic because it eliminates the question of return on that portion of the investment which has been recovered through depreciation accruals.
2. The rate of return when expressed as a percentage of the rate base is higher when a depreciated rate base is used than when an undepreciated base is employed, in those cases where the rate of interest on the depreciation reserve balance is lower than the rate of return. A review of decisions of other regulatory commissions shows that nearly all of their findings of reasonable rates of return are related to a depreciated rate base. When a rate of return found to be fair and reasonable in

connection with a depreciated base is used to fix rates on an undepreciated base, an increase in net revenue results. As stated later herein, the comparative rates of return in all other jurisdictions relied on by applicant were related to depreciated rate bases.

3. Most of the rates of return found reasonable in decisions of this Commission involving other types of utilities are presently expressed in relationship to a depreciated rate base.
4. The depreciation accruals charged by the company to operating expenses under the sinking fund method include the combined remaining life annuity and interest on the reserve. This total expense item is proper in the use of the depreciated rate base, whereas in using the undepreciated rate base only the annuity portion is recognized as an expense.
5. The depreciated base is related inherently to and in harmony with the financial capital structure of the company.

We conclude that the advantages of a depreciated base are sufficient to warrant a change to this method at this time.

#### Standby Gas Manufacturing Plants

Certain gas manufacturing facilities, used in full time production of gas prior to the advent of natural gas service, have been continued in service by applicant as "standby plants" for use in the event of a shortage of natural gas for firm customers or emergency breakdown of pipeline facilities. These plants are located in San Francisco and Oakland, as well as seven other cities. These plants have been fully depreciated on the books of the company.

In the last rate proceeding, Application No. 29777, the company included the gas plants in the rate base at their original cost plus net additions. The staff presented two rate bases, one including the plants at cost and the alternate excluding the cost of the plants, pointing out the fact that full depreciation provision had been accrued for these properties. In Decision No. 43368, the Commission reviewed the facts as of that date and

concluded that the inclusion of one-half of the cost of the fully depreciated property would be equitable to both the utility and its customers.

In the instant proceeding, both the applicant and the staff have presented rate bases in harmony with this finding. In each case, land has been included at its full cost. Some of the parties in the present proceeding have questioned the equity of including any of the cost of the fully depreciated standby plants in the rate base. Since the company has been permitted to accrue and recover its entire cost of the depreciable portion of these plants, it is urged by protestant parties that it is inequitable to continue to include one-half of the original cost and net additions in the rate base. As of December 31, 1949, the nonlanded capital cost was reported at \$10,708,511. Applicant estimated in 1949 that it would cost between 16 and 19 million dollars to provide new plants capable of the same standby service.

All evidence in the record at present before the Commission is based on the inclusion of one-half of these plants in the rate base in accordance with Decision No. 43368. For the purposes of this decision, the Commission will include in the rate base found reasonable herein an amount equivalent to one-half of the cost of such plants.

Conclusion as to Earnings

Counsel for applicant urges that it be allowed a return equivalent to 6% of its undepreciated rate base. Applicant presented testimony showing how it has financed the cost of its properties, its capital ratios and requirements, the price range of its common stock, and a comparison with public utility stock averages for the last several years, and the earnings on invested capital and rates of return allowed for other natural gas utilities outside of California between January 1, 1945, and June 30, 1950.

Its Exhibit No. 31 contains, among other things, a reference to 18 proceedings involving rates of natural gas utilities. Applicant's witness indicated that the summary did not indicate the nature of some of the rate bases used in the determination and some are said to have been decided on a fair value basis. However, our review of the references cited by applicant indicates that all 18 decisions were predicated on depreciated rate bases, although the witness asked in this case for a return related to an undepreciated base. It appears from the exhibit and from the case citations referred to therein that the rates of return varied from 6.0% to 6.5%.

Counsel for the government urged that the rate of return should not exceed that authorized by the Commission in the earlier gas rate proceeding, which was 5.9% applied to an undepreciated rate base. A spokesman for the City and County of San Francisco urged that a return of 5-1/4% applied to a depreciated rate base

would enable applicant to attract new capital and to meet all its financial requirements, using, in arriving at this conclusion, a suggested allowance of \$2.50 a share for the outstanding shares of common stock.

It appears that applicant has financed the cost of its properties through the issue of bonds, preferred and common stock, and with earnings from operations. Giving effect to an issue of shares of common stock in the early part of 1951, the record shows that its capital structure consisted of bonds in the amount of 51.11% of the total, preferred stock 20.11%, and equity capital 28.78%. The record shows the estimated cost of money represented by bonds, preferred stock, and those reserves accumulated on a sinking fund basis at 3.98%, excluding any consideration of the charges applicable to refunded issues, and at 4.13% including a consideration of such charges. The record further shows that the company for many years has paid dividends at the rate of \$2 a share on its outstanding shares of common stock, and that during the last 10 years its earnings, from all sources, have ranged from a low of \$2.10 a share in 1949 to a high of \$2.72 a share in 1946. In 1950 its earnings were reported at \$2.62 a share, and reports show that for the 12 months ended June 30, 1951, they had declined to \$2.23 a share.

From a review of the record it appears that applicant will have need for additional revenues from its gas department if it is to enjoy a fair return on its investment. We are of

the opinion that the increase in rates should be based on a 52% federal income tax rate because both Houses of Congress have approved bills adopting a 52% rate and as the Commission is informed, there is no material dispute between the two Houses of Congress except as to the effective date.

The record contains data showing wage, material price and construction cost trends. Applicant has ahead of it a substantial construction program to meet demands for service and we believe recognition should be given to the declining return with which it has been faced, and no doubt will be faced in the future, as it proceeds with the installation of additions, improvements and replacements of property at prices in excess of existing average costs.

Having given consideration to all estimates of revenues and expenses for the test year 1951, we find that for that year the company will realize net revenues of approximately \$10,918,000 after the deduction of the interest on the depreciation reserve, but excluding the proposed increased cost of out-of-state gas, and assuming the interim rates in effect throughout the entire period.

On the basis of this finding we conclude that additional gross revenues of \$9,000,000 over and above the interim rates previously authorized will be required to provide applicant with a fair return on its investment and with earnings which will assist it in attracting the capital which will be necessary to finance its capital requirements, and we hereby find that such additional revenues will yield it a return of 6.29% applied to a depreciated rate base of \$232,401,000 for the test year 1951,<sup>1/</sup> which rate, however, we believe will decline to approximately 6.0% for the next 12 months' period.

We find that the \$9,000,000 increase in revenues is justified by the evidence in this proceeding and that the rate of return of 6.0% on a depreciated rate base is fair and reasonable.

<sup>1/</sup> Applied to an undepreciated rate base of \$297,560,000 the additional revenues will yield a return equivalent to approximately 6.0% for the test year 1951.



Authorized Rates

In spreading the increase in rates we have given such weight to the evidence placed in the record by the applicant and the various parties on this subject as appeared appropriate. Some data with respect to costs of service as between the customers in the San Joaquin and Sacramento Valleys, the San Francisco Bay Area and the Eureka area were presented by the protestants and interested parties. The company presented a functional cost analysis, Exhibit No. 32, by a consulting engineer, which contained data with regard to the cost of service by classes and zones. The company also furnished information as to the value of the service to interruptible gas customers.

Consideration also was given to the form of the rates and to the fact that the existing interim rates were the old form of rates with a surcharge of 11½% added. In this final order it now appears proper to discontinue the surcharged form of rate and provide for schedules that show the full rates in their proper relationships. The applicant will be ordered to refile its gas rates in accordance with Exhibit "A" herein.

Cost Differentials by Areas

Representatives of a number of San Joaquin Valley and Sacramento Valley areas presented evidence and made arguments seeking to justify the exclusion of costs associated with the new Texas line as applicable to their territory, together with certain other exclusions. Applicant presented evidence showing the operation of all of these facilities as a unified natural gas transmission network, except as to the isolated lines in Humboldt County.

The record shows that in serving certain areas, the gas is secured from specific fields and is not necessarily a completely

commingled gas over the entire network. It is our opinion, however, that such fact is not necessarily controlling, in that the network of transmission lines permits curtailments to be made area-wide when necessary or feasible in order that service be assured to firm customers throughout the territory. To accomplish this purpose, industrial usage for instance in a given area might be curtailed even though a substantial local supply of gas existed in order to render firm service in another area. The sources of gas are not dedicated to particular areas but normally are available for system requirements.

Under such conditions the unit cost of production and transmission is customarily considered the same at all points of delivery from the interconnected transmission system. Because of extensions of the transmission system into areas remote from the supply of gas, it now appears appropriate to limit this assumption of uniform production and transmission cost to transmission lines which tie production sources together and to the load center.

It is a well-known fact that distribution costs as between areas differ and on this basis we are impressed with the evidence and argument presented by counsel for several San Joaquin Valley cities as to the costs of service in such areas.

Reference is made to the statement of this Commission in Decision No. 36082 in Cases Nos. 4621 and 4622 (44 CRC 588) as follows:

"In this order, it should be specifically understood the consolidation of proceedings herein in no way changes the Commission's former rate fixing policy of considering the San Joaquin area operations separately from the Northern California area as described in Exhibits Nos. 1 and 12."

Case No. 4621 involved the San Joaquin Power Division and Case No. 4622 the other divisions of the company. The Commission does not find evidence in the record in the present proceeding as to the relative level of distribution and commercial costs in the

various divisions served by applicant. Such evidence is helpful in arriving at reasonable classifications of territory in the zone plan. Therefore we will require applicant to prepare a comprehensive analysis of its costs of service as between areas and divisions to be completed in a reasonable time and forwarded to this Commission for review. Upon receipt of such data the Commission will then determine whether or not further hearings should be held.

#### General Service Schedules

A review of the evidence indicates that from a cost standpoint larger increases are warranted in the initial charge and the charge for the next 2300 cubic feet than for succeeding blocks, except for the Eureka area where this observation applies only to the initial charge. Increases for additional usage will be made in lesser amounts, however, as shown by the following table comparing present, proposed, and authorized rates, per 100 cubic feet.

		ZONES						
		1	2	3	4	5	6	10
<b>A. PRESENT BASE RATES (INCLUDING 11.5% SURCHARGE)</b>								
First	200 cu.ft.							
	Incorporated	\$0.72	\$0.78	\$0.84	\$0.89	\$0.95	\$ -	\$0.95
	Unincorporated	0.84	0.89	0.95	1.00	1.06	1.17	1.17
Next	2,300 cu.ft. @	4.38¢	4.59¢	4.94¢	5.35¢	5.80¢	6.24¢	10.50¢
Next	17,500 cu.ft. @	4.26¢	4.46¢	4.67¢	4.91¢	5.18¢	5.46¢	6.52¢
Next	80,000 cu.ft. @	4.18¢	4.18¢	4.29¢	4.40¢	4.52¢	4.63¢	6.30¢
Next	4,900,000 cu.ft. @	4.13¢	4.13¢	4.24¢	4.35¢	4.46¢	4.57¢	6.07¢
Over	5,000,000 cu.ft. @	4.01¢	4.01¢	4.01¢	4.01¢	4.01¢	4.01¢	6.07¢
<b>B. APPLICANT'S PROPOSED RATES</b>								
First	200 cu.ft.							
	Incorporated	\$0.85	\$0.90	\$0.95	\$1.00	\$1.10	\$ -	\$1.10
	Unincorporated	1.05	1.10	1.15	1.20	1.30	1.40	1.40
Next	2,300 cu.ft. @	4.98¢	5.22¢	5.61¢	6.08¢	6.59¢	7.09¢	11.91¢
Next	17,500 cu.ft. @	4.84¢	5.07¢	5.31¢	5.58¢	5.89¢	6.21¢	7.41¢
Next	80,000 cu.ft. @	4.73¢	4.73¢	4.86¢	4.99¢	5.11¢	5.24¢	7.13¢
Next	4,900,000 cu.ft. @	4.67¢	4.67¢	4.80¢	4.92¢	5.05¢	5.18¢	6.87¢
Over	5,000,000 cu.ft. @	4.55¢	4.55¢	4.55¢	4.55¢	4.55¢	4.55¢	6.87¢
<b>C. AUTHORIZED RATES</b>								
First	200 cu.ft.							7
	Incorporated	\$0.80	\$0.85	\$0.90	\$0.95	\$1.05	\$ -	\$ 1.10
	Unincorporated	1.00	1.05	1.10	1.15	1.25	1.35	1.40
Next	2,300 cu.ft. @	4.83¢	5.07¢	5.45¢	5.90¢	6.40¢	7.00¢	10.50¢
Next	17,500 cu.ft. @	4.59¢	4.79¢	5.00¢	5.24¢	5.52¢	5.79¢	6.52¢
Next	80,000 cu.ft. @	4.51¢	4.51¢	4.62¢	4.74¢	4.85¢	4.96¢	6.30¢
Next	4,900,000 cu.ft. @	4.46¢	4.46¢	4.57¢	4.68¢	4.79¢	4.90¢	6.37¢
Over	5,000,000 cu.ft. @	4.35¢	4.35¢	4.35¢	4.35¢	4.35¢	4.35¢	6.07¢

The authorized base rates will continue to be adjusted by the present method for variation in heating content of gas supplied in each particular area. No change in classification of cities and communities between zones as presently existing, pending the division and area cost study and report by applicant as hereinbefore referred to, is being made.

#### Firm Industrial Schedule

All firm industrial service is presently handled on one system-wide rate, Schedule No. G-40, which is applicable to all areas except in the Humboldt Division and a portion of Stockton Division supplied from the transmission lines between Lodi Gas Field and Las Vinas. The company proposed no change in the territory or applicability of this rate. Pending the completion of the area cost study, we are not authorizing any change in territory or applicability of this system-wide rate. A comparison of the present, proposed, and authorized base rate levels is set forth below:

		<u>Present Rate</u>	<u>Proposed Rate</u>	<u>Authorized Rate</u>
First	100 Mcf, per Mcf .....	40.1¢	45.6¢	42.0¢
Next	900 Mcf, per Mcf .....	39.0¢	44.3¢	40.9¢
Next	2,000 Mcf, per Mcf .....	37.9¢	43.0¢	39.8¢
Over	3,000 Mcf, per Mcf .....	36.8¢	41.7¢	38.7¢

Although the California Manufacturers Association contends that no further increase should be authorized in the firm industrial schedule over and above the increase of 11.5% authorized by the first interim order under this application, we are of the opinion that an additional increase of approximately 5.0% is just and reasonable at this time.

In estimating the revenue from gas engines, our staff combined this class of business with the firm industrial class

because the revenue was minor in total amount. After reviewing this matter, we are authorizing a schedule for gas engine service containing the same level of rate increase as is authorized herein for firm industrial service.

#### Service to City of Palo Alto

A schedule for the service to the City of Palo Alto will be re-established, the conditions of which will be in harmony with the special contract heretofore approved by this Commission but with charges designed more in harmony with cost considerations developed in the record. In this instance the customer cost of this service is shown to be \$500 per month, while the demand cost is \$14,100 per month, based on 1951 conditions. With these charges, a related average commodity cost of 22.47 cents per Mcf is shown. The average rate per 1,000 cubic feet effective prior to the interim rate was 28.5 cents and the interim rate level is 31.8 cents per Mcf. The rates authorized herein will result in an average rate of 32.7 cents per Mcf based on the staff's estimate of 1951 sales.

#### Industrial Interruptible Natural Gas Service

The California Manufacturers Association presented evidence pointed toward maintenance of the present level of the industrial interruptible rate, while the applicant and some of the other interested parties seek substantially higher charges for such service on the basis of the competitive costs of fuel oil. The Manufacturers Association bases its showing to a considerable extent upon the cost allocation shown by Exhibit No. 32, which indicates that present revenues exceed costs. However, a review of Exhibit No. 32 indicates that the costs shown therein reflect demand costs only to a very limited extent subject to the following qualifications:

"Because no other demand assignment is made to the Interruptible service, it is not to be inferred that such allocation is not justified. For purposes of this study, it is looked upon as more or less immaterial whether full costs are assigned to the Interruptible service or not."

Considering all of the evidence, the relationship of these rates to the rates for other classifications of natural gas service, the competitive fuel costs and the basis of the cost studies in the record, it is concluded that a reasonable increase in the base rate for interruptible service should be authorized. This will take the form for the purpose of this decision of an increase of 4.8 cents per Mcf in the initial block and an increase of 2 cents in all other blocks, with the retention of the escalator provisions in their present form.

Interruptible Gas for Steam-Electric Generating Plants

Applicant supplies natural gas to its steam-electric generating plants. The principal plants are stations "A" and "P" located at San Francisco, Station "C" at Oakland, the Kern Plant near Bakersfield, the three Contra Costa County Refinery Plants, and the new Moss Landing Plant near Monterey. The capacities of some of these plants are being increased. The new Contra Costa Plant is not presently connected to the company's natural gas system.

Natural gas is supplied to these plants on an interruptible basis with the lowest priority. Moreover, as the usage is concentrated in several large plants, curtailment in large quantities may be effected quickly. The present charge for this service is the higher of either (1) 80% of the interruptible industrial rate, or (2) the direct cost as was provided by Decision No. 43368. Counsel for the United States government, as well as other interested parties, requested that consideration be given to charging a higher rate for steam plant interruptible service and pointed out in addition that substantial gas plant investments had been made specifically for service to such steam-electric generating plants which investment should be reflected in the rate developed for this service.

The record in this proceeding contains additional data as to costs of service, particularly Exhibit No. 32, which was not available to the Commission in the prior proceedings, and it appears that there is merit in the position taken by the interested parties as expressed above. The Commission will prescribe herein a schedule applicable to service in applicant's steam-electric generating plants. The capital cost of the facilities used exclusively in supplying such services is shown by Exhibit No. 32 to be \$856,000, and the annual charge is computed to be \$139,000, which includes \$72,000 applicable to the Moss Landing transmission main. This annual charge is equivalent to about 16% of the capital cost, but its components are not detailed. An additional \$108,000 annual capital cost associated with the Moss Landing transmission line should be included to bring the total to \$180,000 annually for this line. The tariff will provide for a specific charge for natural gas on a volumetric basis of 4 cents less than the terminal base rate for industrial interruptible gas coupled with a fixed monthly charge of \$20,500. The capital base and monthly costs shall be reviewed annually or more often as changed conditions may require and, when appropriate, revised by applicant through tariff filing procedure.

#### Service to Humboldt Division

On the basis of the customer cost component, an increase in the Humboldt Division rate schedule for only the initial charge above the interim level covering the first 200 cubic feet appears warranted. No change in the follow-on blocks will be authorized at this time. However, a propane standby plant is presently in service for the Eureka area, and future costs may be higher as propane service is utilized to a greater extent to augment local natural gas service in this area.

Propane Service

Concerning propane service in the cities of Grass Valley, Nevada City, Red Bluff, and Redding, which service as a whole is relatively minor compared to the system natural gas operations, applicant will be required to proceed with a cost study for the purpose of determining steps necessary to place this service on a reasonable level of earnings.

Gas Service for Interdepartmental Use and for Employees

Discounts for gas service to departments other than for gas used in steam-electric generating plants should be eliminated in order not to place an undue burden on the main body of applicant's firm customers. For authorized company employees, the present 25% discount will be applied to the applicable general service tariff authorized by this order.

Increased Cost of Out-of-State Gas

The record shows that the price of out-of-state gas may increase on November 1, 1951. A higher rate has been sought by the El Paso Natural Gas Company before the Federal Power Commission in F.P.C. Docket No. G-1696. The increase authorized herein does not contemplate the possible increase in the out-of-state gas on November 1, 1951. Should increased rates become effective on or after November 1, 1951, applicant, by supplemental application herein, may seek to increase its rates and charges over and above the rates authorized herein to the extent that increased rates are payable to the El Paso Natural Gas Company, and further, provided such rates are effective subject to possible refund provisions



upon final decision of the Federal Power Commission. Applicant herein shall concurrently present a plan for refunding such amounts to customers as subsequently may be refunded by the El Paso Natural Gas Company to applicant.

Increased Cost of California Gas

In addition to the increase in price of out-of-state gas, the field price of gas produced in California is being increased by local producers from 15.663 cents per Mcf to 20.295 cents per Mcf. This higher average unit price, which has been recognized in the expenses allowed herein, is equivalent to an increase in gas costs of over \$6,000,000 annually.

At this point we desire to observe that the price charged this utility by gas producers is not fixed by this Commission or other state authority. Thus, the utility buys in an unregulated field and sells in a regulated field. Unlike several other states, this state does not, by law, fix the price of gas charged by producers. This is a matter which might well have the consideration of the legislature.

Taxes - Past Over-Assessment

A representative for the City and County of San Francisco questioned applicant's witness on taxes regarding a report in The San Francisco News of June 12, 1951, that an income tax refund of \$4,132,245.90 was to be made by the Internal Revenue Bureau because of over-assessments in the years 1943, 1944, and 1945. The representative was concerned over the disposition of the refund and suggested it be used in lieu of a rate increase or, that no cushion be allowed in these proceedings to cover the difference between estimates of income tax and payments.

The company's witness testified that, if and when the company does receive a refund, it will be credited to the company's taxes accrued account. He further pointed out that taxes for the years 1946 to date have not been settled and that the company may be subject to additional assessment for these years.

At this time we are uncertain as to any amount of such refund which may be assignable to the gas department and as to the date when such refund, if any, may be made available. Until these facts are known, we cannot decide as to the proper disposition of any refunds. Accordingly, this matter will be left undecided and will be subject to determination when the refund shall have been made, which fact, together with all necessary details, shall be reported to the Commission by applicant.

O R D E R

Pacific Gas and Electric Company, having applied to this Commission for an order authorizing increases in natural gas rates and charges, public hearings having been held, the matter having been submitted and being ready for decision,

IT IS HEREBY FOUND AS A FACT that the increases in rates and charges authorized herein are justified, and that present rates, in so far as they differ from those herein prescribed for the future, are unjust and unreasonable; therefore,

IT IS HEREBY ORDERED that:

1. Applicant is authorized and directed to file in quadruplicate with this Commission after the effective date of this order, in conformity with General Order No. 96, revised schedules with the changes in rates shown in Exhibit "A" attached hereto, and after not less than one (1) day's notice to this Commission and to the public, to make said rates effective for service rendered on and after October 24, 1951.
2. Applicant is authorized and directed to increase the rates for natural gas service to the City of Palo Alto for resale purposes under a special contract, dated March 27, 1946, as amended, in accordance with Schedule G-60, being filed as above ordered for service rendered on and after October 24, 1951, and, concurrently with such change in rates, amend said contract so as to be consistent with and comply with the rates and special conditions set forth in the filed wholesale tariff.

3. Applicant shall prepare a cost-of-service study for its natural gas systems and propane systems, as between divisions and areas, to be completed and submitted on or before June 30, 1952.
4. Applicant may file a supplemental application with the Commission and serve copies thereof upon the parties hereto as to any increase in rates for out-of-state gas as filed in Federal Power Commission Docket No. G-1696, and include therein its proposal for revising rates to cover any increases as well as the procedure covering any refunds to applicant's customers if refunds are later ordered paid to applicant by Federal Power Commission in said Docket No. G-1696.
5. When applicant receives any refund of income taxes covering the years 1943, 1944 and 1945, it shall promptly advise the Commission and parties hereto as to the total amount of the refund, the amount assignable to the gas department operations and its suggested disposition of such refunds.
6. Applicant shall review annually, or more often as changed conditions may require, the capital base and monthly costs upon which the facility charge to its steam-electric plants is predicated, and revise the rate, when appropriate, by tariff filing.

The effective date of this order shall be twenty (20) days after the date hereof.

Dated at San Francisco, California, this 2nd day of October, 1951.

R. F. Zimmerman  
President.

Justus F. Gassen  
Harold L. Lila  
John E. Mitchell

Commissioners.

APPENDIX "1"  
Sheet 1 of 2

LIST OF APPEARANCES

Appearances for applicant: Robert H. Gerdes and Ralph W. DuVal.

Protestants: City of Oakland, by John W. Collier and Loren W. East; City and County of San Francisco, by Dion R. Holm and Paul Beck; City of Sacramento, by Everett Glenn and Anthony J. Scalora; City of Vallejo, by W. G. Elliott; County of Alameda, by J. F. Coakley and David I. Wendel; City of Bakersfield, by J. Kelly Steele and C. M. Ozias; City of Palo Alto, by Harold L. May.

Interested Parties: City of Berkeley, by Ross Miller, Fred C. Hutchinson and Robert T. Anderson; California Farm Bureau Federation, by Edson Abel; Department of Defense and all executive agencies of the United States Government, by F. W. Denniston of Department of the Army; California Manufacturers Association, by George D. Rives of Brobeck, Phleger & Harrison; City of Alameda, by Carl Froerer and Stanley B. Whitney; City of Stockton, by Bill L. Dozier; City of Carmel, by Thomas K. Perry; Cities of Fresno, Merced, Madera, Sanger, Selma, Chowchilla, Atwater, Clovis, Fowler, Livingston, Kerman, and County of Kern, by C. M. Ozias, Roger Arnebergh and Clarence A. Winder; City of Turlock, by W. Coburn Cook; City of Merced, by William Richards and Kenneth E. Morley; Brazos Oil and Gas Company, by Richard E. Plumbe; Cities of Arcata, Wheatland, Newman, Ripon, Biggs, Galt, Modesto, Fairfield, Rio Vista, Oakdale, Lodi, Dixon, Riverbank, Roseville, Tracy, Ceres, Arcata and Eureka, and Danish Creamery Association, Crystal Cream and Butter Company, Butte Tallow Company, Western Condensing Company, Peacock Dairies, Inc., and East-West Dairymen's Association, by W. D. MacKay; City of Modesto, by F. W. Halley; City of Lodi, by H. D. Weller.

Other appearances: E. C. McKeage, C. T. Mess, and F. Coleman for the Commission's staff.

APPENDIX "1"  
Sheet 2 of 2

LIST OF WITNESSES

Evidence was presented on behalf of applicant by: J. S. Moulton (maps, charts, cost of gas, summary of results of operations), R. Jenny (scope of operations, history, rates, bill comparisons, main extensions), G. M. Thomas (cost of plant, depreciation), L. N. Knapp (material and supplies), K. C. Christensen (working cash requirements, income taxes), E. J. Lage (price index, wage, pay and cost trends, other production expense, transmission expense, ad valorem taxes), R. S. Fuller (standby plants, Topock-Milpitas line, storage), J. W. Ellis (customers, sales and revenues), J. F. Brennan (normalizing gas sales), S. A. Haavik (California gas production), S. B. Barton (cost of maintenance), H. H. Blasdale (distribution, customers accounting and sales promotion expenses), E. W. Hodges (administrative and general expense, uncollectible accounts and unemployment and old age taxes), E. J. Beckett (fair rate of return), R. A. Wehe (functional cost analysis), C. P. Smith (integrated system operations), D. L. Beaudet (gas plant retirements).

Evidence was presented on behalf of the protestants and interested parties by: Clarence A. Winder (San Joaquin Valley gas operations), Edwin Fleischmann (rate comparisons), and W. D. MacKay (gas production data).

Evidence was presented on behalf of the Commission staff by: E. F. McNaughton (amortization of acquisition adjustments and remaining life depreciation), C. W. Mors (history, present operations and summary of earnings), C. V. Shawler (balance sheet, book depreciation and amortization reserves), L. E. Cooper (operating revenues, expenses and depreciation), F. F. Watters (operating revenues, cost of gas, and temperature adjustment), C. G. Ferguson (gas plant and rate base), V. R. Muth (production expenses), K. J. Kindblad (distribution expenses, customers accounting and collecting expenses, and sales promotion expenses), S. Weber (administrative and general expenses, operating taxes), R. T. Perry (gas plant and common utility plant), G. L. Way (construction work in progress and rate base), C. T. Coffey (working cash capital allowance).

EXHIBIT A  
Page 1 of 9

The presently effective gas tariff schedules are changed as follows and remain unchanged by this order in all other respects:

## 1. All Firm Natural Gas Service Schedules

Delete "SURCHARGE: 11.5% in addition to the above charges.", wherever it occurs in such schedules.

2. All General Natural Gas Service Schedules  
Except Schedule No. G-6.2

Under "Special Conditions", add the following sentence to the special condition: If the customer permanently ceases operation, such contract shall not thereafter continue in force.

## 3. Schedule No. G-1

		Per Customer Per Month	
		Base Rates	Effective Rates
		A	
		1100 Btu	1100 Btu
First	200 cu.ft. or less:		
	Incorporated territory .....	\$0.80	\$0.80
	Unincorporated territory .....	\$1.00	\$1.00
Next	2,300 cu.ft., per 100 cu.ft.....	4.83¢	4.83¢
Next	17,500 cu.ft., per 100 cu.ft.....	4.59¢	4.59¢
Next	80,000 cu.ft., per 100 cu.ft.....	4.51¢	4.51¢
Next	4,900,000 cu.ft., per 100 cu.ft.....	4.46¢	4.46¢
Over	5,000,000 cu.ft., per 100 cu.ft.....	4.35¢	4.35¢

## 4. Schedule No. G-2

		Per Customer Per Month			
		Base Rates	Effective Rates		
			A	B	C
		1100 Btu	1100 Btu	1050 Btu	1000 Btu
First	200 cu.ft. or less:				
	Incorporated territory.....	\$0.85	\$0.85	\$0.85	\$0.85
	Unincorporated territory...	\$1.05	\$1.05	\$1.05	\$1.05
Next	2,300 cu.ft., per 100 cu.ft.....	5.07¢	5.07¢	4.92¢	4.77¢
Next	17,500 cu.ft., per 100 cu.ft.....	4.79¢	4.79¢	4.65¢	4.50¢
Next	80,000 cu.ft., per 100 cu.ft.....	4.51¢	4.51¢	4.37¢	4.24¢
Next	4,900,000 cu.ft., per 100 cu.ft.....	4.46¢	4.46¢	4.33¢	4.19¢
Over	5,000,000 cu.ft., per 100 cu.ft.....	4.35¢	4.35¢	4.22¢	4.09¢

EXHIBIT A  
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5.

## Schedule No. G-3

		Per Customer Per Month				
		Base Rates		Effective Rates		
			X	A	B	C
		100 Btu	1150 Btu	1100 Btu	1050 Btu	1000 Btu
First	200 cu.ft. or less:					
	Incorporated territory.....	\$0.90	\$0.90	\$0.90	\$0.90	\$0.90
	Unincorporated territory....	\$1.10	\$1.10	\$1.10	\$1.10	\$1.10
Next	2,300 cu.ft., per 100 cu.ft....	5.45¢	5.61¢	5.45¢	5.29¢	5.12¢
Next	17,500 cu.ft., per 100 cu.ft....	5.00¢	5.15¢	5.00¢	4.85¢	4.70¢
Next	80,000 cu.ft., per 100 cu.ft....	4.62¢	4.76¢	4.62¢	4.48¢	4.34¢
Next	4,900,000 cu.ft., per 100 cu.ft....	4.57¢	4.71¢	4.57¢	4.43¢	4.30¢
Over	5,000,000 cu.ft., per 100 cu.ft....	4.35¢	4.48¢	4.35¢	4.22¢	4.09¢

6.

## Schedule No. G-4

		Per Customer Per Month					
		Base Rates		Effective Rates			
			A	B	C	D	G
		1100 Btu	1100 Btu	1050 Btu	1000 Btu	950 Btu	800 Btu
First	200 cu.ft. or less:						
	Incorporated territory ....	\$0.95	\$0.95	\$0.95	\$0.95	\$0.95	\$0.95
	Unincorporated territory...	\$1.15	\$1.15	\$1.15	\$1.15	\$1.15	\$1.15
Next	2,300 cu.ft., per 100 cu.ft....	5.90¢	5.90¢	5.72¢	5.55¢	5.37¢	4.90¢
Next	17,500 cu.ft., per 100 cu.ft....	5.24¢	5.24¢	5.08¢	4.93¢	4.77¢	4.35¢
Next	80,000 cu.ft., per 100 cu.ft....	4.74¢	4.74¢	4.60¢	4.46¢	4.31¢	3.93¢
Next	4,900,000 cu.ft., per 100 cu.ft....	4.68¢	4.68¢	4.54¢	4.40¢	4.26¢	3.88¢
Over	5,000,000 cu.ft., per 100 cu.ft....	4.35¢	4.35¢	4.22¢	4.09¢	3.96¢	3.61¢

EXHIBIT A  
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## 7. Schedule No. G-5

	Base Rates		Per Customer Per Month Effective Rates				
	1100	A	B	C	D	E	F
	Btu	Btu	Btu	Btu	Btu	Btu	Btu
First 200 cu.ft. or less:							
Incorporated territory	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05	\$1.05
Unincorporated territory	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25	\$1.25
Next 2,300 cu.ft.,							
per 100 cu.ft. . . . .	6.40¢	6.40¢	6.21¢	6.02¢	5.82¢	5.63¢	5.44¢
Next 17,500 cu.ft.,							
per 100 cu.ft. . . . .	5.52¢	5.52¢	5.35¢	5.19¢	5.02¢	4.86¢	4.69¢
Next 80,000 cu.ft.,							
per 100 cu.ft. . . . .	4.85¢	4.85¢	4.70¢	4.56¢	4.41¢	4.27¢	4.12¢
Next 4,900,000 cu.ft.,							
per 100 cu.ft. . . . .	4.79¢	4.79¢	4.65¢	4.50¢	4.36¢	4.22¢	4.07¢
Over 5,000,000 cu.ft.,							
per 100 cu.ft. . . . .	4.35¢	4.35¢	4.22¢	4.09¢	3.96¢	3.83¢	3.70¢

## 8. Schedule No. G-6

	Base Rates		Per Customer Per Month Effective Rates					
	1100	A	B	C	D	E	F	G
	Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu
First 200 cu.ft. or less . .	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35	\$1.35
Next 2,300 cu.ft.,								
per 100 cu.ft. . . . .	7.00	7.00	6.79	6.58	6.37	6.16	5.95	5.81
Next 17,500 cu.ft.,								
per 100 cu.ft. . . . .	5.79¢	5.79¢	5.62¢	5.44¢	5.27¢	5.10¢	4.92¢	4.81¢
Next 80,000 cu.ft.,								
per 100 cu.ft. . . . .	4.96¢	4.96¢	4.81¢	4.66¢	4.51¢	4.36¢	4.22¢	4.12¢
Next 4,900,000 cu.ft.,								
per 100 cu.ft. . . . .	4.90¢	4.90¢	4.75¢	4.61¢	4.46¢	4.31¢	4.17¢	4.07¢
Over 5,000,000 cu.ft.,								
per 100 cu.ft. . . . .	4.35¢	4.35¢	4.22¢	4.09¢	3.96¢	3.83¢	3.70¢	3.61¢



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## 9. Schedule No. G-6.2

		Per Customer Per Month	
		Base Rates	Effective Rates
			I
		1100 Btu	700 Btu
First	200 cu.ft. or less.....	\$1.35	\$1.35
Next	2,300 cu.ft., per 100 cu.ft.....	7.00¢	5.53¢
Next	17,500 cu.ft., per 100 cu.ft.....	5.79¢	4.57¢
Next	80,000 cu.ft., per 100 cu.ft.....	4.96¢	3.92¢
Next	4,900,000 cu.ft., per 100 cu.ft.....	4.90¢	3.87¢
Over	5,000,000 cu.ft., per 100 cu.ft.....	4.35¢	3.44¢

## 10. Schedule No. G-10

Renumber G-7.

		Per Customer Per Month	
		Base Rates	Effective Rates
			B
		1100 Btu	1050 Btu
First	200 cu.ft. or less.....		
	Incorporated territory.....	\$1.10	\$1.10
	Unincorporated territory.....	\$1.40	\$1.40
Next	2,300 cu.ft., per 100 cu.ft.....	10.50¢	10.18¢
Next	17,500 cu.ft., per 100 cu.ft.....	6.52¢	6.32¢
Next	80,000 cu.ft., per 100 cu.ft.....	6.30¢	6.11¢
Over	100,000 cu.ft., per 100 cu.ft.....	6.07¢	5.89¢

## 11. Schedule No. G-19

Renumber G-10.

Rate:

The regular filed rate schedule applicable in the territory where gas service is supplied, less 25% discount.

## 12. Schedule No. G-40

		Per Customer Per Month								
		Base Rates	Effective Rates							
			X	A	B	C	D	E	F	G
		1100	1150	1100	1050	1000	950	900	850	800
		Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu
First	100 Mcf, per Mcf.....	42.0¢	42.8¢	42.0¢	41.2¢	40.3¢	39.5¢	38.6¢	37.8¢	37.0¢
Next	900 Mcf, per Mcf.....	40.9¢	41.7¢	40.9¢	40.1¢	39.3¢	38.4¢	37.6¢	36.8¢	36.0¢
Next	2,000 Mcf, per Mcf.....	39.8¢	40.6¢	39.8¢	39.0¢	38.2¢	37.4¢	36.6¢	35.8¢	35.0¢
Over	3,000 Mcf, per Mcf.....	38.7¢	39.5¢	38.7¢	37.9¢	37.2¢	36.4¢	35.6¢	34.8¢	34.1¢

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13.

## Schedule No. G-45

		Per Meter Per Year								
		Base Rates		Effective Rates						
		X	A	B	C	D	E	F	G	
		1100	1150	1100	1050	1000	950	900	850	800
		Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu
First	14 Mcf per hp., per Mcf.	43.2¢	44.1¢	43.2¢	42.3¢	41.5¢	40.6¢	39.7¢	38.9¢	38.0¢
Next	14 Mcf per hp., per Mcf.	34.8¢	35.5¢	34.8¢	34.1¢	33.4¢	32.7¢	32.0¢	31.3¢	30.6¢
Over	28 Mcf per hp., per Mcf.	29.8¢	30.4¢	29.8¢	29.2¢	28.6¢	28.0¢	27.4¢	26.8¢	26.2¢

14.

## Schedule No. G-50

			Per Customer Per Month								
			Base Rates		Effective Rates						
			Fuel Oil								
			\$1.50 per Bbl.								
			X		A	B	C	D	E	F	G
			1100	1150	1100	1050	1000	950	900	850	800
			Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu	Btu
First	1,000	Mcf, per Mcf.....	32.7¢	38.4¢	37.7¢	37.0¢	36.4¢	35.7¢	35.1¢	34.4¢	33.8¢
Next	2,000	Mcf, per Mcf.....	29.0¢	34.6¢	34.0¢	33.4¢	32.8¢	32.3¢	31.7¢	31.1¢	30.5¢
Next	3,000	Mcf, per Mcf.....	26.0¢	33.6¢	33.0¢	32.4¢	31.9¢	31.3¢	30.8¢	30.2¢	29.6¢
Next	4,000	Mcf, per Mcf.....	27.0¢	32.5¢	32.0¢	31.5¢	30.9¢	30.4¢	29.8¢	29.3¢	28.8¢
Over	10,000	Mcf, per Mcf.....	26.0¢	31.5¢	31.0¢	30.5¢	30.0¢	29.4¢	28.9¢	28.4¢	27.9¢

15.

## Schedule No. G-60

Renumber G-51

EXHIBIT A  
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16. Rule and Regulation No. 2

Under paragraph (C), revise the schedule of percentages per 50 Btu step, following the second paragraph, to include Wholesale Natural Gas Service and Steam Electric Generating Plant - Interruptible Natural Gas Service as indicated below:

General Natural Gas Service Schedules .....	3% per 50 Btu step down to and including 850 Btu.
	2% per 50 Btu step below 850 Btu.
Firm Industrial Natural Gas Service Schedule ...	2% per 50 Btu step.
Gas Engine Agricultural Natural Gas Service Schedule .....	2% per 50 Btu step.
Wholesale Natural Gas Service .....	2% per 50 Btu step.
Interruptible Natural Gas Service Schedules ....	2% per 50 Btu step.
Steam Electric Generating Plant - Interruptible Natural Gas Service .....	2% per 50 Btu step.

17. Add original Schedule No. G-55 attached.

18. Add original Schedule No. G-60 attached.

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## Schedule No. G-55

## STEAM ELECTRIC GENERATING PLANT - INTERRUPTIBLE NATURAL GAS SERVICE

## APPLICABILITY:

Applicable, subject to interruptions in supply as provided in special conditions below, for natural gas service to steam electric generating plants owned and operated by Pacific Gas and Electric Company.

## TERRITORY:

- X - (1150 Btu)  
San Joaquin Division.
- A - (1100 Btu)  
Coast Valleys and San Francisco Divisions.
- B - (1050 Btu)  
East Bay Division.
- C - (1000 Btu)  
Sacramento Division.

## RATES:

## Facility Charge:

An annual charge of \$246,000 payable in 12 equal monthly payments.

## Commodity Charge:

To be added to the Facility Charge:

	Base Rates		Effective Rates			
	Fuel Oil		X	A		C
	\$1.50 per bbl.	1100		1100	1050	1000
	Btu	Btu	Btu	Btu	Btu	Btu
For all gas deliveries, per Mcf.	22.0¢	27.4¢	27.0¢	26.6¢	26.1¢	

The above effective rates are based on the average monthly heating value per cubic foot indicated and as set forth in Rule and Regulation No. 2(C), and a posted price of fuel oil of \$1.80 per barrel as set forth in Special Condition (1) below.

## Minimum Charge:

The minimum charge shall be the annual facility charge.

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Schedule No. C-55 (Continued)

SPECIAL CONDITIONS:

1. The rates in effect at any time vary with the market price of fuel oil in tank car lots as regularly quoted or "posted" either by the Standard Oil Company of California f.o.b. its Richmond Refinery, or by the Union Oil Company of California f.o.b. its Oleum Refinery, or by the Shell Oil Company, f.o.b. its Martinez Refinery, or by the Tide Water Associated Oil Company f.o.b. its Avon Refinery, whichever posted price is the lowest, and shall be determined from the base rates by deducting or adding, respectively, 1¢ for each 6¢ that such price of oil is below or above \$1.50 per barrel from \$1.20 to \$1.80 per barrel, both inclusive, and further by deducting or adding, respectively, 1¢ for each 12¢ that such price of oil is below \$1.20 or above \$1.80 per barrel, within the limits of \$1.00 and \$2.00 per barrel, both inclusive.

When a change in the price of fuel oil occurs, the Company shall submit to the California Public Utilities Commission, within a period of fifteen (15) days, an Advice Letter and appropriate tariff sheets setting forth the new effective rates and accompanied by an affidavit of such change in the price of fuel oil. The new rates shall be effective on all regular meter readings taken on or after the thirtieth (30th) day following such change in the price of fuel oil.

2. In case rate changes to be made in conformity with Rate Adjustment for Heating Value rule, Rule and Regulation No. 2(C), and Special Condition 1 above are due to become effective within fifteen (15) days of each other, then the two shall be combined and the later date of the two effective dates shall govern.

3. Service under this schedule is subject to discontinuance without notice in case the Company has an insufficient quantity of natural gas from all sources available to it to supply with natural gas all its other gas consumers, except that service to the Company's own plants shall have priority over service rendered to interruptible gas customers only (a) during periods of existing or threatened emergencies, or when other unusual or special operating conditions require the Company to avail itself of such prior service, or (b) during any other times when such prior service is necessary to prevent interruption or impairment of service to the Company's electric, steam heat or firm gas customers, as to which conditions (a) and (b) the Company shall be the sole judge. In the execution of the foregoing policy, the Company will be guided by its intention that curtailment of its interruptible gas customers in favor of its own plants shall be held to a minimum.

4. The facility charge hereunder shall be reviewed annually, or more often, as changed conditions may require; and where warranted the Company shall file appropriately revised tariff sheets.

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Schedule No. G-60

## WHOLESALE NATURAL GAS SERVICE

## APPLICABILITY:

Applicable only to the City of Palo Alto for the purchase of natural gas at wholesale from Pacific Gas and Electric Company.

## TERRITORY:

The principal points of delivery for gas to be delivered by Seller shall be at the existing meter stations located on Hopkins Avenue, north of Newell Road and on Alma Avenue, south of Oregon Street.

## RATES:

## Demand Charge:

Per Month

Based on the maximum billing month consumption, per Mcf. 7.5¢

## Commodity Charge:

To be added to the Demand Charge:

	Base Rate 1100 Btu	Effective Rate 1100 Btu
For all gas deliveries, per Mcf.	20.0¢	20.0¢

## Minimum Charge:

The minimum charge shall be the monthly demand charge.

## SPECIAL CONDITIONS:

1. The maximum billing month consumption to be used in computing the monthly demand charge for any month shall be the total volume of gas taken by the City of Palo Alto in that month but not less than the maximum volume taken during any of the preceding 11 months.

2. The heating value of the gas delivered hereunder shall not average for any month less than 900 or more than 1200 Btu per cubic foot dry basis. The above effective rate for the commodity charge is based on the average monthly heating value per cubic foot indicated and as set forth in Rule and Regulation No. 2(e).

3. A contract covering the natural gas requirements of the City of Palo Alto shall be required as a condition precedent to service under this schedule.

4. This rate shall be and remain in full force and effect for each contract year commencing on and including February 21 of each such year, and from contract year to contract year thereafter, until either party shall terminate same by giving the other written notice to that effect at least six (6) calendar months prior to the close of the contract year in which such notice shall be given.