MS

Decision No. 78186

ORIGINAL

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY for authority, among other things, to increase its rates and charges for electric service. (Electric)	Application No. 51552 (Filed December 15, 1969)

(Appearances are listed in Appendix A)

OPINION

The applicant Pacific Gas and Electric Company (hereinafter sometimes called PGandE) filed its application for authority to increase its rates for electric service on December 15, 1969. A technical amendment to correct clerical errors was filed December 31, 1969. The proposed changes in rate schedules subject to this Commission's jurisdiction according to the application would produce gross operating revenues of $778,296,000 during the test year 1970, an increase of $67,437,000 over gross operating revenues at present rates, and a rate of return of 7.80% on a depreciated rate base of $2,752,242,000.

Altogether 47 days of hearing were held before assigned Commissioner Moran, Commissioner Sturgeon and/or Examiner Cline, of which 42 days were in San Francisco, two days in Monterey and one each in Fresno, Eureka and Red Bluff. Some 118 exhibits were introduced into evidence, and there were 5,331 pages of transcript. Fourteen opening briefs were filed on or before September 22, 1970, by the following parties:

1. Pacific Gas and Electric Company (PGandE).
2. Commission staff (Staff).

3. The California Farm Bureau Federation (Farm Bureau).

4. California Labor Federation (AFL-CIO).

5. California Manufacturers Association (CMA).

6. California Rural Legal Assistance (CRLA).

7. City and County of San Francisco (San Francisco).

8. Association of California Consumers
California Farmer-Consumer Information Committee
Consumers Cooperative of Berkeley, Inc.
Consumers Cooperative Society of Palo Alto, Inc.
California State Council of Carpenters
Western Conference of Teamsters
U.A.W. Northern California Community Action Council
Northern California District Council of I.L.W.U.
City of Fresno
(Consumer Associates).

9. Department of Defense and Other Executive Agencies of the United States of America (U.S. Government).

10. H. George Gerdes (Gerdes).

11. Kate Maremont Foundation (Maremont).

12. Northern California Power Agency (NCPA).

13. City of Seaside, City of Gonzales and Castroville Chamber of Commerce (Seaside, Gonzales and Castroville).

14. South Lake Farms and other San Joaquin Valley Growers (Valley Growers).

Five closing briefs were filed on or before October 5, 1970, by the following:

1. PGandE.
2. Staff
3. San Francisco.
4. United States Government.
5. Valley Growers.

The matter was taken under submission on October 5, 1970.

Issues

The following issues have been raised by the parties and require resolution by the Commission:

I. What is a fair and reasonable rate of return for PGandE's Electric Department for the test year 1970?

II. To what extent, if any, should "Below the Line" expenses be considered in arriving at a fair and reasonable rate of return?

III. What are fair and reasonable estimates of operating revenues at present rates and at proposed rates for PGandE's Electric Department for the test year 1970?

A. Domestic Revenue Estimates?

B. Commercial Revenue Estimates?

C. Industrial Revenue Estimates?

D. Agricultural Revenue Estimates?

E. Street Lighting Interdepartmental and Other Revenue Estimates?

F. Is any adjustment in the revenue estimates required by reason of nonjurisdictional services?

G. Total Revenue Estimates?

IV. What are fair and reasonable estimates of operating expenses at present rates and at proposed rates for PGandE's Electric Department for the test year 1970?

A. Should full year, part year, or any treatment be given to 1970 wage increases in estimating operating expenses?

B. Administrative and General Expenses, including Institutional Advertising?

C. Sales Expenses, including Related Advertising?

1. Should any part of sales service expenses be capitalized and included in the rate base?

2. Sales Service and Sales Promotion Expenses, and Related Advertising Expense, as the components of Sales Expense?

D. Production Expenses?

E. Customer Accounts Expenses?

F. Taxes?

G. Other Operating Expenses - Transmission, Distribution and Depreciation?

V. Results of Operation during the test year 1970 at Present Rates and Additional Revenue Requirements.

VI. What rates should be authorized as fair and reasonable for PGandE's Electric Department based on the test year 1970?

A. In General?

1. Preliminary Statement No. 5(a)?

2. Preliminary Statement No. 7?

3. Should system rates be imputed to the special rate situations as proposed by the staff? Rate Zoning?

4. Treatment of Rate Blocks?

B. Domestic Rates?

C. Commercial Rates?

D. Industrial Rates?

E. Agricultural Rates?

F. Other Rates?

1. Interdepartmental?

2. State Water Project?

3. Schools?

4. Supplemental Fringe?

5. Schedule No. P-8?

6. Street Lighting?

7. Ames Research Center and Stanford Linear Accelerator Center?

G. Summary of Authorized Increases in Rates By Class of Service?

VII. Should special rate treatment be established for designated customer groups?

A. The "Elderly" and the Small User?

B. Certain housing projects such as those run by The Maremont Foundation?

VIII. Are PGandE's employment practices discriminatory? If they are, does such discrimination produce economic inefficiency? If it does, how should this affect the relief sought in this proceeding?

IX. Should PGandE's activities in relation to the proposed incorporation of Castroville affect the relief sought in this proceeding? If so, how?

X. Should PGandE's activities before Federal, State and Local Governmental Bodies on matters of direct operating concern affect the relief sought in this proceeding? If so, how?

XI. Jurisdictional Cost Allocation?

XII. Is the request of Northern California Power Agency (NCPA) that the Commission persuade PGandE to implement cooperative action with the Agency warranted?

I. What is a fair and reasonable rate of return for PGandE's Electric Department for the test year 1970?

The criteria to be employed in the determination of a rate of return are well settled and are not disputed.

In Bluefield Co. v. Public Service Commission, 262 U.S. 679, 692-3 (1923), the Supreme Court of the United States held:

> "What annual rate of return will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and

> become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.*

In Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 603 (1944), the Supreme Court said:

> "The rate-making process under the Act, i.e., the fixing of 'just and reasonable' rates, involves a balancing of the investor and the consumer interests... From the investor or company point of view, it is important that there be enough revenue not only for operating expenses but also for the capital costs of business. These include service on debt and dividends on the stock."

According to the evidence presented by PGandE's Chief Financial Officer a fair and reasonable range for rate of return would be 7.82 to 8.0%. The computation upon which this evidence is based appears on page 2 of Exhibit 87 as follows:

	Capital Ratios	Cost	Weighted Cost With Rate of Return On Common Equity	
			12.5%	13.0%
Bonds	53.6%	4.98%	2.67%	2.67%
Preferred Stock	9.4	5.49	0.52	0.52
Common Equity	37.0		4.63	4.81
Total	100.0%		7.82%	8.00%

The recommended rate of return on rate base and the resulting rate of return on common equity of the staff and various other parties to the proceeding are as follows:

	Recommended Rate of Return On Rate Base	Resulting Rate of Return On Common Equity*
Staff	7.2%	10.84%
AFL-CIO	7.1	10.57
U.S. Government	7.0	10.30
Gerdes	6.7	9.49
Consumer Associates	6.62	9.27

* Note: The resulting rates of return on common equity shown above assume embedded costs of bonds and preferred stock and capitalization ratios as shown in Exhibit 87, p.2.

The cost of PGandE's new debt capital has increased about 90% in the last ten years - from about 4-3/4% in 1960 to about 9% in 1970. Also PGandE's embedded cost of debt capital has risen from 3.44% in 1960 to 4.76% in 1970, or about 38%, and will continue to rise until interest rates on new debt issues used to refund maturing debt falls below the interest rate on the maturing debt which now is about 3% and the interest rates on debt issues for new plant falls below the embedded cost of debt of 4.76%.

With the embedded cost of debt increasing, even if the rate of return on rate base remains constant, the rate of return on common equity declines. Since 1967 PGandE's return on average common equity has declined as follows:

1967	12.4%
1968	12.0%
1969	11.6%
1970(June)	11.0%

As shown in Exhibit 87, p. 3, the continuing decline in rate of return on common equity and the increase in the embedded cost of debt has reduced PGandE's bond interest coverage as follows:

Year	Times Interest Earned Before Federal Income Taxes	Times Interest Earned After Federal Income Taxes
1965	4.7	3.5
1966	4.5	3.5
1967	4.4	3.4
1968	4.2	3.2
1969	3.9	3.0
1970(June)	3.4	2.8

PGandE's Chief Financial Officer testified that the declining bond interest coverages threaten PGandE's Aa bond rating and its ability to raise debt capital at reasonable cost. He pointed out that the need for adequate bond interest coverage takes on added importance because PGandE will be required to raise over $1-1/4 billion of external capital during the five-year period from 1970 through 1974.

He further pointed out that since 1966 when the rapid rise in the cost of money began, PGandE's dividend increases have not kept pace with the increasing cost of money. As shown in the following table prepared from Exhibit 87, p. 14, increases in dividends have only roughly matched the increases in the common equity owners' investment.

Year	Per Common Share Book Value	Per Common Share Div. Paid	Book Yield	Effective Rate of New Bond Issues
1965	18.11	1.175	6.5	4.6
1966	19.15	1.275	6.7	5.8
1967	20.24	1.375	6.8	7.0
1968	21.23	1.425	6.7	6.8
1969	22.44	1.500	6.7	8.9
1970(June)	22.91	1.500	6.6	8.7

The following table prepared from Exhibit 87, pp. 3 and 4, shows that PGandE's return on its common equity has not kept pace with the increasing cost of money.

Year	Rate of Return on Average Common Equity	Effective Rate on New Bond Issues
1967	12.4%	7.0%
1968	12.0	6.8
1969	11.6	8.9
1970(June)	11.0	8.7

In support of the 12.5 - 13.0% rate of return on common equity, PGandE's Chief Financial Officer compared this range with the rates of return on common equity earned by the 15 largest combination gas and electric utilities outside California and the 50 largest electric and combination utilities in the United States. The averages appear in Exhibit 87, pp. 9-10, and are set forth below.

Year	Average Rate of Return on Common Equity: 15 Combination Utilities	Average Rate of Return on Common Equity: 50 Electric and Combination Utilities
1967	13.5%	13.2%
1968	12.7	12.7
1969	12.9	12.8

A rate of return of 12.5% on common equity would produce about 3.0 times interest earned coverage after Federal income taxes, and a rate of return of 13% on common equity would produce about 3.1 times interest earned coverage after Federal income taxes.

The staff financial witness testified that in his opinion a rate of return in the range of 7.20% to 7.50% to be applied to an original cost rate base for the electric operations of PGandE which are subject to the jurisdiction of this Commission would be reasonable. The staff in its brief urges that a rate of return of 7.2% be adopted as reasonable by the Commission. The staff contends that such a rate of return will provide PGandE with the opportunity to earn a return on its investment commensurate with that of other enterprises having corresponding risks, it will assure confidence in the financial integrity of the company enabling PGandE to maintain its credit and to attract capital, and it will provide the consumer with the best possible service at the lowest possible price.

Table 9 of Exhibit No. 33 shows:

Comparison of Return on Average Common Equity,
Return on Average Total Capital, and
Times Long-Term Debt Interest Earned
5-Year Averages 1964-68

Item	Pacific Gas and Electric Company	8 Combination Gas & Electric Utilities	9 Electric Utilities
Average Common Equity Ratio	36.64%	36.59%	41.49%
Return on Average Common Equity	11.74	11.99	13.83
Return on Average Total Capital	6.89	6.97	8.03
Times Long-Term Debt Interest Earned After Income Taxes	3.49	3.37	4.05

In Table No. 10 of Exhibit No. 33 is set forth the trend of earnings on average common equity for the five years 1964 through 1968. The figures for the year 1969 which are in the record of this proceeding are added to the table below.

Trend - Earnings on Average Common Equity
1964 - 1969

Year	Pacific Gas and Electric Company	8 Combination Gas & Electric Utilities	9 Electric Utilities
1964	11.05%	11.76%	13.61%
1965	11.54	12.18	14.20
1966	11.72	12.23	14.13
1967	12.38	12.24	13.96
1968	12.03	11.64	13.15
1969	11.59	11.38	13.01

Table No. 11 of Exhibit No. 33 sets forth the trend and related index of earnings on average total capital for the five years 1964 through 1968. The figures for 1969 have also been added in the table below.

Trend - Earnings on Average Total Capital
1964 - 1969

Year	Pacific Gas and Electric Company	8 Combination Gas & Electric Utilities	9 Electric Utilities
1964	6.48%	6.78%	7.96%
1965	6.79	7.04	8.28
1966	6.89	7.11	8.11
1967	7.16	7.05	7.98
1968	7.13	6.88	7.87
1969	7.07	6.98	7.83

Below are lists of the fifteen combination gas and electric utilities used by the PGandE witness in his Exhibit No. 87 and the eight combination gas and electric utilities and the nine electric utilities used by the staff witness in Exhibit No. 33.

15 Combination Gas and Electric Utilities
Used by PGandE Witness

1. Public Service Electric and Gas
2. Consumers Power
3. Niagara Mohawk Power
4. Philadelphia Electric
5. Northern States Power
6. Baltimore Gas and Electric
7. Long Island Lighting
8. Northern Indiana Public Service
9. Wisconsin Electric Power
10. Cincinnati Gas and Electric
11. Illinois Power
12. Public Service of Colorado
13. New York State Electric and Gas
14. Dayton Power and Light
15. Rochester Gas and Electric

8 Combination Gas and Electric Utilities
Used by Staff Witness

1. Baltimore Gas & Electric Co.
2. Consolidated Edison Co. of N.Y.
3. Consumers Power Co.
4. Niagara Mohawk Power
5. Northern States Power
6. Philadelphia Electric
7. Public Service Electric and Gas
8. Virginia Electric and Power Co.

9 Electric Utilities
Used by Staff Witness

1. Commonwealth Edison Co.
2. Detroit Edison Co.
3. Duke Power Co.
4. Florida Power & Light Co.
5. Georgia Power Co.
6. Houston Lighting and Power Co.
7. Ohio Edison Co.
8. Ohio Power Co.
9. Southern Calif. Edison Co.

The staff financial witness testified that he considered many items which influenced his exercise of informed judgment in the determination of a reasonable rate of return for PGandE. Those items which he considered positively to increase his rate of return recommendation include (1) the company's capital structure; (2) the growth potential in PGandE's service area; (3) the trend toward higher debt cost; (4) PGandE's continuing need for large amounts of external financing; (5) PGandE's downward trend in interest coverage; and (6) the effect of continued inflation. Those items which he considered negatively to lower his rate of return recommendation include (7) the size of PGandE; (8) competition as compared to a captive market for PGandE's services; (9) essentiality of the product to the public; (10) PGandE's general trend toward increasing internal financing; and (11) the upward trend of PGandE's earnings over the years.

Table No. 28 of Exhibit No. 33 sets forth the rate of return computed by the staff financial witness assuming various earnings on common equity ranging from 9.0% to 13.0%. Those for 10.5% to 12.5% are shown in the table below.

Item	Capital Ratios	Cost Factor	Weighted Cost with Rate of Return on Common Equity at				
			10.50%	11.00%	11.50%	12.00%	12.50%
Bonds	53.68%	4.95%	2.66	2.66	2.66	2.66	2.66
Preferred Stock	8.94	5.30	.47	.47	.47	.47	.47
Common Equity	37.38		3.92	4.11	4.30	4.49	4.67
Total	100.00%		7.05%	7.24%	7.43%	7.62%	7.80%

PGandE contends that it does not gain a lower cost of capital by reason of its size and the great amounts of its security offerings. PGandE's large construction program and its refunding of outstanding securities require PGandE to make repeated offerings of large amounts of additional securities each year. Investor guidelines restricting the amount of their investments in any one type of industry and in any one company create sales resistance to PGandE's large securities offerings. PGandE also contends that the inclusion of the largest utilities in the staff's list of comparable companies results in the staff financial witness giving double recognition to the size factor.

The staff points out that PGandE has compounded its size with its construction program which was considered as a positive item.

The table on page 11 of Exhibit No. 87 lists PGandE as the largest of the fifty largest utility companies. If measured by revenues, PGandE is larger than the combined three utilities listed in PGandE's 15 comparables. If measured by invested capital, PGandE is as large as the No. 1 and No. 2 utilities of the 15 comparables combined. The staff witness testified "...that a large company is less risky than a small company. In the process of becoming large it acquires a degree of stability, its financing is facilitated and it is less susceptible to the ill effects of sudden fluctuations in business conditions."

With respect to the negative factor competition as compared to a captive market the staff witness testified that PGandE not only enjoys exclusive distribution for its products in its certificated area but its competition with competing energy sources is substantially reduced by the fact that it provides most of its customers with a choice between two of the main energy sources. In its brief PGandE points out that this condition exists with respect to each of the eight combination gas and electric utilities which the staff witness used for making comparisons with PGandE.

In its brief PGandE also points out that the negative factor of essentiality of the product to the public has been taken into account through the inclusion of electric utilities selling the same type of service among the companies with which comparison had been made. The staff states in its reply brief that with respect to this factor the staff is concerned with the relationship between electric utilities and other industries.

The staff witness has considered the general trend toward increasing internal financing as a negative factor. Table 4 of Exhibit No. 33 shows that the amount of funds available from internal sources for PGandE's total financing has increased substantially over the past 20 years and its proportion of total financing has also trended upward.

PGandE in its brief points out that Exhibit No. 33, Table 4, shows that for the past five years, 1965-69, internal funds have accounted for 55.3% of total financing. The data furnished in Exhibit No. 3, p. 4, by PGandE's financial witness shows that the comparable figure for the five-year period 1970-74 will be 48.3%. However, under cross-examination, PGandE's witness admitted that the estimates for internal funds for the years 1970-74 were based on the present rate of return and disregard any future increase which may be authorized by this Commission.

Table 10 and Table 11 of Exhibit No. 33 show that PGandE's earnings on common equity and on total capital increased each year from 1964 to 1967 and in 1968 both dropped slightly. The staff financial witness considered this trend of earnings as a negative factor. PGandE argues that consideration of the 1969 data should change this factor to a positive factor. The staff financial witness concluded after consideration of the 1969 earnings data that the factor should still remain negative.

PGandE emphasizes in its brief the fact that of the 15 combination companies used by its financial witness for comparison with PGandE 13 have filed for or received rate relief since January 1, 1969. The staff response is that of the four companies of these 13, which received relief, the returns found to be reasonable varied from 6.95% to 7.3%.

In its brief AFL-CIO points out that PGandE's financial witness conceded that the gas operation of PGandE is riskier than the electric operation. However, in Application No. 50779 PGandE sought a 7.5 percent rate of return and by Decision No. 76655 issued January 6, 1970, in Application No. 50779 the Commission determined 7.3 percent to be a reasonable rate of return. This party also contends that evidence introduced by PGandE and the staff shows that PGandE's decline in return on common equity has been less severe than for other utilities. AFL-CIO urges that PGandE should be authorized to have its rates established at a level to permit it to earn a 7.1 percent return on original cost rate base. It is urged that such a return on rate base would (1) provide a return on common equity of nearly 11.0 percent, (2) warrant an increase in rates exceeding $47 million yearly, (3) maintain PGandE's financial credit ratings, (4) provide for the attraction of new capital at reasonable rates, and (5) recognize that the risk of PGandE's electric operations is less than that of the gas operations.

In its closing brief PGandE contends that the rate of return should be determined on a total company basis rather than on a departmental basis, and that the rate of return of 7.3 percent found fair and reasonable for the test year 1969 in the recent PGandE gas rate case reflected a fair and reasonable rate of return for PGandE as a whole and not just for the gas operations.

In its brief San Francisco reviews the evidence regarding the rate of return submitted by PGandE, the staff and the U.S. Government. San Francisco agrees with the approach of the staff financial witness but concurs with the U. S. Government as to 7.0 percent being a fair and reasonable rate of return.

In its brief Consumer Associates contends that PGandE has failed to carry its burden of proof that it is entitled to a rate increase. Reference is made to paragraph I of the application which reads as follows:

> "PGandE requests authorization of new electric rates and charges which will increase its electric revenues about 9-1/2% to meet the increasing costs of providing electric service."

Consumer Associates claims that the evidence in this proceeding shows that the costs of providing electric service are not increasing, but are at a pinnacle of their height and that stability is the most reasonable forecast for the future.

The application further sets forth that the cost of new bond money has risen and states that the rate increase is necessary in order to "attract investment in its equity securities in the light of present prevailing economic conditions which are characterized by high interest rates and continuing inflation." In this regard Consumer Associates contends that the evidence demonstrates that the inflation is at its peak and that there is no evidence that such inflation will continue into the future.

Consumer Associates contends that as costs are not going to increase there is no basis for granting an increase in rates and that the Commission should adopt as reasonable the 6.62 percent rate of return for the year 1970 which it is estimated that PGandE will earn under existing rates.

The Assistant Professor of Economics who testified on behalf of Consumer Associates presented the view that the economy may be heading into a recession at the present time. He testified that the Gross National Product reached its peak the third quarter of 1969 and has been declining the last few quarters. Unemployment has been rising the last several months. He pointed out, however, that one contrary statistic to the general downward trend is the price for goods and services. His concluding remarks regarding inflation are as follows (Transcript 4809):

> "I think there would be a lot of debate about whether or not we will be able to stop the inflation completely within the foreseeable future, but I think everyone agrees that inflation will be able to be slowed down so that prices will be rising at a less rapid rate than they are today.
>
> "And certainly if you take a much longer point of view, instead of just one or two years, people expect the government to ultimately get this problem under control and return to a period like we had in the early 60's of stable prices."

This witness for Consumer Associates also testified that interest rates are at an all-time high for the Twentieth Century. From a long range point of view he stated that interest rates tend to fluctuate around a rate of 3-1/2 to 4 percent. The abnormally high interest rates existing at the present time are the product of the attitude of investors who have come to expect inflation and who are bidding up the price of borrowed capital. This witness anticipates that as prices begin to stabilize the inflation components of the interest rates will begin to fall, and interest rates will decline. He anticipates that the interest rates will return to a 5 or 4 percent level within the next 10 or 15 years.

This witness for Consumer Associates testified that the comparisons of PGandE's rates of return on rate base and on common equity should be made not with those of other electric and combination gas and electric utilities but with the rates of return of unregulated industries and of regulated industries which have capital investment requirements similar to those of PGandE, other than electric and combination gas and electric utilities. He pointed out a circular spiral which could result from a comparison of rates of return of other comparable regulated electric and combination gas and electric utilities. For example, if Niagra Mohawk is granted a rate increase, such increase could be used to justify an increase in PGandE's rates. PGandE's rate increase could then be used to justify a further increase in the rates of Niagara Mohawk, etc.

Another witness of Consumer Associates, who is presently a candidate for a Masters Degree in Business Administration at San Francisco State College, concurred in the circular spiral theory of the preceding witness. In the opinion of this witness PGandE can best be compared with automobile manufacturers and parts suppliers. In Exhibit No. 115 the 1965-69 5-year median annual rate of return on equity of the 31 such companies listed is 12.4 percent as compared with 11.1 percent for PGandE. For the 12-month period ending December 31, 1969, the median for the automotive industry was 11.0 percent, a figure identical to that of PGandE.

The following table prepared from Exhibit No. 115 compares the rates of return in the preceding paragraph with the rates of return for other industries.

	Annual Rate of Return on Equity	
Industry	5-Year Median 1965-1969	Median for 1969
Automotive Products	12.4%	11.0%
Aerospace and Defense ...	14.1	11.3
Airline	16.4	6.1
Chemicals	12.9	10.8
Industrial Equipment	12.9	10.9
Nonferrous Metals	13.5	13.0
Steel	8.7	7.3
Surface Transportation ..	5.5	5.1
Utilities	11.9	11.1
PGandE	11.1	11.0

The financial witness for the U. S. Government employed the earnings-price ratio (E/P) theory as the basis for his recommended rate of return on common equity. The E/P theory is that the cost of equity capital to a particular company is the ratio of the current earnings per share to the market price per share. Using the pure E/P theory this witness first arrived at 6.50 percent as the rate of return for PGandE on common equity, and then he made three adjustments. By evaluating the PGandE's common stock potential three years hence the witness increased the 6.50 percent to 7.50 percent. He then made an adjustment of 10 percent in the E/P ratio for corporate costs and pressure to arrive at 8.333 percent as the recommended rate of return on equity, or 6.21 percent as the rate of return on rate base. The 6.21 percent rate of return on rate base was further adjusted to 7.00 percent to account for unforeseen circumstances.

PGandE, in its brief, has pointed out the fallacy of using the E/P method to determine rate of return on an original cost rate base. Many factors affect the price at which the common stock of a utility is sold on the market. The rate of return which a shareholder receives on the market value of his stock ordinarily is not the same as the rate of return which he should be authorized to receive on the book value of his stock.

Mr. Gerdes, in his brief, contends that the rate of return for PGandE should closely approximate the 3-year average yield of long-term U. S. Treasury bonds plus an allowance for reward of excellence in management. The most recent 3-year average yield on long-term U. S. Treasury bonds for the years 1967-69 is 5.40 percent. To this Mr. Gerdes has added 1.30 percent for excellence of PGandE's management to arrive at his recommended rate of return of 6.70 percent. Mr. Gerdes joins in objecting to the rate of return testimony of the financial witness for PGandE and of the staff financial witness because of the circular spiral which can result from making comparisons with other comparable regulated utilities.

In its closing brief PGandE contends that the use of the 5-year historical average return on common equity by the staff financial witness does not properly indicate what PGandE should earn in the future and that it is the function of the Federal Government rather than this Commission to take the necessary measures to fight inflation. PGandE further points out that low earnings are not conducive to good reliable service nor to low rates, and that consumer interests equate with good utility service at reasonable rates.

The Commission finds that (1) the average return on common equity for the 15 combination utilities and 50 electric and combination utilities for the years 1967, 1968 and 1969 ranges from 12.7 to 13.5 percent as set forth on pages 9 to 10 of Exhibit No. 87, (2) the 5-year average return on average common equity for the years 1964 to 1968 for 8 combination gas and electric utilities is 11.99 percent and for 9 electric utilities is 13.83 percent as set forth in Table 9 of Exhibit No. 33, (3) the annual return on common equity for the years 1967, 1968 and 1969 for 8 combination gas and electric utilities declined from 12.24 to 11.38 percent as set forth in Table No. 10 of Exhibit No. 33, and (4) the 5-year median annual rate of return on equity for the years 1965 to 1969 for the automotive industry is 12.4 percent, and for utilities is 11.9 percent as shown in Exhibit No. 115.

The Commission further finds that a rate of return on equity of approximately 11.7 percent should permit PGandE to compete in the money markets and raise the funds it will require to carry out its construction program at reasonable terms.

The Commission finds that a reasonable range for the rate of return on rate base for PGandE at this time is 7.40 to 7.60 percent, and that the level of return on rate base for purposes of authorizing rates in this proceeding should be 7.5 percent. A rate of return on rate base of 7.5 percent will produce a return on equity of approximately 11.7 percent based on the capitalization ratios and costs for bonds and preferred stock shown in PGandE's Exhibit No. 87, page 2.

This Commission takes official notice of its own records. In this connection it is of interest to note that as of 1960 this Commission authorized PGandE to charge 2.71 cents per kilowatt hour for domestic use based on an average use of 250 kilowatt hours, but by this decision requires that charge to be limited to 2.64 cents per kilowatt hour.

II. To what extent, if any, should "Below the Line" expenses be considered in arriving at a fair and reasonable rate of return?

The return on common equity and thus the overall rate of return on rate base could be increased for the shareholders by decreasing or eliminating "below the line" expenses. "Below the line" expenses include the nonoperating expenses which because of the requirements of the uniform system of accounts, or practices of PGandE, are included in Accounts 426.1 through 426.5. These expenses relate to certain donations; expenditures for civic, political and related activities; membership dues to service clubs; and the expenses for "PGandE Progress." Certain expenses which PGandE for accounting purposes shows "above the line", but which have been disallowed for rate making in the past, and which PGandE has not claimed as operating expenses in this proceeding, are also added to the "below the line" expenses for purposes of consideration in connection with this issue. For 1969 the total of these "below the line" items was $1,587,000. Approximately $2,977,000 in "below the line" expenditures would be required to change the return on common stock equity by a tenth of one percentage point. PGandE claims, and the staff agrees, that the $1,587,000 is insignificant insofar as rate of return computations are concerned. However, the staff in its brief does state that if the "below the line" expenses did affect the rate of return significantly, the staff would take the position that these expenses should be considered as a negative factor reducing an otherwise fair and reasonable rate of return.

A consideration of the "below the line" expenses will not reduce the 7.5 percent rate of return on rate base found to be reasonable in this proceeding.

Consumer Associates in its brief suggests that this Commission either direct PGandE to discontinue "below the line" expenses or require PGandE to make full disclosure in the annual report to its stockholders "of expenses which the company has not the intention of charging to the rate-paying public." It would be inappropriate for this Commission to adopt either suggestion. The stockholders have their own remedies if they are of the opinion that such expenditures are not for their benefit. The disclosures in the annual reports which are filed with this Commission and at public hearings such as this are sufficient notice of the amounts and nature of such expenditures to the public, including PGandE's stockholders.

III. What are fair and reasonable estimates of operating revenues at present rates and at proposed rates for PGandE's Electric Department for the test year 1970?

Total operating revenues and comparisons of Tables 3-A and 3-B of Exhibit No. 88 and Exhibit No. 74 are shown below at present and proposed rates.

	1970 Estimated Revenues in $1,000			
			Staff Exceeds PGandE	
	PGandE	Staff[b]	Amount	Ratio
At Present Rates	$705,094[a]	$708,386	$3,292	0.47%
At Proposed Rates	771,728	775,358	3,630	.47

a. Reflects correction by PGandE, Tr. 4737-42.

b. Reflects correction by Staff, Tr. 5053 and Tr. 4284-92.

A. Domestic Revenue Estimates?

The estimates of revenues from domestic customers are as follows:

	Revenue Estimates in $1,000			
			Staff Exceeds PGandE	
	PGandE	Staff	Amount	Ratio
At Present Rates	$259,433	$260,348	$915	0.4%
At Proposed Rates	288,722	289,707	985	.3

The difference in the estimates arose because PGandE used the recorded, adjusted kwhr for the months of February and March of 1970, whereas the staff used estimates based on visual projection of 5-year recorded data for these two months. The staff witness used the recorded figures for January, April and May because these figures approximated the projected 5-year recorded figures, but he did not believe that the recorded, adjusted figures for February and March were sufficiently representative to be adopted for the test year estimates. For the seven months of June through December both

PGandE and the staff estimated the use per customer by a projection of 5-years recorded data.

The PGandE witness attempted to explain that his lower estimates were justified because the trend is to multiple dwellings, mobile homes, and cluster homes all of which use less electric energy than a single family home, electric sales are growing less rapidly than in the past and there is a continuing tendency to more efficient energy use through such technological developments as transistorized circuits. This testimony does not explain, however, why the projected five-year recorded figures corresponded to the recorded, adjusted figures for January, April, May and June of 1970, but not for February and March of 1970.

The staff estimates of domestic revenue for the test year are adopted as reasonable in this proceeding.

B. Commercial Revenue Estimates?

The estimates of revenues from commercial customers are as follows:

	Revenue Estimates in $1,000			
			Staff Exceeds PGandE	
	PGandE	Staff	Amount	Ratio
At Present Rates	$250,552	$251,400	$848	0.3%
At Proposed Rates	275,815	276,749	934	.3

The differences in the PGandE and staff estimates arose because PGandE used recorded use per customer data for the first five months and projected five-year historical use data for the balance of the test year, whereas the staff used projected five-year historical use data for the entire test year.

The justification given by PGandE for the lower estimates is that the rate of growth in this class is slipping.

Reasons given for the decline were the following: fewer work hours, the continued development of large shopping centers and office buildings on industrial rather than commercial schedules, the maturing business in the area, leveling off of government spending leading to a more stable level of energy use by aerospace, electronics, and research and development customers, slowing of population growth, and growth of service-type business whose electric load is not great.

The staff witness testified that the higher estimate should be used because the business recession was responsible for the actual use during the first five months being lower than the projected five-year historical use for these months. No evidence was introduced to show that the economic conditions which have resulted in this decline in commercial use are not representative for the test year, however.

The PGandE estimates of commercial revenue for the test year are adopted as reasonable.

C. Industrial Revenue Estimates?

The estimates of revenue from industrial customers are as follows:

	Revenue Estimates in $1,000			
			Staff Exceeds PGandE	
	PGandE	Staff	Amount	Ratio
At Present Rates	$ 99,188	$ 99,788	$600	0.6%
At Proposed Rates	104,808	105,625	817	.8

The estimates for this category were made in two parts. The largest customers were estimated individually both by PGandE and the staff. The balance was estimated by PGandE by giving consideration to five years of recorded data through May of 1970. The PGandE estimate reflected the fact that the rate of growth of the number of customers in the industrial class has been leveling off.

The staff estimate for the balance was based on analysis of five years of recorded data, 1964 to 1969, and assumed an average of 686 industrial customers. This compares to 673 in the PGandE estimate. In this category there were actually 633 customers in December 1969, and 642 in June 1970. The staff witness admitted that 110 additional customers would have to be added before the end of the year to reach his estimate of an average of 686. He further admitted that the recorded growth will not be that much in 1970 and that the growth would have to exceed that experienced in the last five years to reach such average number of industrial customers.

We are of the opinion that the leveling off of the growth in the number of industrial customers on which the PGandE estimates are based is representative of the growth trend for the test year 1970.

The PGandE estimates of industrial revenue for the test year are adopted as reasonable.

D. Agricultural Revenue Estimates?

The estimates of revenue from agricultural customers are as follows:

	Revenue Estimates in $1,000			
			Staff Exceeds PGandE	
	PGandE	Staff	Amount	Ratio
At Present Rates	$52,659	$53,464	$805	1.5%
At Proposed Rates	58,257	59,144	887	1.5

Precipitation has a dramatic effect upon agricultural customer usage of electricity. PGandE's final estimate was based on the relationship between kwhr sales and the percent of normal precipitation affecting agricultural sales. The staff has pointed out that 1969 was an abnormally wet water year after which large acreages were left flooded, water tables were recharged, and residual irrigation water remained in reservoirs to be used for the 1970 water year. The staff has further pointed out that the method used by PGandE in making its estimate ignores growth indicators such as the steady increase in customers and connected horsepower and the upward trending of the peaks and valleys of annual sales.

The staff estimate was a judgment figure based on a review of 18 studies that considered precipitation, growth, diversion of river water, reservoir storage, declining water level in deep wells, along with other variables, for varying periods of time. The staff witness testified that he looked at the spread and picked a point approximately in the middle of the spread as agricultural sales for the test year 1970. The 18 studies produced kwhr results ranging from 3,581,000,000 kwhr to 4,130,000,000 kwhr. The staff judgment estimate derived therefrom was 3,840,000,000 kwhr. PGandE's estimate was 3,784,000,000 kwhr for the test year.

Horsepower as well as kwhr has an impact upon the rate paid by the agricultural user. Since 1960 there has been an upward trend in connected horsepower. In its original estimate PGandE used 2,251,000 horsepower which is comparable to the horsepower figure used by the staff. PGandE subsequently revised this figure to 2,187,000 annual average hp after consideration of the recorded data for the months of January through June of 1970. The staff in its brief, however, has pointed out that 1970 is a low rather than a representative horsepower year because many of the effects of the very wet year 1969, such as higher water table and abnormally high reservoir storage, still prevail in 1970.

The staff estimates of agricultural revenue for the test year are adopted as reasonable.

E. Street Lighting, Interdepartmental, and Other Revenue Estimates?

PGandE makes no comment regarding the street lighting, interdepartmental, and other revenue estimates. The staff in its brief states there are no significant differences between the PGandE and the staff estimates of revenue in these categories.

The following revenue estimates in these categories are adopted as reasonable:

Category	1970 Estimates in $1,000 At Present Rates	At Proposed Rates
Street Lighting and Railway	$12,545	$13,117
Resale	12,475	14,489
Interdepartmental		
Construction	410	474
Operations	787	898
Other Revenues	17,107	17,151

F. Is any adjustment in the revenue estimates required by reason of nonjurisdictional services?

In its opening brief PGandE points out that it provides certain services that are not subject to the jurisdiction of this Commission. By reason of these nonjurisdictional services certain adjustments have been made to system total revenue estimates and system total expense estimates by PGandE on page 3 of Exhibit No. 60 and by the staff in Table 14-C of Exhibit No. 114.

The amount of such adjustments will be shown under the findings relating to issue V, Results of Operation at Present Rates during the test year 1970 and Additional Revenue Requirements, below.

PGandE made a further reduction of $1,886,000 to reduce the balance of Cal. Oper. (CPUC) revenue shown in column H as $758,132,000 to the $756,246,000 shown in column I, of page 3 of Exhibit No. 60, in order to reduce the rate of return from 7.83% to 7.80%. Since the system total revenue estimate of PGandE was reduced from $778,296,000 to $771,728,000 in Exhibit No. 74, a reduction of $6,568,000, and the rate of return in said column H is therefore less than 7.80%, the $1,886,000 adjustment made in column I is no longer required.

G. Total Revenue Estimates?

The following is a tabulation of the revenue estimates at present rates of PGandE and the staff and the revenue estimates at present rates which are adopted as reasonable in this proceeding:

Operating Revenues
1970 Estimated at Prsent Rates
(Dollars in Thousands)

Class	PGandE	Staff	Adopted
Domestic	$259,433	$260,348	$260,348
Commercial	250,552	251,400	250,552
Industrial	99,188	99,788	99,188
Agricultural	52,659	53,464	53,464
Street Lighting and Railway	12,545	12,545	12,545
Resale	12,472	12,479	12,475
Interdepartmental Construction	388	431	410
Operations	750	824	787
Total Electric	687,987	691,279	689,769
Other Revenues	17,107	17,107	17,107
Total Revenues	705,094	708,386	706,876

IV. What are fair and reasonable estimates of operating expenses at present rates and at proposed rates for PGandE's Electric Department for the test year 1970?

A. Should full year, part year, or any treatment be given to 1970 wage increases in estimating operating expenses?

PGandE has included in its estimate of expenses a provision for wage and salary increase in the amount of $7,898,000. This is based on the assumption that the wage increase granted by PGandE to its employees July 1, 1970 will be in effect during the entire year after this Commission authorizes it to increase its electric rates and therefore that full year treatment should be given to this item of expense. PGandE points out that in the Commission's recent San Diego Gas & Electric Company, Decision No. 77581, issued August 4, 1970, in Application No. 51674, the Commission expressly found that wage increases should be included on a full year basis. PGandE urges that such finding is consistent with the comments regarding the test year of the California

Supreme Court in Pacific Telephone & Telegraph Co. v. Public Utilities Commission, 62 C.2d 634, 645 (1965). The court said:

> "The test period is chosen with the objective that it represent as nearly as possible the operating conditions of the utility which are known or expected to obtain during the future months or years for which the commission proposes to fix rates. The test-period results are 'adjusted' to allow for the effect of various known or reasonably anticipated changes in gross revenues, expenses or other conditions, which did not obtain throughout the test period but which are reasonably expected to prevail during the future period for which rates are to be fixed, so that the test-period results of operation as determined by the commission will be as nearly representative of future conditions as possible."

PGandE further points out that full year treatment of the 1970 general wage increase accords with the treatment both by PGandE and the staff of other large operating expenses. For example, the latest rates for gas sold to the Electric Department, the latest price for fuel oil, and the latest income tax deductions and credits, such as bond interest and exclusion of the tax surcharge, have been assumed for the full year in determining the proper level of operating expenses.

The staff on the other hand has included $3,833,000 for the wage increase from July 1, 1970 to the end of the year. The staff's estimate is slightly less than one-half PGandE's estimate because of the use of a different wage base. The staff pointed out that its position is based on recent Commission decisions commencing with Pacific Telephone and Telegraph Company, Decision No. 67369, issued June 11, 1964, in Case No. 7409, 62 CPUC 775, 834-841, aff. in Pacific Telephone and Telegraph Co. v. Public Utilities Commission, 62 C.2d 634 (1965), and continuing with General Telephone Company of California, Decision No. 75873, issued July 1, 1969, in Application No. 49835, and Pacific Gas and Electric Company, Decision No. 76655, issued January 6, 1970, in Application No. 50779 (Gas).

In its brief the staff urges that with revenue growth being several times the annual wage increment of $7,898,000 PGandE has ample opportunity to absorb the wage increase on the basis of the staff's estimate and without annualization. The staff also asserts that annualization of a mid-test-year wage increase would have the effect of changing the test year for wage expense from January 1 to December 31, 1970 to July 1, 1970 to June 30, 1971, and would put the wage increase out of phase with the test year rate base, revenues, taxes, and results of operation generally.

We find that the annualization of a mid-test-year wage increase would not have the effect of changing the test year for wage expense from the calendar year 1970, because such annualization accords with the treatment of other large operating expenses.

The following table in Exhibit No. 95, page 3-2, shows that PGandE's payroll expense is growing more rapidly than sales and revenues:

Year (A)	Payroll Expense M$ (B)	Wage Rate Increases as of July 1 % (C)	Average Year Revenue M$ (D)	Payroll Expense Per Dollar Revenue (E)	Payroll Expense Per Sales $ Per 2M Kwh (F)
1965	68,265	3.25	542,763	0.126	2,087
1966	73,191	5.76	580,752	0.126	2,063
1967	78,480	4.00	601,671	0.130	2,192
1968	90,631	6.00	639,467	0.142	2,384
1969	99,160	6.50	673,646	0.147	2,459
1970	-	7.50	705,124	-	-

The following table which is taken from Exhibit No. 95, page 3-3, shows payroll has comprised an increasing portion of the revenue dollar. Accordingly, other expenses have received a smaller portion of the revenue dollar. This relationship is shown in the table below in terms of dollars per customer.

Year (A)	Customers (B)	Average Year Revenue Per Cust. $/Cust. (C)	Payroll Per Cust. $/Cust. (D)	Revenue Per Customer Available for Expenses Other Than Payroll: Net Amount $/Cust. (E)	Revenue Per Customer Available for Expenses Other Than Payroll: In % Of Total Rev. Per Cust. (F)
1965	2,287,000	$237.3	$29.8	$207.5	87.4%
1966	2,354,000	246.7	31.1	215.6	87.4
1967	2,404,000	250.3	32.6	217.7	87.0
1968	2,455,000	260.5	36.9	223.6	85.8
1969	2,507,000	268.7	39.6	229.1	85.3
1970	2,568,000	274.6	-	-	-

PGandE contends that these tables show that PGandE's wage costs are growing faster than revenues and faster than the other cost components of the total cost of electric service. Therefore, unless the full, known level of wage expense is adopted the estimate of revenue requirements will be too low, as future electric revenue growth will not compensate for such wage increases. We find that the record supports the factual evidence submitted by PGandE in this connection rather than evidence submitted by other parties. In its exhibits and testimony, PGandE has demonstrated that the facts in this proceeding are clearly different from the facts utilized by the Commission in Pacific Telephone and Telegraph Company, Decision No. 67369, 62 CPUC 775 (1964).

Gerdes contends that the 1970 wage increase was granted by PGandE to its employees substantially without resistance and without commensurate increase of PGandE employee productivity. He therefore urges that the Commission disallow any amount for the 1970 wage increase. The record in this proceeding will not support such contention. The fact that PGandE did not submit its consumers and the public to the dire effects of a prolonged strike before concluding its negotiations with its employees will not justify this Commission in concluding that it did not negotiate in good faith with its employees.

The sum of $7,666,000, which is twice the staff estimate of $3,833,000 for six months' wage increase, is a reasonable expense allowance for the wage increase negotiated by PGandE with its employees during 1970.

B. Administrative and General Expenses including Institutional Advertising?

The following table shows the PGandE, staff and Gerdes estimates for Administrative and General Expense.

	PGandE	Staff	Gerdes
	(Dollars in Thousands)		
At Present Rates	$32,895	$32,915	$31,000
At Proposed Rates	33,259	33,282	-

The difference in this category of expense between PGandE and the staff estimates is due to the difference in franchise requirements resulting from the difference in revenue estimates. Both include an allowance of $273,820 for institutional advertising. Gerdes in his brief does not explain the reason for his lower estimate in this category other than to assert that the PGandE budget for administrative expense is extremely comfortable, if not fat, and that a 5 percent cut can easily be made without any reduction in efficiency.

Gerdes supports a part of the expenditures for institutional advertising but opposes paid advertising in newspapers and periodicals. AFL-CIO opposes the allowance of expenses for institutional advertising on the ground that cost of money to PGandE is based on its financial condition rather than its corporate image. Consumer Associates points out in its brief that consumer attitudes in Fresno and the Bay Area strongly support the disallowance of any expenses by PGandE for advertising.

Petitions containing over 12,000 signatures were received in evidence as Exhibits Nos. 97 and 98. These signatures were obtained by representatives of the Consumers Cooperative of Berkeley, Inc. The petitions read as follows:

"PETITION BY CONSUMERS

"We pay for PG&E's advertising as part of our electric bill. The PG&E is currently trying to raise our electric bill by $70 million a year which includes $2.5 million for advertising expenses in 1970 alone.

"As consumers, we fail to understand why a monopoly like PG&E which has the benefit of a captive market and regulated rates needs to advertise at all.

"As consumers also concerned with our environment, we think the use of unnecessary electricity should be discouraged, not promoted. If present trends continue, Californians will consume twice as much electricity in 1980 as they consume today. The consequence of this increase will be further devastation of our environment. Whether by air pollution, thermal pollution, radiation hazard, or despoilment of river ecologies--all presently-used methods of producing electrical energy degrade the quality of life.

"For these reasons, we the undersigned oppose making consumers pay for any advertising by the PG&E which is designed or intended to cause an increase in the use of electricity."

The President of PGandE testified:

"If we're going to have electric energy, we're going to have to have facilities to generate it and to distribute and to bring it to our customers. Those facilities of course have some impact on the environment. And we're doing everything in our power to minimize the impact on the environment.

"And it's important that the public have an understanding of what is being done in this regard. Without a public understanding, our implementation of planning to provide the facilities necessary to serve our customers would be exceedingly more difficult and costly. And to that extent it's important that the public do have the kind of facts outlined in this advertisement."

The institutional advertisement described by the President of PGandE, which was introduced as Exhibit No. 28, is a comprehensive statement on "PGandE and the Environment." As stated in PGandE's opening brief, the advertisement is beneficial from the ratepayers' point of view as it informs them in a mass way of the involvement of PGandE in various aspects of ecology. The advertisement serves to answer questions that undoubtedly would have been asked of many employees of the Company and thereby reduces the number of customer inquiries at PGandE offices. Such a result, of course, saves time and expense of Company personnel to the ultimate benefit of the ratepayer. The PGandE President also testified that without the understanding produced by such institutional advertisements, the cost of business and operating expenses would increase. Thus, in the final analysis this type of advertising results in reduced costs.

We adopt $32,906,000 as a reasonable allowance for Administrative and General Expense at present rates for the test year in this proceeding.

C. Sales Expense, including Related Advertising?

1. Should any part of sales service expenses be capitalized and included in the rate base?

Both PGandE and the staff have included sales service expenditures as a part of sales expense. PGandE contends that there is no evidence in the record to support a change in the present practice by moving sales service expense from the operation expense accounts to some plant account.

In its brief the staff states that it is not seeking a determination of this issue in this proceeding. The staff is requesting the Commission to order PGandE to review its accounting practices and give consideration to capitalizing portions of the sales service activities and charging others to another and more appropriate expense account.

The record shows that such a review has already been made by PGandE's Assistant Controller and that he is of the opinion that sales service activities are properly includable in sales expense. The order requested by the staff will not be included among the orders issued in this proceeding.

2. Sales Service and Sales Promotion Expenses, and Related Advertising Expense, as the components of Sales Expense?

The following table shows the PGandE, staff and Gerdes estimates for Sales Expense.

	PGandE	Staff	Gerdes
	(Dollars in Thousands)		
At Present Rates	$6,065	$5,462	$2,800
At Proposed Rates	6,065	5,462	-

PGandE's sales expense estimate exceeds the staff's estimate by $603,000. $388,000 of this difference results from the staff's recommendation that promotion expense per customer in the competitive areas should be as low as it is in the combination areas. The staff has also excluded $199,000 for the electric range promotion program in PGandE's combination areas. The remaining $16,000 difference results because of different methods used by PGandE and the staff in making their estimates. The staff has trended five years of recorded data, whereas the PGandE estimate is based on amounts submitted by PGandE's various districts and divisions as to their sales program for the year.

Gerdes recommends that PGandE advertising expenses, other than those for specified institutional advertising, be disallowed. No breakdown of the $2,662,000 difference between the staff estimate and the Gerdes estimate appears in the record. AFL-CIO recommends that PGandE be allowed $2.1 million for advertising expenses which would be equal to $1.00 per customer per year. Consumer Associates urges that advertising expenses of PGandE should be completely disallowed. This position is strongly supported by the consumer petitions which have been received in evidence as Exhibits 22, 97 and 98.

As PGandE points out in its brief, sales expenses fall into two categories: (1) sales service activities and (2) sales promotion activities. PGandE estimates that in 1970 sales service activities will cost $2,988,000 and sales promotion activities will cost $3,077,000. Sales service advertising is estimated at $256,000 and sales promotion advertising at $1,035,000.

Sales service activities are concerned with providing safe and dependable service to PGandE's electric customers. Such activities include (1) making contacts with new home owners and builders to determine and meet load requirements; (2) determining locations for meters and services; (3) explaining rate schedules; (4) securing necessary electric service contracts; and (5) answering customers' complaints, inquiries, and claims.

Customer service advertising is informative advertising designed to tell customers how best to utilize PGandE electric service. Sales service advertising helps customers help themselves and thereby reduces the number of service calls PGandE crews make to customers' premises. Other customer service advertising which explains rates and the reason for larger customer bills during the darker winter months reduces the number and corresponding cost of handling customer inquiries.

The $2,988,000 estimate for sales service activities, including sales service advertising, is adopted as reasonable in this proceeding.

The staff has urged that the sales promotion expense per customer should be as low in the competitive areas as in the combination areas and has therefore reduced sales expense $388,000. In regard to this contention PGandE in its brief has asked the Commission to consider the situation in the Sierra foothills, where no PGandE gas service is available but where a network of its electrical lines has been built to serve the growing domestic market. The typical homeowner (who frequently is only a temporary resident) wants and needs electricity for lighting and convenience appliances, including air conditioners, and many times a domestic water pump. His other home needs--space heating, water heating, cooking range and food refrigeration--could be supplied with propane, delivered by truck from a number of local dealers, who are eager to sell their product. The question is, should PGandE bother to tell these domestic customers that (1) electricity is available to provide their other needs; (2) that it may be cheaper as to the cost of appliances and home construction or installation; (3) that it may be cheaper to operate; (4) that it may be more reliable; (5) that it will mean only one bill instead of two; (6) that electric appliance repairs may be more available and cheaper; (7) that it does not require on-premises storage; and (8) that it is considered less hazardous? If this message is delivered and heeded, PGandE supplies a larger load from its already constructed network of electrical facilities and lowers the overall costs of its service. Hence the extra competitive-area advertising message is directly beneficial to the local consuming public and indirectly to all other PGandE ratepayers. Additionally the staff position ignores the lower customer density in the PGandE single service area electric territory and the consequent higher per customer cost for sales promotion.

No reduction will be made in sales expense by reason of the fact that the sales promotion expense per customer is higher in the competitive single service electric territory than in the combination territory.

The staff has further recommended that $199,000 be deleted from sales promotion expense as an adjustment to eliminate PGandE's program to promote the use of electrically powered ranges, especially those with self-cleaning ovens. To the extent that this promotion program is carried on in combination areas the staff recommendation is well taken. PGandE's gas department also has a promotional program in the combination territory. PGandE's promotion of electric space heating, water heating, and cooking where natural gas is available is inconsistent with its gas department sales programs. As the staff has pointed out in its brief, competing promotional programs in the combination territory, one by the gas department and the other by the electric department for the energy consumption by the same type of appliance, causes utter confusion in the consumer's mind and should be discontinued.

An estimate of $2,878,000 for sales promotion expense and a total estimate of $5,866,000 for sales expense are adopted as reasonable in this proceeding.

The staff has requested the Commission to establish, with definition, a policy regarding the sales promotion program of PGandE. As urged in the petitions filed as Exhibits 97 and 98, the unnecessary use of electricity by PGandE's consumers should be discouraged and not promoted by PGandE. Also, peak usage should not be promoted as such usage causes an increase in costs of service. Off-peak usage which results in an overall increase in electric consumption by consumers and in a waste of energy resources and unnecessary further pollution of the environment should not be promoted.

The record in this proceeding is not sufficient to enable this Commission to establish further definitive guide lines for PGandE's sales promotion program. However, PGandE has been made well aware in this proceeding of the strong resistance of its customers to its advertising for the promotion of sales, especially in its combination areas and where environmental considerations have become of great concern to the public. PGandE is placed on notice that it should carefully reexamine its sales promotion programs and in future proceedings it should be fully prepared to justify its expenditures for sales promotion.

D. Production Expenses?

The following is a tabulation of PGandE, staff and Gerdes estimates of Production Expenses.

	PGandE	Staff	Gerdes
	(Dollars in Thousands)		
At Present Rates	$160,153	$161,022	$160,400
At Proposed Rates	160,153	161,022	-

The $869,000 difference between the PGandE and the staff estimates is occasioned by the staff's higher revenue estimates. In his brief Gerdes does not discuss the $622,000 reduction in the staff estimate which appears in the above tabulation, but contrarily to his own exhibit he proposes further reductions of much greater magnitude in production expense.

The Commission will adopt an estimate of $160,620,000 for production expenses which is based on the adoption of a total revenue estimate of $706,876,000.

E. Customer Accounts Expenses?

The following is a tabulation of PGandE, staff and Gerdes estimates of Customer Accounts Expenses.

	PGandE	Staff	Gerdes
	(Dollars in Thousands)		
At Present Rates	$19,856	$19,863	$15,400
At Proposed Rates	19,963	19,970	-

The difference between the PGandE and the staff estimates arises because of the different revenue estimates.

Gerdes bases his reduction of $4,463,000 in the staff estimate on his recommendation that PGandE switch to bimonthly billing. The record shows that the East Bay Municipal Utility District, the City of Alameda and the City of Sacramento bill their utility customers bimonthly.

PGandE introduced evidence to show that billing on a bimonthly basis would increase customer complaints and cause a lag in revenues, thereby affecting PGandE's cash flow. PGandE during the war years in the 1940's billed its customers on a bimonthly basis but like other utilities abandoned the practice because of customer dissatisfaction. Even if bimonthly billing of its customers were reinstituted many of the expenses included in customers' account expenses would remain unaffected, e.g., customer contracts and orders, miscellaneous accounts expenses, and rents. Also many meters would continue to be read each month, thus further reducing any possible savings. The PGandE witness testified that any savings which might accrue from bimonthly billing would be more than offset by such factors as customer dissatisfaction and the lag in the collection of customers accounts.

An estimate of $19,860,000 at present rates for customer accounts expenses will be adopted as reasonable in this proceeding.

F. Taxes?

Although the dollars of tax expense in the various estimates are different the method of computing taxes used by PGandE and the staff is not in issue in this proceeding. The Commission will adopt as reasonable, tax expenses which are consistent with the level of revenues and other expenses which are adopted in this proceeding.

G. Other Operating Expenses - Transmission, Distribution and Depreciation?

Transmission, distribution and depreciation expense estimates are the same for PGandE and the staff at present rates and at proposed rates. Gerdes has recommended reductions in these expenses. The following tabulation compares these estimates.

Expense Item	PGandE and Staff	Gerdes
	(Dollars in Thousands)	
Transmission	$10,031	$ 9,300
Distribution	57,479	53,400
Depreciation	93,959	91,000

Gerdes has recommended that transmission expense and distribution expense be reduced because PGandE has been slow to make use of 345 kv lines. On the other hand he urges that $128,000,000 out of the proposed $252,000,000 in additions to the rate base be deferred and that depreciation expense be reduced by $3,000,000. He also testified that PGandE should refrain from expanding its transmission network. PGandE's president testified that the eight valley transmission lines did not develop in such a manner as to make the use of 345 kv lines practicable. We find that the $128,000,000 of proposed additions which Gerdes proposed to delete are necessary in order to insure continuity of adequate service by PGandE.

We further find that the estimates of PGandE and the staff for transmission expense, distribution expense and depreciation expense are reasonable and should be adopted in this proceeding.

V. Results of Operation during the test year 1970 at Present Rates and Additional Revenue Requirements?

The following is a tabulation of results of operation at present rates for the test year 1970 which are adopted as reasonable in this proceeding. Based on the results of operation at present rates during the test year 1970 shown in the table below, PGandE will require $51,579,000 additional revenue to enable it to earn 7.50 percent on a rate base of $2,734,032,000. The revenue requirement is and must be based solely on California jurisdictional operations. In computing the additional revenue requirement a net-to-gross multiplier of 2.083 has been used.

A. 51552 ds/ms

RESULTS OF OPERATION
YEAR 1970 AT PRESENT RATES
(In Thousands of Dollars)

Item	System Total (a)	Nonclass Service: FPC Filing: * P.N.I. Contracts (b)	Nonclass Service: FPC Filing: Other (c)	Nonclass Service: CPUC (d)	Subtotal (a-b-c-d) (e)	Resale (FPC) (f)	Other Than Resale (CPUC) (e) - (f) (g)	Balance of Calif. Oper. (CPUC) (d) + (g) (h)
Operating Revenues	$ 706,876	$4,588	$6,135	$18,583	$ 677,570	#$10,531	$ 667,039	$ 685,622
Operating Expenses								
Production	160,620				160,620		160,620	160,620
Transmission	10,031				10,031		10,031	10,031
Distribution	57,479				57,479		57,479	57,479
Customer Accounts	19,860				19,860		19,860	19,860
Sales	5,866				5,866		5,866	5,866
Administrative and General	32,906				32,906		32,906	32,906
Provision for Wage Increase	7,666				7,666		7,666	7,666
Subtotal	294,428				294,428		294,428	294,428
Depreciation	93,959				93,959		93,959	93,959
Taxes Other Than on Income	81,121				81,121		81,121	81,121
Subtotal	469,508				469,508		469,508	469,508
Expense Offset		4,651	6,905	18,583	(30,139)	11,584	(41,723)	(23,140)
Total Expenses	469,508	4,651	6,905	18,583	439,369	11,584	427,785	446,368
Taxes Based on Income	57,989				58,420		58,964	58,964
Total Operating Expense	527,497				497,789		486,749	505,332
Net Revenue	179,379				179,781		180,290	180,290
Rate Base	2,734,032				2,734,032		2,734,032	2,734,032
Rate of Return	6.56%				6.58%		6.59%	6.59%

(Inverse Item)

* Pacific Northwest Intertie.

Other resale revenues are included in CPUC Nonclass Service, Column (d).

VI. What rates should be authorized as fair and reasonable for PGandE's Electric Department based on the test year 1970?

A. In General?

The following is a tabulation of the rate increases proposed by PGandE and the staff:

Rate Increase Proposed By
(Dollars in Thousands)

Class of Service	PGandE Amount	PGandE Percent	Staff Amount	Staff Percent
Domestic	$29,289	11.29%	$10,566	4.0%
Commercial	25,263	10.08	9,911	3.9
Industrial	5,620	5.67	4,063	4.1
Agricultural	5,598	10.63	2,089	3.9
Street Lighting	572	4.58	588	4.7
Interdepartmental	234	20.56	48	3.9
Other	58	0.70	141	1.69
Total	$66,634	9.90%	$27,406	4.0%

In its proposal to increase commercial rates PGandE recommends a reduction from 6 to 3 in number of general service rate schedules and from 6 to 5 in the number of rate zones. As Zones 1, 2 and 3 would have the same proposed rate schedule the number of zones in effect would be reduced to 3. For domestic customers PGandE proposes to reduce the number of zones and rates applicable to each from 6 to 5.

The staff has maintained a differential between the five general service Schedules A-1 through A-5. It also has reduced the number of zones for domestic customers from 6 to 5.

San Francisco, Gerdes, and AFL-CIO support the rate spread proposed by the staff.

The use of 5 rate zones with 5 general service and domestic rate schedules will be adopted.

The staff witness recommended the following percentage increases for each class of service if the Commission authorizes rates to produce an additional $50,000,000 of revenues:

Domestic	8.90%
Commercial	4.90%
Industrial	7.22%
Agricultural	10.00%
Street Lighting	7.22%
Other	7.22%

1. Preliminary Statement No. 5(a)?

Section 5(a) of the Preliminary Statement in PGandE's tariffs reads as follows:

"5. - General:

"(a) Measurement of Electric Energy:

"All electric energy as supplied by the Pacific Gas and Electric Company to its customers shall be measured by means of suitable standard electric meters, except energy delivered under street lighting tariffs on a rate-per-lamp basis, and energy, estimated from load and operating time data, for highway sign lighting, traffic control and other installations where metering is impractical."

PGandE proposed a revision of Section 5(a) of the Preliminary Statement to read as follows:

"5. - General:

"(a) Measurement of Electric Energy:

"Unless otherwise provided in the applicable tariff schedules, all electric energy supplied to customers by the Utility will be measured by means of suitable standard electric meters, except where energy supplied to highway sign lighting, traffic control devices, communication system amplifiers or other loads can be accurately determined from load and operating time or other relevant data and where, in the opinion of the Utility, the installation of a meter is impractical."

In Exhibit No. 55, pp. 3-11, the staff proposes that said Section 5(a) be revised to read as follows:

"5. - General:

"(a) Measurement of Electrical Energy:

"Unless otherwise provided in the applicable tariff schedules, all electric energy supplied to customers by the utility will be measured by means of suitable standard electric meters,

> except where energy supplied to street or sign lighting, amplifiers, rectifiers, alarm or control devices can be accurately determined from load and operating time or other relevant data and where the installation of a meter would not establish greater accuracy. The customer shall notify the utility of any changes in service and shall be charged from the time changes are made."

The staff objects to the rule presently used by PGandE because such rule gives PGandE the discretion to determine when the installation of a meter is impractical and to extend nonmetered service in such instances on a basis estimated from load and operating time data. The rule proposed by the staff purports to list all instances where a meter need not be used if the energy consumed can be accurately determined from load and operating time and other relevant data to such a degree that the installation of a meter would not establish greater accuracy.

In its brief PGandE points out, however, neither a phone booth nor a small underpass pump some of which are presently unmetered fit into the staff rule. There also may be other usages which may best be served on an unmetered basis. No evidence has been introduced to show that the discretion exercised by PGandE under the present rule has been abused. If a customer considers an arrangement unfair he can bring the matter to the attention of the Commission for suitable action. The staff can audit PGandE's practices under the proposed rule to determine whether or not PGandE is exercising its discretion soundly to the end that other customers are not being burdened by unduly low revenues from such unmetered loads.

The changes in Section 5(a) of the Preliminary Statement proposed by the staff will not be adopted in this proceeding. The revision of said Section 5(a) proposed by PGandE will be adopted.

2. Preliminary Statement No. 7?

The first paragraph of the revised Section 7 of the Preliminary Statement proposed by PGandE is the same as the first paragraph proposed by the staff.

PGandE proposes that the second paragraph of said Section 7 read as follows:

> "The Utility will reduce its electric rates to reflect any rate reduction in Schedules Nos. G-55 and G-55.1 of its Gas Department which reflects (1) El Paso rate reductions, or (2) suspension or termination of the income tax surcharge, except that offsetting increases in the cost of gas from the Gas Department and increases in tax expense resulting from changes in the Federal income tax will be subject to review between the Utility and the Commission."

The staff proposes that the second paragraph of said Section 7 read as follows:

> "The utility will reduce its electric rates to reflect any rate reduction in Schedules Nos. G-55 and G-55.1 of its Gas Department to reflect (1) El Paso Natural Gas Company and Pacific Gas Transmission Company rate reductions for contingent offset charges, or (2) suspension or termination of the Federal income tax surcharge."

The provision in the above-quoted paragraphs pertaining to the Federal income tax surcharge is now moot as such tax was eliminated as of June 30, 1970.

The staff in its brief points out that a utility has the ability, under the Natural Gas Act, to increase the rates it charges for gas prior to a full hearing before the Federal Power Commission. Refunds ordered by the Federal Power Commission are the difference between the rates theretofore in effect and those subsequently found to be fair and reasonable. It is because of this difference that the staff believes in automatic reduction in the electric rates whenever the cost of gas is reduced without opportunity for offset by reason of a concurrent or almost concurrent separately filed increase in the cost of gas.

PGandE, on the other hand, believes that whenever there is an offsetting increase in the cost of gas the reduction should not be automatic but should await a review and determination by the Commission.

PGandE's concern for such offsetting is, however, a matter that is properly considered in connection with its gas tariffs. Any such offsetting as is permitted in connection with gas would, thereby, be taken care of.

The second paragraph of Section 7 will be revised to read as follows:

> "The Utility will reduce its electric rates to reflect any rate reduction in Schedules Nos. G-55 and G-55.1 of its Gas Department by reason of (1) El Paso Natural Gas Company rate reductions for contingent offset charges, or (2) Pacific Gas Transmission Company rate reductions for contingent offset charges.

3. Should system rates be imputed to the special rate situations as proposed by the staff? Rate Zoning?

The staff recommended rates are expected by the staff to produce $784,000 less additional revenue than the $27,406,000 shown in Exhibit No. 55. Of the $784,000, a deficiency of $686,000 results from the use of staff proposed system-wide rates in the staff's revenue calculation instead of the lower rates actually recommended to be charged certain customers in Vallejo, Pinole, Rodeo, the Monterey-Santa Cruz area, the Donner Summit area, hereinafter collectively called "acquired areas", and the Shasta area.

The remaining $98,000 increase in imputed revenue (about 3.65% overall) has been assumed for the contract service to the City and County of San Francisco. The staff has reviewed special studies covering contract service to San Francisco for street lighting and to the airport. Rates for other services to San Francisco have not been modified since the original contract of March 14, 1945. All of these rates are now being reviewed by PGandE and San Francisco. No cost studies were introduced to justify continuing these services at their present contract rates. The imputation of $98,000 of additional revenue for PGandE's services to San Francisco is reasonable and will be adopted.

PGandE in its closing brief stated that it had no objection to the imputation of Zone 4 rates to the Shasta Dam Rate Area in lieu of Zone 3 rates as proposed by PGandE, as no system zone level has been established for this area. The $74,000 staff imputed revenue applicable to the Shasta Dam Rate Area will be adopted.

PGandE's present rates in the "acquired areas" are derivations of rates previously in effect in those areas by the predecessor utilities. At the time of acquisition the rates of the predecessor utility continued to apply for service from PGandE to the customers in these areas pursuant to various Commission orders.

The following table shows the increases proposed by the staff, the increases proposed by PGandE and the increases which would result from the application of the staff proposed system rates for the various rate schedules which are involved in the imputation of the $612,000 additional revenue.

	Increase Under Proposed		
Schedule No.	Staff Rates	PGandE Rates	Staff System Rates
D-60	16.80%	29.96%	31.36%
P-60	25.20	25.20	46.00
A-60	19.90	29.30	42.30
A-61	12.00	19.76	34.83
A-62	10.20	9.70	32.41

Schedule D-60 will be applicable in the Pinole, Rodeo and Vallejo Central Rate Areas. Schedules A-60 and P-60 will be applicable in the Vallejo Central Rate Area. Schedule A-61 will be applicable in portions of Monterey, San Benito, Santa Clara, Santa Cruz, Siskiyou and Trinity Counties. Schedules A-62 will be applicable in the Donner Summit Area. The increase in the Shasta rate area occurs because the staff has imputed the difference between the higher Zone 4 rate to this Zone 3 area.

The purpose of this proceeding is to establish just and reasonable rates for PGandE's electric service, including that rendered in special rate areas. For historical reasons the "acquired areas" and the Shasta area have been served on rates lower than the general rates. To bring the acquired areas up to the staff proposed system level would involve increases ranging from 31.64 to 46 percent. Both the PGandE and the staff have accepted rate history as one of the factors to be taken into account in designing rates and for that reason have designed lower rates for these areas than otherwise would be appropriate.

Schedules Nos. D-60, P-60, A-60 and A-61 as proposed by PGandE and Schedule No. A-62 as proposed by the staff are just and reasonable and will be authorized in the order which follows. PGandE will not be permitted to close these schedules and charge different rates for old and new customers within the same areas, except in the Donner, Trinity, and Siskiyou County areas where such service has been on closed schedules. No revenue over and above the revenue provided by said schedules will be imputed as additional revenue for the services provided under said schedules, since it would be unreasonable further to increase the rates under such schedules at this time.

The Shasta rate area was established as a Zone 3 rate area in 1964 by Commission Advice Letter No. 219-E. The staff proposes to impute Zone 4 rates to the Shasta rate area because it does not meet the staff's proposed criteria for new Zone 3 areas. For rate historical reasons the staff has not proposed to impute the higher Zone 4 rates to other rate areas which do not meet the proposed criteria for Zone 3. Chapter 4 of Exhibit No. 117 shows that of the 10,930 customers in the Shasta rate area 9,119 qualify for Zone 3 under the staff's criteria. No additional revenue will be imputed to PGandE by reason of the higher Zone 4 rates.

In future proceedings this Commission will favorably consider proposals from PGandE and the staff further to reduce the rate differentials which have been permitted to exist because of historical reasons.

4. Treatment of Rate Blocks?

The staff in its opening brief points out that PGandE has proposed reductions for various inner rate blocks and for the terminal blocks for the domestic and industrial classes which total over $5,000,000. Sizable percentage differences in the proposed increases in rates will occur in the customer's bills in the same class and zone as the usage varies.

PGandE supports the reduction to the terminal blocks because of the reduction in the cost of generation in PGandE's steam plants. Although the cost of fuel shows a decline from 1957 until 1970, the current trend is rising fuel costs. The cost of gas to the electric department has risen as the result of the Commission's Decision No. 76655 issued January 6, 1970, authorizing PGandE to increase its gas rates. Oil fuel costs will increase from $2.05 to $2.50 per barrel by reason of the purchase of low sulphur fuel oil. PGandE's estimated unit cost for fuel expense in 1970 was 3.15 mills per kwhr. The more current staff adjusted estimate shows an increase to 3.20 mills per kwhr for fuel expense.

The staff also points out another factor to be considered. A reduction in the tail block rate may induce the use of more electricity. This would cause the average annual revenue per kwhr to decrease and may have an adverse affect on the environment.

PGandE in its brief argues that with the rates in the terminal blocks reflecting decreased energy costs higher usage would properly cause the annual average revenue per kwhr to decrease. PGandE further asserts that electricity from central station generating plants provides for the energy needs of people with more efficiency and less pollution than any other method now available. Thus, on balance the environment would suffer more if low-cost electricity made from clean-burning natural gas and falling water were not available to meet the needs of our advanced society.

The public participants in this proceeding have urged that further energy consumption not be encouraged and that rates should be designed so as not to place a greater burden of any increase on the small user than on the large user.

We approve of the staff approach to rate design in this proceeding insofar as the rate blocks are concerned.

B. Domestic Rates?

PGandE proposes to increase domestic rates by 11.29% whereas the staff proposes a 4.0% increase. In connection with Issue VI.A.4., above, this Commission has determined that the staff approach to rate design for domestic rates will be adopted. The transfer of customers on the DA Schedules to the DM Schedule and canceling of the Schedules Nos. DA/1 through 6, recommended by the staff, is approved. Domestic rates will be increased approximately 8.19% to provide $21,334,000 additional revenue.

C. Commercial Rates?

PGandE proposes to have identical rates for Schedules A-1 through A-3. The staff witness testified that based on studies provided by PGandE and Southern California Edison Company there is a difference in costs to serve an A-1 customer and an A-2 customer. PGandE is proposing a lesser rate differential than now exists between Schedules A-5 and A-6 on the one hand and Schedules A-1, A-2, and A-3 on the other hand. The staff witness testified that the cost curve for the commercial or general service schedules is comparable to the cost curve for the domestic schedules. Hence it follows that the rates for these customers should follow the format of the domestic class, not the industrial class.

The staff recommends no increase in the customer charge and terminal block and a uniform increase in block rates and between rate schedules to maintain existing relationships.

The staff format of increases in the commercial rates is approved. The commercial rates will be increased approximately 7.20% to provide $18,040,000 of additional revenue.

D. Industrial Rates?

PGandE proposes an increase in industrial rates which will increase annual revenues from this class of service by 5.67% or $5,620,000. The increases for the industrial users would not be uniform. The average increase for Schedule A-13 users would be about twice that for the Schedule A-14 users, and on each schedule the increases would be greater for customers with low load factors than for high load factors.

In its opening brief PGandE asserts that the proposed industrial rates are appropriate for the following reasons: (1) they are consistent with cost considerations applicable to this class of service and as between classes; (2) they retain a reasonable relationship between the rates for this class as charged by PGandE and other California electric utilities (PGandE's being higher than those of the others); (3) they fit readily within value of service criteria; (4) this class has not shared in rate reductions that have occurred since 1957 to the same extent as have other major classes of service; and (5) a substantial portion of industrial load is served off peak and thereby improves the system load factor.

The Commission staff proposed an increase in industrial rates which would be applied approximately equally for all usages of customers on Schedules A-13 and A-14. If a larger overall increase were authorized, up to 7.2%, the staff would follow the same pattern of increasing the industrial rates. The staff witness testified that it is possible that some industrial customers may be lost if a system average increase in excess of 7.2% be applied to the industrial rates.

CMA strongly supported the pattern of increasing the industrial rates proposed by PGandE and opposed that proposed by the staff. CMA also urged that the increase in industrial rates as a class should in all cases be significantly less than system average, whatever average increase may be allowed.

PGandE did not justify a reduction in the terminal rate affecting large customers in view of increasing costs and rates to its other customers. An industrial rate increase of $6,943,000, or an increase of approximately 7.00% will be authorized.

E. Agricultural Rates?

PGandE has no objection to the staff's proposal that Schedules PA-3 and PA-4 pertaining to agricultural rates be canceled and that customers affected be incorporated into Schedule PA-1. This staff proposal will be adopted.

Under the present Special Condition of Schedule PA-1 agricultural users are permitted to run their motors at overloads up to but not exceeding 125 percent of the full load capacity as indicated by the name plate rating of the motor. Valley Farms and the staff both urge that the Commission retain this special condition in the tariff.

In its proposed Schedule PA-1, PGandE proposes Special Condition 10 which would allow only a 21% overload. In its brief PGandE points out that its proposed Special Condition 10 produces a more equitable application of the rate to customers than does the comparable provision in the present rate schedule which the staff and Valley Farms propose be retained. PGandE's proposed provision makes the application of the provision automatic, based on measured input and not subject to a calculation involving the inherent design efficiency of the type of motor. Also, PGandE's proposed provision yields an even and progressive transfer from Rate A to Rate B, while the present special condition, depending upon the efficiency of the particular type of motor, could produce a significant step increase to a customer upon transfer. Special Condition 10 would not force any rancher to make modifications in equipment or pumping conditions, but it would assure that each customer would be billed for the power and energy he receives on a more equitable basis, eliminating the present preference for lower efficiency motors. Special Condition 10 will be included in the agricultural schedules as proposed by PGandE in this proceeding.

For the first time in this proceeding Valley Farms in its opening brief proposed that Special Condition 7 in Schedule PA-1 be revised to provide that the billing demand used in computing charges under Rate B will be the mean of the maximum demand created by the installations in the current month and the two highest such demands occurring in the year ending with the current month. As proposed by PGandE Special Condition 7 provides that the billing demand used in computing charges under Rate B will be the highest maximum demand created by the installation in the twelve-month period ending with the current month.

PGandE in its closing brief urges that Special Condition 7 in Proposed Schedule PA-1 should not be modified because it would unnecessarily complicate billing procedures and produce revenue changes the effects of which are unknown and concerning which there is no evidence in the record. Special Condition 7 as proposed by PGandE will be adopted by the Commission.

Both Valley Farms and the Farm Bureau in their briefs requested the Commission to consider the economic plight of the farmers and those engaged in agriculture in determining the increases in agricultural rates which are justified.

The Farm Bureau referred to evidence in the record showing (1) that the prices for many agricultural products are lower than they were 20 years ago, and (2) that labor costs have gone up but the producer is unable to control the prices he receives for his products. Electricity is essential to the operation of most farmers. Because it is often difficult to secure immediate restoration of service the farm operator needs to have standby facilities to provide alternate power sources.

Agricultural rates will be authorized which will provide additional revenues of $4,063,000, or an increase of approximately 7.60 percent, which is lower than the increase requested by PGandE and that recommended by the staff.

F. Other Rates?

1. Interdepartmental?

PGandE has and proposes a special rate for interdepartmental service. The justification is that this has been the historical situation. The staff recommends that these rates be applied at system levels and PGandE has concurred in this recommendation. The staff recommendation will be adopted by the Commission. The increased interdepartmental rates will provide $86,000 of additional revenue, or an increase of approximately 7.18 percent.

2. State Water Project?

The staff is recommending imputation of an increase for service to the State Department of Water Resources from 3.0 mills to 3.1 mills energy charge due to increased fuel costs. PGandE proposes to retain the charge of 3.0 mills.

The 3.0 mills per kwhr covers the energy component, and so only the cost of energy need be considered in determining the reasonableness of this charge. The transmission costs are covered in the balance of the contract and in the EHV contract which relates to high tension transmission. The record shows that the initial estimate which resulted in the 3.0 mills per kwhr charge was based on an average fuel cost of 32 cents per million Btu. The present average cost of fuel of 33 cents per million Btu would still leave some margin between the cost of fuel and the charge of 3 mills per kwhr.

No additional revenue will be imputed to PGandE for its service to the State Department of Water Resources.

3. Schools?

Schedule A-16 which provides a special rate to all public schools within the Stockton division for lighting, heating, cooling and power services is proposed to be closed by PGandE. The staff urges that this schedule should be held open and a study be made regarding the expansion of this schedule to a system-wide basis. The staff would propose that schools as covered by such a study would be expanded to include public and private nonprofit establishments.

In its closing brief PGandE strongly opposed the staff recommendation. It pointed out that Schedule A-16 is a schedule for an extremely limited territory established many years ago to meet a specific problem which existed prior to 1950. PGandE contends that it is not reasonable to assume that the study recommended by the staff would result in a reduction in view of the low load factor inherent in the operation of many schools.

PGandE will be required to make the recommended studies in order that the matter may be more fully examined on a system-wide basis. PGandE will be authorized to close Schedule A-16.

4. Supplemental Fringe?

The staff has adopted PGandE's proposed increase of 6.6 percent for the resale power by the City and County of San Francisco to its assigned customers. Such proposed increase will be authorized.

The staff also recommends that the fringe rates and revenues for Southern California Edison customers be increased by the same percentage increase applicable to the commercial class to which these rates are analogous. Such recommendation is adopted.

5. Schedule No. P-8?

The staff has recommended that the terminal blocks not be reduced in Schedule No. P-8. This schedule includes petroleum refineries under contracts and is comparable to the Schedules A-13 and A-14 under which service is provided to the industrial customers. This staff recommendation is adopted for the same reasons that the staff recommendation with regard to the rates for industrial customers was adopted.

6. Street Lighting?

The staff has adopted PGandE's proposals with regard to street lighting Schedules LS-1 and 2 and LS-60 and 61. The staff, however, has recommended that for ratemaking purposes the system-wide schedules be applied to the territories served by LS-60 and 61. For the reasons discussed under Issue VI.A.3., above, such imputation of rates will not be approved. The rate of $10.10 per lamp per month proposed by PGandE for the 700 watt mercury lamp which represents a small fraction of the lamps served by PGandE will be adopted.

Schedule TC-1 includes traffic directional signs or signal lighting service. Whereas PGandE has increased the service charge and not changed the energy charge, the staff is recommending an increase in the energy charge with no increase to the service charge. This treatment is consistent with the staff's uniformity in spreading this rate increase which has been discussed under Issue VI.A.4., above, and will be adopted by the Commission.

7. Ames Research Center and Stanford Linear Accelerator Center?

PGandE proposes that the present, identical contract rate for Ames and SLAC be increased by 6.4% in the same manner for both customers. Because of the different load factors of these two customers, however, under PGandE's proposal SLAC's bill would be increased about 1% and Ames' bill would be increased about 9.7%. This situation is comparable to that for customers served on industrial Schedules A-13 and A-14 . Even with the proposed increase, these two customers would be receiving electric service at a lower average rate than comparable customers served under the proposed industrial tariffs.

The staff recommends that different rates be applied to SLAC and to Ames so that the increase for each of these customers would produce additional revenues at a level 4% higher than under the present rate structure. The justification urged for the staff proposal is that PGandE has made no definitive cost study to support its proposed increase in rates for Ames and SLAC.

In its brief the U.S. Government refers to the minimal increase or no increase to large customers under Schedules A-14, P-8 and A-18 which have been proposed by PGandE and the staff as justification for its request that the contract rates for interruptible service to SLAC and Ames remain as they are with no changes.

In the alternative the U. S. Government proposes that the contract be modified to provide a 4 percent increase to Ames but that the same provisions be made applicable to SLAC. This would result in an increase for SLAC considerably less than 4 percent because of SLAC's greater load factor.

Both the U. S. Government and PGandE rely on the provision in the Ames and SLAC contracts which contemplate that rates will increase or decrease commensurate with Schedule A-13.

This Commission has authorized an increase of 7.0 percent in the industrial rate schedules. The Commission will authorize a 7.0 percent increase in the contract rate for Ames which will provide for a 7.0 percent increase in revenues from Ames. The same contract rate will be applied to SLAC but it will provide only a 4.0 percent increase in revenues from SLAC.

The staff in its opening brief points out that in addition to the SLAC and Ames contracts PGandE has a large number of special contracts for service which involve a substantial amount of revenue. Although all cost studies for special contracts were requested by the staff, evidently PGandE has none as none was supplied to the staff. In accordance with the staff request PGandE is hereby placed on notice that it must be prepared in connection with its next application for general increases either in electric or gas rates to justify by cost studies the treatment that is being accorded to its customers under these special contracts.

G. Summary of Authorized Increases in Rates by Class of Service?

The following is a tabulation of the amounts and percentages of additional revenues by class of service which it is estimated will result from the increased rates authorized in this proceeding.

Present Revenues and Authorized Increases in Rate Schedules

Schedule	Revenue Present Rates	Revenue Increase	Revenue Authorized Rates	Average Increase
	(Dollars in	Thousands)		
Domestic	$260,348	$21,334	$281,682	8.19%
Commercial	250,552	18,040	268,592	7.20
Industrial	99,188	6,943	106,131	7.00
Agricultural	53,464	4,063	57,527	7.60
Street Lighting and Ry.	12,545	872	13,417	6.95
Interdepartmental ...	1,197	86	1,283	7.18
Other	8,328	69	8,397	0.83
Total	685,622	51,407	737,029	7.50
Imputed	-	172	-	-
Total Including Imputed	-	51,579	-	-

VII. Should special rate treatment be established for designated customer groups?

A. The "Elderly" and the "Small" user?

Consumer Associates have urged that there be no increase in the domestic rates for users of 200 kwhr per month or less. Exhibit No. 61 was introduced to provide for Commission consideration domestic rate schedules which would provide for all increases in the outer blocks and none for the first 200 kwhr of energy used. The purpose of these schedules is to reduce the impact of any rate increase upon the elderly with fixed incomes and the poor.

PGandE, in its brief, has pointed out the difficulty in providing rate relief only to this group of ratepayers. The small user or the elderly person is not necessarily a user who has difficulty in paying his electric bill. Both PGandE and Gerdes contend that the welfare problems of the elderly and the poor are matters for legislative consideration and solution rather than being matters for this Commission to resolve.

The staff's solution to this problem is to minimize the rate increase on the domestic service charge and lower energy blocks. The effect is to provide the domestic user of electricity whose usage is small with a lesser increase in his bill than is provided by the domestic rates proposed by PGandE. The Commission has adopted the staff's recommended pattern of increasing domestic rates.

B. Certain housing projects such as those run by The Maremont Foundation?

In its opening brief Maremont requests that there should be included in the D-M schedules authorized in this proceeding, one of the alternative clauses set forth under "Alternative Rate Schedule" on page 3 of Chapter 5 of Exhibit 117, as may be appropriate. Both PGandE and the staff concur in this request. Inasmuch as the staff pattern of rates for commercial schedules has been authorized, Alternative Rate Schedule B set forth on page 3 of Chapter 5 of Exhibit 117 is adopted.

Maremont has also requested that further study should be ordered by the Commission to determine whether the higher rates applicable to projects with several group meters as compared to projects with a single meter for all units are warranted by cost factors. Such request has been opposed neither by PGandE nor the staff. PGandE is hereby placed on notice that in any subsequent proceeding for general rate relief it should be prepared to support the differential between the rates applicable to projects with several group meters and the rates applicable to projects with a single meter for all units with a cost study.

VIII. Are PGandE's employment practices discriminatory? If they are, does such discrimination produce economic inefficiency? If it does, how should this affect the relief sought in this proceeding?

Subsequent to the submission of the application herein, the Commission on October 6, 1970, issued Decision No. 77781 dismissing Case No. 9090, which was a complaint filed by many of the same parties who have raised Issue VIII in this proceeding. Said Decision No. 77781[1] resolves Issue VIII in this proceeding by holding that this Commission does not have jurisdiction over labor-management relations which would include employment practices of PGandE. The Commission further held the Legislature through the enactment of the Fair Employment Practice Act has created a forum other than this Commission to adjudicate problems of discrimination, and it is apparent that the Legislature intended that complaints regarding discrimination in hiring and employment practices be considered by a body other than this Commission. Further, the record in this proceeding does not show that PGandE's hiring and employment practices are unlawfully discriminatory, nor does it show that operating inefficiencies have resulted or will result during the test year from PGandE's hiring and employment practices with respect to ethnic minorities.

IX. Should PGandE's activities in relation to the proposed incorporation of Castroville affect the relief sought in this proceeding? If so, how?

In 1969 proceedings were initiated before the Monterey County Local Agency Formation Commission (LAFCO) to incorporate

1 A petition for writ of review of Decision No. 77781 has been filed, NAACP, Western Region, et al. v. CPUC, SF No. 202792.

the Castroville-Moss Landing area in the City of Castroville. The application for incorporation included within the boundaries of the proposed city PGandE's Moss Landing thermal electric plant located about four miles from the community of Castroville.

PGandE did not oppose the incorporation of Castroville but it did seek the exclusion of its existing Moss Landing plant from the proposed city on the grounds that the inclusion of the Moss Landing plant would increase PGandE's taxes approximately $500,000 per year without providing PGandE with comparable benefits, as PGandE was already providing and would continue to provide the Moss Landing plant with security and fire protection.

PGandE's position was presented to LAFCO on November 25, 1969. Thereafter, following statements by others, LAFCO approved its staff's proposal based on incorporation of Castroville with boundaries that excluded Moss Landing. The proponents of incorporation did not take the necessary procedural steps to proceed further with incorporation of the area with such limited boundaries.

In its brief PGandE points out that had it passively accepted inclusion within the proposed city and its operating expenses in the form of property taxes had thereby been increased $500,000, such inaction would have properly been subject to severe criticism. PGandE contends that its successful effort to keep its operating expenses down, taken openly in good faith, was for the benefit of the ratepayers and should not affect the relief sought in this proceeding.

Seaside, Gonzales and Castroville in their brief contend that PGandE has no legal or moral right to dictate to the residents of any area whether they should or should not have local self-government in the form of a city. They further contend that it is not proper for PGandE to spend monies collected from its ratepayers to thwart the efforts of some of such ratepayers to incorporate; to influence others to oppose them; to employ attorneys to oppose them; to purchase legal transcripts or hire court reporters to oppose them; to pay for conventions, vacations, meeting times or otherwise of executive employees who serve on boards or commissions where utility viewpoints and interests are debated. They also assert that the political actions of PGandE in its attempts to influence legislation or the actions of public bodies are ultra vires, and that PGandE has no right to represent dissenting residents in proceedings before LAFCO.

In its closing brief PGandE points out that one of its attorneys appeared at a public meeting of LAFCO to oppose the inclusion of the Moss Landing plant within the boundaries of the proposed city. PGandE did not oppose the incorporation.

Under PGandE's Articles of Incorporation, PGandE is authorized as follows:

> "(2) To engage in and conduct the business of manufacturing, generating, buying, selling, renting, distributing and otherwise disposing of electricity...."
>
> "(4) To engage in and conduct any other business incidental, necessary, useful or auxiliary to all or any of the purposes or business aforesaid."
>
> "To construct, maintain, and operate... electric plants with all power houses, generating stations...proper or convenient for the generation, transmission, sale and distribution of electricity...."

PGandE contends that its actions in attempting to hold down its property taxes at Moss Landing as an operating expense are activities clearly implied within the scope of the foregoing purposes and are not ultra vires.

Under Government Code Sec. 34310, et seq. property owners could have appealed the decision of LAFCO before the Board of Supervisors. Since such right exists at the appeals level it follows that a property owner has the right to protest the inclusion of its property within the proposed city boundaries before LAFCO.

The evidence shows that the PGandE employee who was a member of LAFCO was participating on LAFCO as a citizen and not as a representative of PGandE. He did not vote in opposition to the application to incorporate but in favor of incorporation with the boundaries in accordance with LAFCO's staff proposal.

PGandE's activities opposing the inclusion of its Moss Landing plant within a proposed incorporation of Castroville were a proper exercise of its corporate powers and do not affect, other than favorably, the relief sought in this proceeding.

X. Should PGandE's activities before Federal, State and Local Governmental Bodies on matters of direct operating concern affect the relief sought in this proceeding? If so, how?

As stated in Issue II, above, for 1969 the total of the "below the line" items was $1,587,000. Some of these items were expenditures for civic, political and related activities which were treated as nonoperating expenses and placed in Account 426.4. Other expenditures in connection with PGandE's activities before federal, state, and local governmental bodies on matters of direct operating concern to PGandE were included as "above the line" expenses in accordance with this Commission's uniform system of accounts. No issue has been raised, other than Issue IX, above, which would require the Commission in this proceeding either to change any particular "below the line" expenditures to "above the line" expenditures or any particular "above the line" expenditures to "below the line" expenditures.

XI. Jurisdictional Cost Allocation?

The issue raised by the staff in its brief regarding jurisdictional cost allocation has been resolved for the purpose of this proceeding through the adoption of the table entitled "Results of Operation - Year 1970 at Present Rates" and included in Issue V, above.

XII. Is the request of Northern California Power Agency (NCPA) that the Commission persuade PGandE to implement cooperative action with the Agency warranted?

In its brief NCPA states it is a joint powers agency created by agreement among the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara and Ukiah, Exhibit No. 111 herein. Each of these cities owns and operates an electrical distribution system, and has joined in the creation of NCPA as a means of facilitating purchase, generation, transmission, distribution, sale, interchange and pooling of electrical energy and capacity among themselves, or with others.

Testimony offered on behalf of NCPA shows that NCPA desires to cooperate with PGandE in the development of additional sources of low-cost power in the California market. Since NCPA is willing to provide a part of the capital required for such additional sources of power, such cooperation would reduce the needs of PGandE for increased capital. The evidence further shows that PGandE and the National Association of Electric Companies have opposed NCPA's application for a planning advance from the U.S. Department of Housing and Urban Development, and it is asserted that such opposition precludes the desired cooperation between NCPA and PGandE. The NCPA witness also testified that reliability of service could be improved through the interconnection of the facilities of the municipal ownership cities to those of PGandE. NCPA requests the Commission to persuade PGandE to modify its opposition to cooperative action and to take affirmative steps to implement such cooperation.

The record shows that none of the cities in NCPA has any generating facilities in operation and none has any immediate construction plans for such facilities. Even if construction was begun immediately the facilities would not be on-line until 1975.

In its brief PGandE asserts that PGandE's transmission network is now connected to each of the cities and that through the PGandE system the distribution systems of the cities are now interconnected to provide the transmission reliability suggested by the NCPA witness.

PGandE also contends that the relationships between PGandE and the NCPA cities may more properly be a subject matter for the jurisdiction of the Federal Power Commission than this Commission.

In any event it would be premature for this Commission to take any action until the NCPA has some specific proposal to present to PGandE and to this Commission for consideration.

Based upon a consideration of the record herein the Commission finds as follows:

1. A reasonable range for rate of return on rate base for PGandE in this proceeding is 7.40 to 7.60 percent.

2. The level of return on rate base to be adopted as reasonable for purposes of authorizing rates in this proceeding is 7.5 percent on California jurisdictional operations.

3. The level of return on equity to be adopted as reasonable for purposes of authorizing rates in this proceeding is approximately 11.7 percent on California jurisdictional operations.

4. For test year purposes, the use of the year 1970, as adjusted, is reasonable and should be adopted to determine the fairness and reasonableness of the rates and charges to be authorized.

5. The estimates of revenues, expenses, rate base, and resulting rates of return and the jurisdictional and nonjurisdictional allocation of revenues and expenses for the test year 1970 at present rates set forth in the table on page 45 of this decision are reasonable and should be adopted in this proceeding.

6. PGandE should be authorized to increase its rates so that it will have the opportunity to earn additional revenue of $51,579,000, including imputed revenue of $172,000 for contract service and service on special rate schedule, as

set forth in the table on page 64 at the end of Issue VI, so that its rate of return on California jurisdictional operations will be 7.5 percent on the California jurisdictional rate base of $2,734,032,000.

7. The preliminary statements, rates, rules and regulations authorized by this Commission as set forth in Appendix B hereto are fair, just and reasonable.

8. No special rate treatment is justified for the elderly, the small user and the DM customers such as the Maremont Foundation housing projects, other than that provided in the preliminary statements, rates, rules and regulations set forth in Appendix B hereto.

9. The evidence does not show that PGandE's hiring and employment practices are unlawfully discriminatory.

10. The evidence does not show that operating inefficiencies have resulted or will result during the test year 1970 from PGandE's hiring and employment practices with respect to ethnic minorities.

11. PGandE's activities in opposing the inclusion of its Moss Landing power plant within a proposed incorporation of Castroville (1) were intended to avoid increasing operating expenses (ad valorem taxes), (2) were a proper exercise of its corporate powers, and (3) do not affect unfavorably the relief sought in this proceeding.

12. PGandE's activities before Federal, State and Local governmental bodies on matters of direct operating concern have been properly accounted for in the determination of

operating expenses for the test year 1970 and the rate of return on rate base found to be reasonable in this decision.

13. The request of Northern California Power Agency that the Commission persuade PGandE to implement cooperative action with the Agency is premature, since the Agency has presented no specific proposal to PGandE and this Commission for consideration.

Based upon a consideration of the record and the foregoing findings the Commission concludes as follows:

1. The application of PGandE should be granted to the extent set forth in the preceding findings and in the following order and in all other respects should be denied.

2. The increases in rates and charges authorized herein are justified.

3. The rates and charges authorized herein are just and reasonable and present rates and charges insofar as they differ therefrom are for the future unjust and unreasonable.

4. All motions consistent with these findings and conclusions should be granted and those inconsistent therewith should be denied.

O R D E R

IT IS ORDERED that:

1. After the effective date of this order, applicant Pacific Gas and Electric Company is authorized to file revised tariff sheets, with rates, charges and conditions modified, as set forth in Appendix B attached hereto. Such filing shall comply with General Order No. 96-A. The effective date of the

revised rate schedules shall be four days after the date of filing. The revised rate schedules shall apply only to service rendered on and after the effective date thereof.

2. Within 180 days after the effective date of this order, Pacific Gas and Electric Company shall file a study covering service to schools including load characteristics, cost studies and other pertinent data relating to the rate level for such service.

3. The application of Pacific Gas and Electric Company in all other respects is denied.

4. All motions consistent with the findings and conclusions set forth above in this decision are granted, and those inconsistent therewith are denied.

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

Dated at San Francisco, California, this 19th day of JANUARY, 1971.

William Symons Jr. Chairman

Vernon L. Sturgeon

Commissioners

Commissioner J. P. Vukasin, Jr., being necessarily absent, did not participate in the disposition of this proceeding.

APPENDIX A
Page 1 of 2

List of Appearances

Applicant: F. T. Searls, John C. Morrissey and John S. Cooper, for Pacific Gas and Electric Company.

Protestants: Lawrence A. Baskin, for Alameda County Legal Aid Society; Mrs. Sylvia Seigel, for Association of California Consumers, Orville Wright of counsel; Andrew Berger, for himself; Grace McDonald, for California Farmer Consumer Information Committee, Orville Wright of counsel; Albin J. Gruhn and Dennis T. Peacocke, for California Labor Federation, AFL-CIO; Robert Gnaizda and Lucy K. McCabe, for California Rural Legal Assistance, Mexican-American Political Association, and Mexican-American Legal Defense Fund, William M. Bennett of counsel; Miss Betty L. Steen, for California State Council of Carpenters, Orville Wright of counsel; Orville Wright and Alan D. Davidson, Assistant City Attorney, for City of Fresno; Roy W. Hanson, Deputy City Attorney, and Diane M. Lee, for City of San Jose; Saul M. Weingarten and William M. Bennett, for City of Seaside, City of Gonzales, and Castroville Chamber of Commerce; Steve Slotkow, for Consumers Co-operation Society of Monterey County, Monterey County Food Bank, Marina Welfare Rights Organization, Seaside Low-Cost Housing Corporation, Young Adults for Action, Involved Citizens of Marina, Senior Citizens of Monterey, Over 60 Club, International Assembly of Black Women, Senior Men's Club of Monterey, National Association of Retired Civil Employees, American Association of Retired Persons (Chapter 97), World War I Veterans & Auxiliary of Monterey Peninsula Barracks No. 634, Salinas-Alisal Neighborhood Organization, Puerto Rican Social Club, Gonzales Welfare Rights Organization, Soledad Welfare Rights Organization, CRLA Advisory Group, Alisal High School ESEA Title I Advisory Group, Warlords, Mexican Estudiants Chicanos De Aztlan, M.A.P.A., and Guadalupanes; Don Rothenberg, for himself and Consumers Cooperative of Berkeley, Orville Wright of counsel; Jean L. Walker, for Consumers Cooperative Society of Palo Alto, Inc., Orville Wright of counsel; William M. Bennett, for Consumers of Pacific Gas and Electric Company, People of the State of California, and Consumers Arise Now; William M. Bennett, Jr., for Consumers Arise Now; John Allen, Edward C. Burckhardt, Marvin G. Claitman, Larry S. Craig, Lew Geiser, James Grandjean, William R. Harmsen, Gary Horn, Ralph M. Johnson, Bruce Ketron, Terrance L. McGowan, John J. McGregor, Roger W. Patton, Donald Prigo, Arthur W. Simon, Harold Sherwin Small, Thomas George Smith, Ruth Spear, Sharon Streicher, Robert M. Teets, Edward Torrico, and Dewey Watson, each for himself and for Consumers Arise Now; Marin County Counsel, by George J. Silvestri, Jr., for County of Marin; Howard E. Gawthrop, for County of Santa Cruz; Vivian D. Wilson, for CRLA, M.A.P.A. of Sonoma County, and F.A.P.A.; Edward Hayes, Jr., and Robert Gnaizda, for East Palo Alto Welfare Rights Organization, William M. Bennett of counsel; H. George Gerdes, for himself; Poe Haskell, for himself; Alan S. Maremont, for Kate Maremont Foundation; Rubin Tepper, for Legal Aid Society of San Mateo County; Florence Smith and Steve Slotkow, for Monterey County Welfare Organization; J. Henry Glazer, for National Aeronautics and Space Administration-Ames Research Center; Elaine D. Climpson and Steve Slotkow, for NAACP; Robert Gnaizda, for NAACP of San Francisco, NAACP Legal Defense Fund, California Indian Legal Services, Filipino-American Political

List of Appearances

Association, and San Benito County Consumers' Co-op, William M. Bennett of counsel; Keith Eickman and Dave Jenkins, for Northern California Council of the International Longshoremen's and Warehousemen's Union; Martin McDonough, for Northern California Power Agency; Thomas Malley, for San Francisco Neighborhood Legal Assistance; Trinidad Montanona and Steve Slotkow, for Salinas Welfare Rights Organization; Robert Gnaizda and Ronald J. Podraza, for San Mateo Consumers and Tenants Council, William M. Bennett of counsel; John G. Lyons, Vaughan, Paul & Lyons, for South Lake Farms, Stuart Morshead, H & H Farms, Inc., and Kern Valley Farms; Salvador L. Tavares, for U.A.W. Northern California Community Action Council; David W. Salmon, for Western Conference of Teamsters; Orville Wright, for himself.

Interested Parties: Mark L. Kermit, for Board of Supervisors of Contra Costa County; William L. Knecht and R. O. Hubbard, for California Farm Bureau Federation; Brobeck, Phleger & Harrison, by Gordon E. Davis and Robert N. Lowry, for California Manufacturers Association; Martin M. Eisenberg, for himself; Darrell D. Lynn, for himself and Marin Coalition; Manfred Hans Mikelens, for himself; Dr. Osterloh and Marta Osterloh, for themselves; Thomas M. O'Connor, City Attorney, William C. Taylor and Edward J. Nevin, Deputy City Attorneys, and Robert R. Laughead, Rate Engineer, for City and County of San Francisco; Michael Rourke Downey, for City of Santa Clara; Frank A. Quinn, for U. S. Equal Employment Commission; Harold Gold, Gerald Depkin and Stuart R. Foutz, for Department of Defense and Other Executive Agencies of the United States of America; Arthur H. Sulliger, for Valley Nitrogen Producers, Inc.; Stuart R. Foutz, Counsel, for Western Division Naval Facilities Engineering Command.

Commission Staff: William C. Bricca and John S. Fick, Counsel, Manley W. Edwards, General Division Engineer, and John J. Gibbons.

APPENDIX B

RATES - PACIFIC GAS AND ELECTRIC COMPANY

Applicant's rates, charges and conditions are changed to the level or extent set forth in this appendix.

PRELIMINARY STATEMENT

Modify as proposed in Section B I of Exhibit No. 4 to Application No. 51552 except revise the wording of the second paragraph of Section 7 to read as follows.

"The Utility will reduce its electric rates to reflect any rate reduction in Schedules Nos. G-55 and G-55.1 of its Gas Department by reason of (1) El Paso Natural Gas Company rate reductions for contingent offset charges, or (2) Pacific Gas Transmission Company rate reductions for contingent offset charges."

SCHEDULES NOS. A-1, A-2, A-3, A-4 and A-5

RATES

	Per Meter Per Month				
	A-1	A-2	A-3	A-4	A-5
Single-Phase Service:					
Customer Charge	$0.50	$0.60	$0.65	$0.70	$0.85
Energy Charge (in addition to the Customer Charge):					
First 100 kwhr, per kwhr	4.0¢	4.3¢	4.5¢	4.7¢	5.9¢
Next 200 kwhr, per kwhr	3.6	3.8	4.0	4.3	5.3
Next 700 kwhr, per kwhr	3.4	3.5	3.7	4.0	4.9
Next 2,000 kwhr, per kwhr	2.9	3.0	3.1	3.2	3.6
Over 3,000 kwhr, per kwhr	2.0	2.0	2.0	2.0	2.0
Minimum Charge:*	$0.50	$0.60	$0.65	$0.70	$0.85

*But not less than 65¢ per month per kva of connected welder load.

Polyphase Service:

The single-phase rate plus $1.00 per meter per month.

	A-1	A-2	A-3	A-4	A-5
Minimum Charge:*	$1.50	$1.60	$1.65	$1.70	$1.85

*But not less than 65¢ per month per kva of connected welder load and per horsepower of polyphase connected motor load.

APPLICABILITY, TERRITORY AND SPECIAL CONDITION

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. A-12

Establish a new General Service Schedule No. A-12 as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Rates as follows and add the following clause to the last sentence of Special Condition 3, "......., as such days are specified in Public Law 90-363 (U.S.C.A. Section 6103)."

RATES

Energy Charge:

	Per Meter Per Month
First 6,000 kwhr, or less	$167.50
All excess over 6,000 kwhr:	
First 100 kwhr per kw of billing demand, per kwhr	2.10¢
Next 200 kwhr per kw of billing demand, per kwhr	1.05
All excess, per kwhr	.65

Minimum Charge:

$167.50 per month but not less than $1.00 per kw of billing demand.

SCHEDULE No. A-13

RATES

	Per Meter Per Month
Demand Charge:	
First 1,000 kw of billing demand	$1,500.00
Over 1,000 kw of billing demand, per kw	1.00
Energy Charge (in addition to the Demand Charge):	
First 100 kwhr per kw of billing demand, per kwhr	1.22¢
Next 200 kwhr per kw of billing demand, per kwhr	.72
All excess, per kwhr	.65

Minimum Charge:
The Demand Charge constitutes the Minimum Charge.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Special Conditions Nos. 1 and 3 as follows.

1. ...... that in cases where the use of energy is intermittent or subject to violent fluctuations, either a 5-minute or a 15-minute interval may be used.

3. ...... Thanksgiving Day and Christmas Day, as said days are specified in Public Law 90-363 (U.S.C.A. Section 6103).

SCHEDULE No. A-14

RATES

	Per Meter Per Month
Demand Charge:	
First 4,000 kw of billing demand	$4,300.00
Over 4,000 kw of billing demand, per kw	.95
Energy Charge (in addition to the Demand Charge):	
First 100 kwhr per kw of billing demand, per kwhr	1.15¢
Next 200 kwhr per kw of billing demand, per kwhr	.70
All excess, per kwhr	.50

Minimum Charge:
The Demand Charge constitutes the Minimum Charge.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Special Conditions Nos. 1, 3 and 9 as follows.

1. ...... that in cases where the use of energy is intermittent or subject to violent fluctuations, either a 5-minute or a 15-minute interval may be used.

3. ...... Thanksgiving Day and Christmas Day, as said days are specified in Public Law 90-363 (U.S.C.A. Section 6103).

9. Energy Charge (in addition to the Demand Charge):

First 450 kwhr per kw of excess maximum demand, per month:
Included in Demand Charge

All over 450 kwhr per kw of excess demand per month:
5.0 mills per kwhr

SCHEDULE No. A-15

RATES

	Per Meter Per Month
Customer Charge:	$0.60
Energy Charge (in addition to the Customer Charge):	
First 50 kwhr, per kwhr	6.00¢
Next 150 kwhr, per kwhr	5.45
Next 800 kwhr, per kwhr	4.80
Next 2,000 kwhr, per kwhr	4.20
Next 12,000 kwhr, per kwhr	3.40
All over 15,000 kwhr per meter per month:	
First 50 kwhr per kw of billing demand, per kwhr	2.85
Next 150 kwhr per kw of billing demand, per kwhr	2.15
All excess, per kwhr	1.50

Minimum Charge: The Customer Charge constitutes the Minimum Charge, except where motors (exclusive of lamp socket appliances) aggregating more than 5 hp are connected, in which case the total minimum charge will be $1.25 per month per hp.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. A-16

RATES

	Per Meter Per Month
Energy Charge:	
First 150 kwhr, per kwhr	5.10¢
Next 150 kwhr, per kwhr	3.00
All excess, per kwhr	2.30
Minimum Charge:	
(a) Lighting only	$1.60
(b) Lighting, cooking, and power	1.60
Plus, for all connected loads in excess of 3 kw of heating and cooking, or 3 hp of power, per kw or per hp	0.80
(c) Power only	1.60
Plus, for all connected loads in excess of 2 hp, per hp	0.80

APPLICABILITY, TERRITORY AND SPECIAL CONDITION

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. A-18

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Special Conditions 3 and 5 as follows.

3. Change "Standard Bunker Fuel Oil" to "Chevron Industrial Fuel Oil on October 28, 1970".

5. ...... Thanksgiving Day and Christmas Day, as said days are specified in Public Law 90-363 (U.S.C.A. Section 6103).

SCHEDULE No. A-30

The existing Schedule No. A-30 is cancelled and replaced by Schedule No. A-60 as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except delete the last sentence of the applicability clauses.

SCHEDULE No. AB-31

The existing Schedule No. AB-31 is cancelled and replaced by Schedule No. A-61 as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify the last sentence of the applicability clause as follows:

APPLICABILITY

"In the Siskiyou and Trinity County areas this schedule is applicable only to customers of record on   who thereafter maintain continuous service at the same location under this schedule."

SCHEDULE Nos. AS-1 and HS-1

The existing Schedules Nos. AS-1 and HS-1 are cancelled and replaced by Schedule No. A-62 as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify RATES and the second sentence in Applicability as follows:

APPLICABILITY

"This schedule is applicable only to customers of record on   who thereafter maintain continuous service at the same location under this schedule".

RATES

Rate A

	Per Meter Per Month
Energy Charge:	
First 13 kwhr, or less	$1.60
Next 37 kwhr, per kwhr	4.40¢
Next 200 kwhr, per kwhr	3.70
Next 500 kwhr, per kwhr	3.50
Next 1,750 kwhr, per kwhr	3.10
Over 2,500 kwhr, per kwhr	2.00

Rate B (in addition to Rate A)

Energy Charge:	
First 300 kwhr, per kwhr	1.65¢
Over 300 kwhr, per kwhr	1.25

RATES—Contd.

Minimum Charge:

The minimum charge hereunder shall be $1.60 per month plus $0.55 per kilowatt of total connected load in excess of two kilowatts or two horsepower other than lighting, provided, however, that the minimum charge in excess of $1.60 per month will not apply during billing periods in which no energy is used.

SCHEDULE No. A-40

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. A-41

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Special Condition 3 as follows:

3. ...... and under a contract for service for a period of 5 years have demands ignored which occur between 10:30 P.M. and 6:30 A.M. of the following day and on Sundays and the following holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, and Christmas Day, as such days are specified in Public Law 90-363 (U.S.C.A. Section 6103).

SCHEDULES Nos. D-1, D-2, D-3, D-4 and D-5

RATES

	Per Meter Per Month				
	D-1	D-2	D-3	D-4	D-5
Customer Charge:	$0.50	$0.60	$0.65	$0.70	$0.85
Energy Charge (in addition to the Customer Charge):					
First 50 kwhr, per kwhr	4.0¢	4.3¢	4.5¢	4.7¢	5.9¢
Next 50 kwhr, per kwhr	3.0	3.2	3.4	3.5	4.2
Next 100 kwhr, per kwhr	1.8	2.2	2.4	2.5	2.9
Next 100 kwhr, per kwhr	1.6	1.6	1.6	1.6	1.5
Next 700 kwhr, per kwhr	1.5	1.5	1.5	1.5	1.5
Over 1,000 kwhr, per kwhr	1.3	1.3	1.3	1.3	1.3

APPLICABILITY, TERRITORY AND SPECIAL CONDITION

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. D-30

The existing Schedule No. D-30 is cancelled and replaced by Schedule No. D-60 as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except delete Special Condition and the second sentence of the Applicability.

SCHEDULE No. D-40

Modified as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. DE

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. DM

RATES

The rate of the single family domestic service schedule, applicable in the territory in which the multi-family accommodation is located, modified as follows:

Customer Charge: No change.

Energy Charge (in addition to the Customer Charge):

The kilowatt hours for all blocks shall be multiplied by the number of residential dwelling units and/or trailer spaces wired for service, except that the first 25 kilowatt hours per unit of the first block should be billed at the rate of the first block and the remainder of the first block shall be billed at the rate of the second block.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Special Condition No. 2 as follows:

2. In determination of the multiplier it is the responsibility of the customer to advise the Utility within 15 days following any change in the number of residential dwelling units and trailer spaces wired for service.

SCHEDULE No. H-1

RATES

	Per Meter Per Month
Energy Charge:	
First 150 kwhr, per kwhr	5.60¢
Next 850 kwhr, per kwhr	2.15
All excess kwhr, per kwhr	1.50

Minimum Charge - Monthly basis:

$4.00 per month for the first 7 kw or less of the connected load plus 35¢ per kw per month for any additional connected load; provided, however, that space heating appliances shall not be considered as active connected load in computing bills on meter readings subsequent to May 1 and prior to November 1.

Optional Annual Minimum Charge:

Upon application by the customer the Utility will put the minimum charge on an annual basis of $48.00 per annum for the first 7 kw or less of connected load, plus $4.00 per annum for each additional kilowatt; provided the customer signs a contract for service for a period of not less than one year. The Company reserves the right to bill the annual minimum charge proportionately throughout the year.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. LS-1

RATES

Class Burning Schedule Nominal Lamp Rating	Rate per Lamp per Month A All-Night	 Midnight	 B All-Night
Incandescent Lamps			
600 lumens or less	$ 2.00*	1.80*	-
1,000 lumens	2.20*	1.95*	-
2,500 lumens	3.30	2.95*	2.55
4,000 lumens	4.00	3.45*	3.15
6,000 lumens	4.70	4.00*	3.85
10,000 lumens	6.35	5.30*	5.45
15,000 lumens	8.20*	6.60*	-
Mercury Vapor Lamps Watts — Initial Lumens			
175 — 7,500	$3.85	3.30*	3.00
250 — 11,000	4.65	3.95*	3.85
400 — 21,000	6.10	5.00*	5.20
700 — 37,000	10.40	8.60*	8.60
1,000 — 57,000	13.05	10.80*	11.05

*Service under rates marked with an asterisk and service covered by Special Condition 3, except service for extended all-night burning schedules as provided under Special Condition 3, are limited to street lights in service under such rates as of May 15, 1966.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. LS-2

RATES

Class	Rate per Lamp per Month A Utility supplies energy and switching service only		B Utility supplies energy, switching, and maintenance service for lamps and glassware		C Utility supplies energy, switching, and maintenance service for entire system including lamps and glassware	
Burning Schedule	All-Night	Midnight	All-Night	Midnight	All-Night	Midnight
Nominal Lamp Rating:						
Incandescent Lamps						
1,000 lumens or less	$ .55	$ .45	$1.00	$ .75	$1.35	$1.05
2,500 lumens	1.20	.95	1.80	1.30	2.15	1.60
4,000 lumens	1.80	1.40	2.45	1.85	2.75	2.05
6,000 lumens	2.55	1.95	3.15	2.40	3.55	2.70
10,000 lumens	3.95	3.00	4.70	3.50	5.10	3.85
15,000 lumens	5.50	4.15	6.45	4.75	6.85	5.15

RATES (Cont)

Burning Schedule		All-Night	Midnight	All-Night	Midnight	All-Night	Midnight
Low Pressure Sodium Vapor Lamps							
10,000 lumens		$1.90	-	-	-	-	-
High Pressure Sodium Vapor Lamps							
Watts	Initial Lumens						
400	46,000	3.20	-	-	-	-	-

		Rate per Lamp per Month					
		A		B		C	
		All-Night	Midnight	All-Night	Midnight	All-Night	Midnight
Metal Halide Lamps							
Watts	Initial Lumens						
400	30,000	$3.20	-	-	-	-	-
1,000	90,000	7.25	-	-	-	-	-
Mercury Vapor Lamps							
Watts	Initial Lumens						
175	7,500	1.70	1.35	2.10	1.65	2.60	2.05
250	11,000	2.25	1.80	2.75	2.15	3.25	2.45
400	21,000	3.25	2.55	3.75	2.95	4.25	3.35
700	37,000	5.25	4.00	6.55	4.80	7.05	5.25
1,000	57,000	7.40	5.65	8.95	6.55	9.45	6.95

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify the fourth sentence of Special Condition No. 1 as follows and delete reference to Rule 15.1 in Special Condition No. 10.

> "Single-phase service from 480 volts sources will be available in certain areas at the option of the Utility when this type of service is practical from the Utility's engineering standpoint."

SCHEDULE No. LS-3

RATES

Energy Charge:

For the first 20 kw or less of connected load:
3.9¢ per kwhr for first 150 kwhr per month per kw connected
0.9¢ per kwhr for all in excess

For all connected load in excess of the first 20 kw:
3.2¢ per kwhr for first 150 kwhr per month per kw connected
0.9¢ per kwhr for all in excess

Service Charge (in addition to the Energy Charge):

$4.00 per month for each service connection to a separate circuit of the customer.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. LS-4

RATES

Energy Charge:
For the first 20 kw or less of connected load:
3.9¢ per kwhr for first 150 kwhr per month per kw connected
0.9¢ per kwhr for all in excess

For all connected load in excess of the first 20 kw:
3.2¢ per kwhr for first 150 kwhr per month per kw connected
0.9¢ per kwhr for all in excess

Service Charge (in addition to the Energy Charge):
$4.00 per month for each service connection to a separate circuit of the customer.

Note: The Energy Charge shall be based on a connected load of not less than 1 kw.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify the second and fourth sentence of Special Condition No. 1, the fourth and fifth sentence of Special Condition No. 2 as follows and delete reference to Rule 15.1 in Special Condition No. 3.

1. ...... Multiple current will normally be supplied at 120/240 volts*, single phase. ...... Single-phase service from 480 volt sources will be available in certain areas at the option of the Utility when this type of service is practical from the Utility's engineering standpoint.

2. ...... When 480 volt service is desired by the customer, energy will be supplied from overhead facilities at 480 volts single-phase for an interconnected group of lamps provided the total connected load of the interconnected group of lamps to be so served is not less than 8 kw. For a customer-owned interconnected system of less than 8 kw but not less than 2 kw, energy will be supplied at 120/240 volts unless the customer pays the additional cost of a 480 volt supply.

SCHEDULE No. LS-30

The existing Schedule No. LS-30 is cancelled and replaced by Schedule No. LS-60 as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. LS-31

The existing Schedule No. LS-31 is cancelled and replaced by Schedule No. LS-61 as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. OL-1

RATES

	Per Lamp Per Month
175 watt mercury vapor lamp	$4.25
400 watt mercury vapor lamp	6.70

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. P-1

RATES

A - Monthly Basis:

Energy Charge:

Connected Load in hp	Rate per kwhr for Monthly Consumption of			
	First 50 kwhr per hp	Next 50 kwhr per hp	Next 150 kwhr per hp	All over 250 kwhr per hp
2 - 9.9 hp	5.25¢	2.75¢	1.60¢	1.25¢
10 - 24.9 hp	4.70	2.70	1.45	1.25
25 hp and over	3.90	2.45	1.35	1.15

Minimum Charge:

	Per hp Per Month
First 50 hp of connected load	$1.25
All over 50 hp of connected load	.85

The minimum charge will be accumulative annually.

B - Annual Basis:

Demand Charge:

	Per hp Per Year
First 10 hp of connected load	$8.40
All over 10 hp of connected load	5.90

The demand charge is payable in five equal monthly installments.

Energy Charge (in addition to the Demand Charge):

The energy rates applicable to Rate A above.

Note: The Minimum Charge in Rate A and the Demand Charge in Rate B shall be based on a connected load of at least 2 hp for single-phase service and at least 3 hp for three-phase service.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify the last sentence of Applicability as follows:

"This schedule is applicable only to customers of record on who thereafter maintain continuous service at the same location under this schedule".

SCHEDULE No. P-3

RATES

Billing Demand kw	Rate per kwhr for Monthly Consumption per kw of Billing Demand: First 100 kwhr per kw	Next 100 kwhr per kw	Next 100 kwhr per kw	All over 300 kwhr per kw
0-18	3.80¢	2.00¢	1.45¢	1.25¢
19-37	3.45	1.70	1.25	1.15
38-74	3.15	1.45	1.25	1.00
75 and over	2.70	1.35	1.15	0.90

Minimum Charge:

$58.00 per month for the first 40 kw or less of the billing demand plus $1.00 per kw for any excess, accumulative annually.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify the last sentence of Applicability as follows:

"This schedule is applicable only to customers of record on who thereafter maintain continuous service at the same location under this schedule".

SCHEDULE No. P-5

RATES

Energy Charge:

Connected Load in hp	Rate per kwhr for Monthly Consumption of: First 50 kwhr per hp	Next 50 kwhr per hp	Next 150 kwhr per hp	All over 250 kwhr per hp
2- 9.9	6.45¢	3.50¢	2.05¢	1.50¢
10- 24.9	5.65	3.30	1.85	1.50
25- 49.9	4.75	3.20	1.70	1.40
50- 99.9	4.10	3.85	1.70	1.25
100-249.9	3.65	2.50	1.50	1.15
250-499.9	3.30	2.15	1.40	1.05
500 and over	3.20	2.05	1.35	1.05

Minimum Charge: $3.30 per month for the first 2 hp plus $1.65 per hp per month for the next 48 hp plus $1.05 per hp per month for excess; provided, however, that when the primary use of power is seasonal or intermittent, the minimum charge may at the option of the customer be made accumulative over a 12-month period.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552.

SCHEDULE No. P-8

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Electric Rate I, Electric Rate II, Special Condition Nos. 3 and 5 as follows:

ELECTRIC RATE I

	Per Meter Per Month
Demand Charge:	
First 1,000 kw of billing demand	$1,500.00
Over 1,000 kw of billing demand, per kw	1.00
Energy Charge (in addition to the Demand Charge):	
First 100 kwhr per kw of billing demand, per kwhr	1.22¢
Next 200 kwhr per kw of billing demand, per kwhr	.72
All excess, per kwhr	.65

Minimum Charge:

The Demand Charge constitutes the Minimum Charge

ELECTRIC RATE II

Demand Charge:	
First 4,000 kw of billing demand	$4,300.00
Over 4,000 kw of billing demand, per kw	.95
Energy Charge (in addition to the Demand Charge):	
First 100 kwhr per kw of billing demand, per kwhr	1.15¢
Next 200 kwhr per kw of billing demand, per kwhr	.70
All excess, per kwhr	.50

Minimum Charge:

The Demand Charge constitutes the Minimum Charge

SPECIAL CONDITION No. 3

Maximum Demand: The maximum demand ....; provided, that in cases where the use of energy is intermittent or subject to violent fluctuations, either a 5-minute or a 15-minute interval may be used.

SPECIAL CONDITION No. 5

Off Peak Demand: All customers will, for billing purposes, have maximum demands ignored which occur between 10:30 P.M. and 6:30 A.M. of the following day and on Sundays and the following holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day as such days are specified in Public Law 90-363 (U.S.C.A. Section 6103).

SCHEDULE No. P-30

The existing Schedule No. P-30 is cancelled and replaced by Schedule No. P-60 as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except delete the last sentence of Applicability and modify the last sentence in the second paragraph of Special Condition No. 4(b) as follows:

SPECIAL CONDITION No. 4(b)

"Demand for installations .... on Sundays and the following holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day, as said days are specified in Public Law 90-363 (U.S.C.A. Section 6103)."

SCHEDULE No. PA-1

RATES

A - Connected Load Basis

B - Maximum Demand Basis

Connected Load in hp or Billing Demand in kw	Annual Service Ch. per hp or kw	Energy Charge in Addition to the Service Charge Rate per kwhr per hp or kw per year: First 1000 kwhr per hp or kw	Next 1000 kwhr per hp or kw	All Over 2000 kwhr per hp or kw
2- 4.9	$9.12	2.02	0.98¢	0.70¢
5- 14.9	7.92	1.73	0.98	0.70
15- 49.9	7.14	1.61	0.98	0.70
50- 99.9	6.36	1.49	0.98	0.64
100-249.9	5.76	1.43	0.98	0.64
250-499.9	5.52	1.39	0.98	0.64
500 and over	5.16	1.31	0.98	0.64

Minimum Charge:

The minimum charge shall be the annual service charge.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify the word "increases" to "changes" in Special Condition 9.

Add a new special condition:

13. Credit for Ownership of Transformer by Customer: Customers operating installations having a connected load of 50 hp. or over and owning the transformers supplying such installations as of effective date of schedule will be allowed the following credits:

Size of Installation		Annual Credit per hp. of Connected Load
50 - 99 hp.	-----------	$1.00 per hp.
100 - 249 hp.	-----------	.90 per hp.
250 - 499 hp.	-----------	.90 per hp.
500 - and over	-----------	.80 per hp.

In those cases where the customer's motor operates at the voltage at which the service is metered, no credit for customer ownership of transformers will be allowed on the connected load of such motor.

SCHEDULE No. S-1

RATES

Stand-by Charge:	Per Meter Per Month
First 25 kw of contract capacity, per kw	$2.10
Next 100 kw of contract capacity, per kw	1.58
Over 125 kw of contract capacity, per kw	1.26
Minimum Stand-by Charge	25.00

Demand and Energy Charges (in addition to the Stand-by Charge):

The regular schedules applicable, including the minimum charges and all other provisions of said schedules.

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except delete the third sentence of Special Condition 5.

SCHEDULE No. TC-1

RATES

	Per Meter Per Month
Service Charge: For each Service Connection	$1.25
Energy Charge (in addition to the Service Charge): All kwhr, per kwhr	2.43¢

Minimum Charge: $1.25 per month

APPLICABILITY, TERRITORY AND SPECIAL CONDITIONS

Modify as proposed in Section B II of Exhibit No. 4 to Application No. 51552 except modify Special Condition 1 as follows and delete reference to Rule 15.1 in Special Condition 6.

1. Type of Service: Energy will normally be supplied at 120/240 volt single-phase service (120/208 volts star in certain localities) unless the customer pays the additional initial cost of a 480 volt supply. However, service from 480 volt sources from underground systems will be made available only for new service connections at the option of the Utility when this type of service is practical from the Utility's engineering standpoint.

INDEX OF COMMUNITIES AND RATE ZONING MAPS

Modify to reflect rate area zoning as proposed in Section C of Exhibit No. 4 to Application No. 51552.

SCHEDULES Nos. D-6, D-21, D-22, D-23, D-24, D-25, D-51, DP-3, DF-1, DS-1, DB-10

The existing schedules are to be cancelled and withdrawn and the customers transferred to the applicable Domestic Schedule as proposed in Exhibit No. 4 to Application No. 51552.

SCHEDULES Nos. DA-1 to DA-6, DT

The existing schedules are to be cancelled and withdrawn and the customers transferred to Multi-Family Service Schedule No. DM.

SCHEDULES Nos. DP-1 and DP-2

The existing schedules are to be cancelled and withdrawn and the customers transferred to Domestic Service Schedule No. D-60.

SCHEDULES Nos. A-6, A-21, A-22, A-23, A-24, A-31, A-51, A-52, AB-30, AF-2, CP-1, CP-2, CP-3, LP-1, LP-2, LP-3, LF-1, P-6, P-21, P-23, PF-3

The existing schedules are to be cancelled and withdrawn and the customers transferred to the applicable General Service Schedule as proposed in Exhibit No. 4 to Application No. 51552.

SCHEDULE No. AB-15

The existing Schedule AB-15 is cancelled and withdrawn and the customers are transferred to Outdoor Area Lighting Service Schedule No. OL-1.

SCHEDULES Nos. H-20, H-30, H-51

The existing schedules are cancelled and withdrawn and the customers are transferred to Heating and Cooking Schedule No. H-1.

SCHEDULES Nos. P-7, P-21, P-22, PP-1, PF-1, P-30

The existing schedules are cancelled and withdrawn and the customers are transferred to the applicable General Power Schedule as proposed in Exhibit No. 4 to Application No. 51552.

SCHEDULES Nos. PA-3, PA-4, PA-6, PA-7, PF-4

The existing schedules are to be cancelled and withdrawn and the customers transferred to Agricultural Power Schedule No. PA-1.

SCHEDULES Nos. S-2, R-20, S-20

The existing schedules are cancelled and withdrawn and the customers are transferred to Stand-By Service Schedule No. S-1.

SPECIAL CONTRACTS WITH J. RAMON SOMAVIA AND PAICENES COMPANY

The contracts are cancelled and the customers transferred to Agricultural Power Schedule No. PA-1 or General Service Schedule No. A-13.

SCHEDULE No. LS-57

The existing Schedule No. LS-57 is to be cancelled and withdrawn and the customers transferred to Street and Highway Lighting Schedule No. LS-1.

SPECIAL CONTRACT RATES FOR INTERRUPTIBLE SERVICE TO AMES LABORATORY AND STANFORD LINEAR ACCELERATOR CENTER

Demand Charge:

On-Peak Demand, per kw per month	$0.78
Off-Peak Demand, per kw per month	$0.25

Energy Charge:

First 300 kwhr per kw of Demand, per kwhr	.57¢
All over 300 kwhr per kw of Demand, per kwhr	.50¢

Minimum Charge for SLAC:

PG&E Facility Charge	$13,960.00 per mo.
Credit for USBR	$64.00 per MW
Energy Component	.624¢ per kwhr