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Decision No. 91325 FEB 13 1980 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 steam service provided by the San Francisco Steam Sales System.

(Steam)

Application No. 57202 (Filed April 6, 1977; reopened June 1, 1979)

Malcolm H. Furbush and Joseph S. Englert, Jr., Attorneys at Law, for Pacific Gas and Electric Company, applicant.
Leonard Snaider, Attorney at Law, for the City and County of San Francisco, interested party.
William J. Jennings, Attorney at Law, and Bruce M. De Berry, P.E., for the Commission staff.

O P I N I O N

Pacific Gas and Electric Company (PG&E) filed Application No. 57202 requesting authority to increase its rates and charges for steam service in the City and County of San Francisco by 34.3 percent or an annual gross increase in revenues of $1,131,900 on a 1977 test year basis and authority to revise its currently authorized fuel cost adjustment clause to conform to that used in its Electric Department.

After duly published and posted legal notice, public hearing was held before Administrative Law Judge Gillanders in San Francisco on December 5, 6, and 7, 1977. After receipt of three late-filed exhibits and the conclusion of oral argument on January 23, 1978 the matter was submitted.

On December 27, 1977 Grosvenor Properties, Ltd., after completion of the hearings, forwarded a letter requesting lifeline rates and the letter was made a part of the record.

On June 29, 1978 Grosvenor Properties, Ltd. filed a petition to set aside submission and reopen the proceeding for further hearings on lifeline steam service under Rule No. 84 of the Rules of Practice and Procedure. The grounds stated are that lifeline rates were not proposed by PG&E and no evidence has been presented on lifeline uses.

The Commission has considered the request for lifeline steam service rates and has determined not to authorize such rates in this proceeding and not to set aside submission and reopen this proceeding for the purpose of further considering lifeline rates.

PG&E presented testimony and evidence through six witnesses and 14 exhibits. The staff presented testimony from four witnesses and introduced five exhibits.

A proposed decision prepared by Commissioner Gravelle, the assigned Commissioner, and an alternate decision prepared by the Revenue Requirements Division came before the Commission at its regularly scheduled conference of July 25, 1978. After discussing the proposed decisions, the Commission suggested that certain rate base evidence needed clarification and further study, and the matter was withdrawn. Subsequently, PG&E and the staff began the preparation of the studies.

On June 1, 1979, the studies having been completed, the matter was reopened for the purpose of receiving evidence on the following issues:

1. Depreciation reserve requirement studies.
2. Contributed plant.
3. PG&E's accounting system for steam properties.
4. The staff's recently developed rate base adjustments.

Further hearing was held at San Francisco on July 2, 1979. Testimony and exhibits were presented by one PG&E witness and two staff witnesses. The matter was submitted on the record subject to a late-filed exhibit which was received on July 6, 1979.

General Information

PG&E is and, ever since October 10, 1905, has been an operating public utility corporation organized under California law. It is engaged principally in the business of furnishing electric and gas service in California. It also distributes and sells water in some cities, towns, and rural areas, and produces and sells steam in certain parts of San Francisco.

Steam System

PG&E began construction of its San Francisco steam system in 1911 to meet the competition of the United Light and Power Company, which operated three steam plants in San Francisco known as: "Consumers Light and Power Company," "Equitable Light and Power Company," and "Southside Light and Power Company." These latter three companies generated electric energy by steam, using the exhaust to supply low-pressure steam for heating, distributed through a system of large low-pressure mains. In 1915 these competing companies' plants were purchased by the Great Western Power Company and, with subsequent additions, continued to be operated as a low-pressure system using exhaust steam. During the early 1920's the steam system of PG&E included three boiler plants totaling 3,100 boiler horsepower. Two of these plants were operated under lease. About 460 customers were served through approximately 40,000 feet of main. The then competitive system of Great Western Power Company operated four boiler plants with a steam heating capacity totaling 5,100 boiler horsepower. Three of the four competing plants generated electricity and supplied steam service to about 400 customers through approximately 42,000 feet of main.

In 1930, PG&E acquired the properties of the Great Western Power Company including its steam system. The low-pressure system continued to be operated with steam supplied from both the high-pressure system and from low-pressure boilers at Station "R" built in 1916. Station "R" was retired in 1953. Steam for the entire system is presently supplied to the high-pressure mains from Stations "S" and "T", built in about 1913 and 1924, respectively, and subsequently enlarged and improved. The existing system is thus entirely supplied by steam generated expressly for heating purposes and cogeneration has not been practiced for many years.

Rate History

The regulation of rates for the sale of steam commenced when the Public Utilities Act was amended, effective July 22, 1919, to include the distribution of steam as a public utility enterprise. Rates for steam heat service were first filed in 1920, pursuant to Decision No. 7576 (5-17-20) in Application No. 5014, which authorized elimination of contract rates and the placing of customers on filed schedules.

Decision No. 84902 dated September 16, 1975, in the utility's most recent rate proceeding for the Steam Department, authorized a rate of return of 8.65 percent on rate base and 12.0 percent on common equity for the 1975 test year. It granted no increase in rates, other than to bring the fuel cost adjustment factor to zero, and to cancel Rate Schedule SB-1, absorption air-conditioning service, to be combined with Schedule No. S-1, General Service. It also ordered the transfer of $2,249,000 from the accumulated provision for depreciation of the Oakland steam system to that of the San Francisco steam system.

Rate Proposal

PG&E proposes the following changes to its steam service tariff:

(a) Increase rates and minimum charges sufficiently to increase revenues by $1,131,900 or 34.3 percent based on year 1977 estimated revenues at rates in effect on March 1, 1977.

(b) Modify the fuel cost adjustment provision to establish a base weighted average rate for fossil fuel consistent with year 1977 estimated fossil fuel expense and to utilize the actual cost of fossil fuel per unit of sales under the fuel cost adjustment.

All service from the San Francisco steam sales system is to one class under one schedule: Schedule No. S-1, General Service.

The utility-proposed rates were established by increasing the rates in effect on March 1, 1977 on a uniform-cent-per-thousand pound basis. To the extent that the rates presently in effect are increased or decreased as a result of the operation of the currently effective fuel cost adjustment provision, PG&E proposes that the amount of such increases or decreases after March 1, 1977 be added to or subtracted from the proposed base rates, as the case may be, to yield the appropriate level of effective rates at the time of the Commission's decision herein.

The minimum charge under Schedule No. S-1 has been increased to reflect the amount of usage covered by the minimum charge which existed immediately prior to the adoption of the fuel cost adjustment provision in 1974. This results in an increase from present rates of $12 per meter per month to $30 per meter per month.

The fuel cost adjustment provision has been modified as follows:

(a) The "weighted average base cost of fuel" contained in paragraph 4 thereof has been redesignated the "base weighted average rate for fossil fuel" and such base weighted average rate has been modified from a cents per million Btu basis to a dollars per thousand pounds of sale basis, analogous to the change ordered by the Commission for electric energy cost adjustment clauses in its Decision No. 85731 dated April 27, 1976. The derivation of the base weighted average rate for fossil fuel consistent with the proposed base rates is shown on page 12-7 of Exhibit 2.

(b) The method of calculating the offset rate contained in the same paragraph 4 has been modified to allow for estimated actual losses to be used and to incorporate the use of the base weighted average rate for fossil fuel.

(c) Paragraph 7(a)(3) has been modified to reflect the use of the base weighted average rate for fossil fuel per thousand pounds of steam sold as proposed in item (a) above.

(d) Because the proposed fuel cost adjustment provision would result in the actual cost of fuel being recovered, paragraph 7(c) is no longer necessary and is proposed to be deleted.

Results of Operation

Witnesses for PG&E and the Commission staff have analyzed and estimated PG&E's operational results. Summarized on Tables 1 and 2 below are the estimated results of operations for the test year 1977 under PG&E's present and proposed rates as presented at the 1977 hearings. The individual differences are discussed below.

TABLE 1

Pacific Gas and Electric Company Steam Sales System
Summary of Earnings
Year 1977 Estimated at Present Rates

Item	Staff (A)	Utility (B)	Utility Exceeds Staff Amount (C)	Utility Exceeds Staff PCT (D)
	(Thousands of Dollars)			
Operating Revenues				
Revenue from Sales	$2,884.8	$3,302.7	$ 417.9	14.5
Total Operating Revenues	2,884.8	3,302.7	417.9	14.5
Operating Expenses				
Production	2,948.4	3,398.3	449.9	15.3
Distribution	384.4	385.6	1.2	.3
Customer Account	5.4	6.2	.8	14.8
Administrative and General	185.4	195.0	9.6	5.2
Subtotal	3,523.6	3,985.1	461.5	13.1
Deprec. and Amort.	48.5	116.9	68.4	141.0
Taxes Other Than on Income	227.0	249.0	22.0	9.7
State Corp. Franchise Tax	(120.8)	(143.4)	(22.6)	18.7
Federal Income Tax	(621.1)	(763.1)	(142.0)	22.9
Total Operating Expenses	3,057.2	3,444.5	387.3	12.7
Net Operating Revenues Adjusted	(172.4)	(141.8)	30.6	(17.7)
Rate Base	1,893.6	4,235.0	2,341.4	123.6
Rate of Return	(9.10)%	(3.35)%	5.75%	

(Red Figure)

TABLE 2

Pacific Gas and Electric Company Steam Sales System
Summary of Earnings
Year 1977 Estimated at Proposed Rates

Item	Staff (A)	Utility (B)	Utility Exceeds Staff Amount (C)	Utility Exceeds Staff PCT (D)
	(Thousands of Dollars)			
Operating Revenues				
Revenue from Sales	$3,872.5	$4,434.6	$ 562.1	14.5
Total Operating Revenues	3,872.5	4,434.6	562.1	14.5
Operating Expenses				
Production	2,948.4	3,398.3	449.9	15.3
Distribution	384.4	385.6	1.2	.3
Customer Account	7.2	8.3	1.1	15.3
Administrative and General	192.4	205.4	13.0	6.8
Subtotal	3,532.4	3,997.6	465.2	13.2
Deprec. and Amort.	48.5	116.9	68.4	141.0
Taxes Other Than on Income	227.0	249.0	22.0	9.7
State Corp. Franchise Tax	(32.7)	(42.6)	(9.9)	30.3
Federal Income Tax	(193.6)	(274.1)	(80.5)	41.6
Total Operating Expenses	3,581.6	4,046.8	465.2	13.0
Net Operating Revenues Adjusted	290.9	387.8	96.9	33.3
Rate Base	1,893.6	4,235.0	2,341.4	123.6
Rate of Return	15.36%	9.16%	(6.20)%	

(Red Figure)

Revenues

PG&E's estimate of revenue at proposed rates exceeds the staff's estimate by $562,100. Staff estimated 279 customers for test year 1977 which is three less than PG&E's. According to the staff by using later sales information than used by PG&E, its estimate is 104,300 M-lbs less. The staff attributes the decline in total sales to the increased efforts of the steam customers to conserve energy. The staff's estimate is reasonable and will be adopted because it reflects more current conditions.

Operating Expenses

The only significant difference between staff and PG&E is in the item of production expenses where the staff estimate is $449,900 less. $444,400 of the difference is due to cost of fuel which in turn follows from the staff's lesser estimate of sales. Having adopted the staff's estimate of revenues and customers, we will adopt the staff's estimate of operating expenses, except for administrative and general expenses.

At the 1977 hearings PG&E stated that for the purposes of expedition of this case it was accepting the staff's estimates of all categories of revenues and expenses, except those estimates associated with the installation, operation, and maintenance of Boiler No. 7 at Station "T", and the staff's recommendation as to rate design.

According to PG&E, its acceptance of the staff's showing, with the exceptions mentioned, should not in any way be construed as its acceptance of the staff's principles or methodology for other purposes than the expedition of the instant proceeding. We have developed our own results of operation as set forth in our discussion.

Utility Plant

The staff's estimate for beginning-of-year steam system plant-in-service is $2,455,500 less than PG&E's estimate of $8,099,800, or 30.3 percent less. The difference between the staff and PG&E's estimates is in the treatment of a new boiler (Boiler No. 7) and plant addition to Station "T".

Staff contends that Boiler No. 7 and the new plant addition are not needed for the present test year. Declining sales prior to authorization of this boiler have made this portion of plant unnecessary. The recorded steam sendout has been on a declining trend since peaking just prior to the end of year 1973. Consumption has reflected the customers' efforts to conserve energy since 1974. Increased conservation efforts are evidenced by the difference between PG&E's and the staff's estimate of sales for the 1977 test year.

According to the staff, the maximum annual peak-hour load has also been affected by customers' conservation efforts. The yearly maximum hourly load occurs during the winter months. The highest hourly load ever recorded occurred during the winter of maximum sales, the 1973-74 winter. The maximum winter sales and the highest hourly load peaks were produced without Boiler No. 7. The annual peak-hour loads for the last three winters have been less than that recorded for the winter of 1973-74, even when adjusted for temperature. The average yearly peak-hour load for the past five winters is 300 M-lbs/hr., and when considering total plant net output without Boiler No. 7, the net reserve would be sufficient to provide for PG&E's desired 50 M-lbs/hr. net reserve.

PG&E's final work order authorization to proceed with the plant addition and Boiler No. 7 installation was based on a previous justification, written approximately 1½ years prior to final authorization. This project was originally submitted for authorization on October 12, 1973, and was presented to PG&E's Electric Engineering Advisory Committee (EEAC) for approval on November 6, 1973. The EEAC referred the project back to the Steam Sales Task Force for reconsideration due to the fuel crisis at the time. The Steam Sales Task Force reviewed the project based on future load forecasting, capacity, energy consumption, and alternate solutions. The project with a revised cost estimate (Revision 1) was authorized approximately six months later, or May 14, 1974, with a written justification. The new boiler (Boiler No. 7) was purchased and stored, for the entire year of 1975, on utility property awaiting the new plant addition construction, scheduled for 1976. A new revised estimate (Revision 2) was made dated September 19, 1975, which contained the Revision 1 estimates's justification. This work order was authorized October 28, 1975. The staff contends that a new study should have been made to justify this new plant expansion at the time just prior to project approval and authorization instead of basing the need for the project on a 1½ years' old study, thus resulting in the current unnecessary plant. We agree with the staff contention that Boiler No. 7 is not required. We will adopt the staff's estimate of utility plant.

Depreciation Expense and Reserve

The $68,400 difference between the staff and the utility estimates of depreciation expense is caused by the staff's exclusion of Boiler No. 7 and the related new plant addition, but includes the new fuel oil storage tanks in Account 4406. Half of the difference in expense ($34,300) is the difference in the weighted average reserve. Having adopted the staff's estimate of plant, it follows that we should adopt the staff's estimate of depreciation expense and reserve adjusted to reflect the recommendation regarding Contributions in Aid of Construction (CIAC) as discussed hereinafter.

Rate Base

PG&E's estimate of weighted average rate base exceeds the staff's estimate by $2,341,400. The difference is due to the staff's elimination of the new boiler and plant additions at Station "T". We will not adopt either PG&E's or the staff's estimate of rate base for those reasons set forth in our discussion.

Depreciation Reserve Requirement Studies

A supervising valuation engineer employed by PG&E presented a "Theoretical Reserve Requirement Study" for the steam system (Exhibit 20, Item No. 2).

The study outlined the various mortality curves used, lives, ages, and other depreciation data concerning PG&E's steam system.

It is the testimony of PG&E and the staff that subsequent to 1973 the Utility Plant In Service accounts contain only the historical cost of plant paid for by PG&E. PG&E's theoretical reserve study was based on depreciable plant as of December 31, 1977 (Excluding Boiler No. 7); therefore, the amounts shown represent PG&E's costs built up since the inception of an accounting system on December 31, 1911.

Below is a brief history of major additions to plant since the reclassification of original cost of plant as of December 31, 1948:

1949-1951 Three original Babcock and Wilcox sectional header boilers were replaced at Station "S".

1957-1958 Union Iron Works package boiler was installed at Station "T". A deaerating heater and a turbine driven pump were installed to replace obsolete equipment, and sodium zeolite type water softeners were installed.

June 4, 1958 - an explosion occurred on Boiler No. 4 at Station "T" causing Boilers Nos. 3 and 4 to be made unsafe for further steam generation. Two new packaged boilers were installed.

1969-1977 Steam facilities were relocated for the construction of the BART system.1/

Station "T" was enlarged, including installation of Boiler No. 7 and auxiliaries and the enlarging of Station "T" buildings.1/

High pressure steam mains were installed on Jessie and Fifth Streets and on Montgomery and Pine to serve new loads.2/

1/ Costs not included in depreciation reserve study.

2/ These costs normally would be done under nonrefundable advances and thus should be considered as donated plant. The record shows no advances for construction although PG&E's Rule 15 calls for advances to be made under certain conditions.

The staff did not present a separate depreciation reserve requirement study; however, a presentation of the recorded Accumulated Provision for Depreciation was made as part of the staff's Exhibit 22.

We have reviewed the theoretical reserve requirement study presented by the company and find the study reasonable for purposes of this proceeding.

Contributed Plant

According to PG&E, prior to Federal Power Commission (FPC) Order No. 490, issued August 22, 1973, the historical cost of plant contributed to the company by others was included in utility plant and offset for book and ratemaking purposes in Balance Sheet Account 271 - Contributions in Aid of Construction (CIAC). In order to eliminate the CIAC account, the FPC required that contributions relating to specific items of plant still in service be credited to the plant accounts. The contributions relating to depreciable property which was no longer in service or which could not be identified was to be credited to the Accumulated Provision for Depreciation (Depreciation Reserve). While FPC Order No. 490 was specifically directed to electric and gas utilities, PG&E applied the directive to all its properties which included the Steam Sales Department. As of the date of the order, PG&E has $186,839 that was associated with the San Francisco Steam Sales System included in the CIAC account. Examination of the records of that account indicated that $126,744 was included in the Main account and $95 in the Services account. Since it was not possible from the existing records to determine precisely the portion of these dollars that represented utility plant still in service or plant that had been retired, estimates were prepared using the age of the contribution and the survivor curves representing the average service lives and mortality dispersion characteristics used for depreciation purposes. This resulted in eliminating the CIAC account by crediting $86,782 to Plant in Service and $40,057 to the Accumulated Provision for Depreciation (Depreciation Reserve).

Subsequent to 1973, the Utility Plant in Service accounts contain only the historical cost of plants paid for by the company.

According to the staff, Exhibit 14, identified earlier in this proceeding by PG&E as a schedule of CIAC received in connection with its Steam Sales Department, does not agree with PG&E's books of account.

Exhibit 14 was not used in determining rate base. The amount recorded in the CIAC ledger does agree with the amounts identified as a footnote to PG&E's schedule, "Steam Sales Dept. Gross Additions & Retirements Years 1920-1977", submitted to the staff accountant and described in her testimony.

The following tabulation shows the reconciliation between Exhibit 14 and the CIAC ledger:

CIAC total per Exhibit 14 (p. 3)	$629,371
Less: Advances subject to refund and not recorded in CIAC ledger (refunds have been made)	(66,721)
Plus: CIAC recorded but not included in Exhibit 14	92,766
Total CIAC recorded	655,416
Less: CIAC amortized (prior to 1974)	10,914
Balance per CIAC ledger	$644,502

(Red Figure)

CIAC included in PG&E schedule "Steam Sales Department Gross Additions & Retirements"

1973	$ 86,782
1974	457,124
1975	99,519
1976	1,077
Total	$644,502

In addition, as of December 31, 1977, PG&E had recorded the following amounts of CIAC in suspense accounts:

	Year Recorded	Source	Amount
(a)	1968-1971	Bay Area Rapid Transit District (BARTD)	$190,000
(b)	1974	Continental Insurance Company	45,000
(c)	1977	James A. Nelson Company	17,000
			$252,000

(a) The $190,000 received from BARTD remains in suspense. The applicable construction has been completed and booked in Plant In Service since 1973. PG&E is currently in the process of finalizing its analysis of the work performed. Preliminary analysis indicates that a refund may be due BARTD.

For ratemaking purposes in this application the $190,000 was considered in PG&E's calculation of Weighted Average Depreciation Reserve for 1976 (Exhibit 2, p. 10-4 l. 17).

(b) The $45,000 received from Continental Insurance Company remains in suspense as PG&E has not found it necessary to perform the construction initially anticipated (reinforcement of the steam plant). PG&E will retain the $45,000 CIAC in suspense until such time as the applicable plant reinforcement becomes necessary. At this time no refund is anticipated.

(c) The $17,000 received from James A. Nelson Company has been credited from the plant accounts subsequent to December 31, 1977, the end of the audit period. At the time of the audit, the related project had been completed but an analysis of the work performed had not been finalized.

The staff accountant recommended that PG&E for ratemaking purposes, reduce its plant investment by $62,000 of CIAC received but not credited from the steam plant accounts.

The staff recognizes that the $190,000 received from BARTD should correctly be included as a reduction in plant investment. However, for purposes of this proceeding, PG&E has recognized the amounts received from BARTD in its calculation of "Weighted Average Reserve for 1976".

The staff engineer in his Exhibit 24 correctly reduced plant in service by $190,000 with a corresponding reduction in the reserve.

We will adopt the staff recommendations to reduce plant investment by $252,000 and reduce the plant reserve by $190,000. The net effect will be to reduce net plant by $62,000.

Accounting for Funds Received for Relocations

PG&E's accounting procedures for recording amounts received in connection with relocation of plant facilities are:

a. Apply amounts received to offset any expense incurred as a result of the relocation.

b. Credit any remainder to the depreciation reserve account as a relocation credit. (No CIAC is recognized.)

The Finance Division recommended in a memorandum dated March 31, 1958, that amounts received in connection with the relocation of utility plant facilities shall be accounted for by:

a. First, recovering the unrealized depreciation on properties retired prematurely due to the relocation work (credit depreciation reserve).

b. Then, offsetting charges to expense or other accounts representing the cost of maintenance or repair work incurred in connection with the relocation work.

c. Finally, accounting for any balance remaining as a CIAC (credit to Plant in Service).

The staff accountant recommended that PG&E change its accounting procedures to record amounts received in connection with the relocation of plant facilities to conform with those recommended by the Finance Division of this Commission. We will adopt the staff recommendation as it conforms to our long-standing policy on relocations.

PG&E's Accounting System for Its Steam Properties

According to PG&E, the original classifications of accounts for California electric, gas, and water companies were adopted by the California Railroad Commission on October 23, 1912, to become effective January 1, 1913. Although the Steam Sales Department was not specifically mentioned in any reference to that action that it could find, a classification of accounts for that unit of the company's operation was prepared, with an introductory statement dated December 31, 1911, which for plant accounts has remained in force today.

From October 1905, when the company was incorporated, to January 1, 1913, the effective date of the Commission's original classification, the company's accounts were maintained without reference to any officially prescribed accounting system. This was likewise true of Great Western Power Company which owned steam properties subsequently acquired by PG&E.

Because none of the utility companies had their plant accounts segregated in sufficient detail to set up their plant investment in accordance with the accounting classification prescribed by the Commission, it was necessary in most instances to start with an inventory of plant. PG&E's appraisal was as of December 31, 1919. Figures for the Great Western Power Company were based on the Kelley Appraisal as of June 30, 1918.

From the inventory dates to the present time, these inventories plus additions and betterments less retirements have served as the historical cost of plant included on the books of the company and used for ratemaking purposes. The plant retirements of facilities installed prior to the inventory dates have been written out of plants at the amount shown in the inventories. Retirements of items installed subsequent to the inventory dates were based on the historical costs of plant recorded on the books of the company.

The plant of the Great Western Power Company was merged with PG&E as of June 30, 1928.

The California Railroad Commission, in Decision No. 30269, dated October 25, 1937, as amended by Decision No. 30339, dated November 15, 1937, in Case No. 4230 adopted and prescribed, effective January 1, 1938, a Uniform System of Accounts for Electric Corporations and in Decision No. 42068, dated September 21, 1948, in Case No. 4458, adopted and prescribed, effective January 1, 1949, a Uniform System of Accounts for Gas Corporations. These systems of accounts contain provisions requiring each utility to classify its plant according to the primary plant accounts prescribed therein, such classification to be made to show both the original cost and the cost of the utility of its plant.

On May 11, 1937, the FPC adopted an order relating to the determination of original cost of electric plant, as required by Electric Plant Instruction 2-D of the Uniform System of Accounts effective January 1, 1937.

By Resolution No. A-282, adopted February 11, 1947, the California Commission directed that no electric corporation should make any entries on its books to record any reclassification of its plant accounts until such reclassification was approved by the Commission.

From 1940 to 1949 members of the staffs of the California Commission and the FPC, in connection with and as part of original cost studies, made thorough investigations and audits of the Company's books and those of its predecessor companies. On June 22, 1949, a conference was held between representatives of the California Commission, the FPC, and the Company where certain understandings were reached. As a result, on December 1, 1949, the Company filed Application No. 30823 with the California Commission requesting an order approving the reclassification of the Company's entire plant as of January 1, 1949. This included a proposal for the Steam Sales Plant as well as the Electric, Gas, and Water Plant. In Decision No. 43826, dated February 14, 1950, the reclassification was approved. For the Steam Sales Department,[3] the cost of properties was set at $2,070,095 which was a reduction of $62,993 in plant carried on the Company's books of which $54,190 was applicable to the San Francisco Steam Sales System. This difference was primarily adjusting overheads included in PG&E's 1919 appraisal and Great Western Power Company's Kelley Appraisal as of June 30, 1918. In addition, the decision ordered a charge against the depreciation reserve of $34,199 for the Steam Sales Department.

On February 27, 1950, the FPC issued an order approving the reclassification adjustments.

From the date of the reclassification to the present time, the reclassified plant plus additions less retirements have served as the historical cost of plant for book purposes.

In June 1978, the staff of the then Finance Division conducted a limited review of PG&E's system of accounts for its Steam Sales Department.

The review disclosed that PG&E uses its own Steam System of Accounts developed in 1911 and periodically revised by its accounting department.

Although this system of accounts has not been adopted by the Commission, it is adequate to describe the investment and operations of the steam department.

The staff concluded:

> "Currently PGandE and SDG&E (San Diego Gas & Electric Company) have the only steam systems in California under the jurisdiction of this Commission. PG&E complied with the CPUC adopted Electric and

3/ San Francisco and Oakland systems.

Gas Systems of Accounts that allow utilities with other utility departments to keep their books which are proper and necessary to reflect the results of operation of each utility department. Therefore, it is not necessary to adopt a Steam System of Accounts."4/

In addition, the current examination disclosed that the steam sales plant accounts prescribed in PG&E's Steam System of Accounts were the plant accounts recognized by this Commission in Decision No. 43826, dated February 14, 1950, for the reclassification of steam plant property.

Staff Adjustments

At the July 2, 1979 hearing the staff testified as follows its proposed changes to its showing:

"The purpose is to present to the Commission the results of adjustments to the staff and the utility's Summary of Earnings. The adjustments consist of reducing Plant In Service by $62,000 for Contributions in Aid of Construction (CIAC), as recommended by the Finance Division, and also incorporating the latest rates for Social Security tax (FICA) and for federal income tax (FIT) on a pro forma basis. The FICA rate was 5.85% in 1977, but the current rate is 6.13%. The FIT rate presently is 46% for corporations as set by the Revenue Act of 1978; the previous rate of 48% was used by the staff and the utility in their exhibits."

We did not include PG&E's steam department in our OII 33, an investigation into the effects of the Revenue Act of 1978, as it was included as a pending rate case in Appendix C of OII 33.

We anticipated that the decision in this proceeding would recognize our Finding 6 in Decision No. 90316 for OII 33, where we stated that "The employers' share of the FICA taxes was increased on January 1, 1979. Such an increase should serve as an offset to the concurrent reduction in federal income taxes pursuant to the Revenue Act of 1978."

Therefore, we will recognize the higher FICA taxes and 1978 Revenue Act effects as reasonable for this proceeding. We will adopt the adjustment for CIAC as it deals with a subject of the reopened proceeding.

4/ Memorandum, June 27, 1978, to the Director of Finance Division from Principal Financial Examiner.

Allocations

Indirect administrative and general expenses which are general in character; common utility plant including material and supplies, which are used jointly by several departments; plus the depreciation expense and depreciation reserve, relative to common utility plant; ad valorem taxes on common utility plant, including material and supplies; and payroll taxes not based on income were prorated to the four operating departments of electric, gas, water, and steam sales. Proration was made by the four-factor method of allocation.

The portions of indirect administrative and general expenses such as injuries and damages, pensions, and the saving fund plan, also including payroll taxes, were allocated to steam sales system by use of a 0.22 percent factor. Since this is the same factor adopted in D.86281, dated August 24, 1976, of the last general electric and gas proceeding, A.55509 and A.55510, the staff used this factor in its estimates. Both the staff and the utility used a zero percent factor for allocating the property insurance item of administrative and general expenses; this is the same as shown on the staff's exhibit in the last general rate proceeding.

For the balance of items shown as indirect administrative and general expenses and all other common utility plant associated items, the company used a 0.14 percent allocation factor based on the composite rates of the four-factor method. The method was reviewed in detail and appeared to be consistent with staff practices and was followed by the staff.

The staff witness testified that he made no special study of the steam department as "we just had a staff review of the gas and electric rate case previously and I used the factors that they had reviewed and the total common utility plant estimates that they came up with."5/

The use of the four-factor method for very small divisions of PG&E leads to distorted results. For example, according to the staff the steam department will have 279 customers for the 1979 test year.

The staff's four-factor method thus assigns $2,630 of common plant and property held for future use to each steam customer. The staff's method assigns $665 of administrative and general expenses to each customer and $1,644 of working capital.

5/ Those estimates did not give consideration to the staff's disallowance of $2,790,614 of Steam Department Production Plant.

The problem of allocations was recently discussed in Decision No. 87468 dated June 21, 1977 in connection with PG&E's Application No. 54199 for authority to increase its rates for water service provided by the Tuolumne Water System. In Decision No. 87468 we said:

> "PG&E argues that its utilization of the four-factor method to allocate common expenses is fair and reasonable. PG&E utilized the established four-factor method to allocate certain administrative and general expenses, to allocate common utility [plant], and to allocate common utility plant depreciation, reserve, and expense to the Tuolumne Water System. PG&E adopted the four-factor method after discussion with the staff several years ago. The four factors are customers, capital investment, operations and maintenance expense, and direct payroll. For each of the operating departments, including the water department, there is developed a percent of total for the four items. If the four-factor method is not utilized, PG&E claims it will mean that some part of its common plant and administrative and general expenses would not be recovered, which would be an irrecoverable loss to PG&E.
>
> "The staff estimate was based on a two-factor allocation. The reason for this, as explained at length by the staff witness, was that a four-factor allocation produced a distorted result for the Tuolumne Water System of $10.11 per customer as opposed to a $5.39 cost per customer for PG&E overall. The staff two-factor allocation resulted in a charge of $6.09 per customer, a more equitable estimate. According to the staff witness, he did not blindly follow a formula which led to an unreasonable result but instead substituted 'engineering judgment' to reach a reasonable result.
>
> "We are impressed with the staff showing both as to its study of customer accounts expense and the allocation of common expenses and plant. We find it difficult to believe that, in PG&E's words, 'nothing had changed since the last allocation study undertaken in 1968'. The staff's estimates will be adopted."

If we found in 1977 that an allocated cost per customer of $73.08 per year was reasonable for a small water division of PG&E, surely a customer cost of $664.80 per year for 1977 test year must be unreasonable for the steam division of PG&E. If we found that $69 of common plant per customer was reasonable for the small water division, then $2,630 must be unreasonable for the steam division.

Administrative and General Expenses

Based upon the above discussion a reasonable allowance for administrative and general expenses is $21,000 instead of the staff's $190,600.

Rate Base Determination

Staff Exhibit 9 shows on Table 9-A allocations of common plant and property held for future use amounting to $733,600 and on Table 10-B a depreciation reserve allocation of $178,800 or a net of $554,800.

On Table 11-A of staff Exhibit 9 the staff shows allocated common plant materials and supplies of $340,800 and allocated working cash allowance of $118,000 or a total allocated working capital of $458,800.

Table B of staff Exhibit 23 shows an adjusted net plant investment as of December 31, 1977 of $3,590,459; from this amount $2,790,614 of production plant related to Boiler No. 7 should be subtracted leaving a balance of $799,845.

In the Tuolumne matter, the staff made its own estimate of materials and supplies and developed a working cash allowance based on Tuolumne's needs. In this matter, materials and supplies and working cash are total company allocated amounts. There is nothing in this record to show that any of the materials and supplies allocated to the steam department could or would ever be used in the steam system. Based on the Simplified Basis[6] of determining a working cash allowance, $61,000 is a reasonable amount.

Adjusting the staff's rate base in accordance with the above discussion derives a rate base of $839,000 instead of the staff's $1,893,600.

Use of the staff's weighted average depreciation reserve in this determination should not be construed as agreement that the depreciation reserve is properly estimated. As every $1,000 of rate base disallowance only requires a reduction in net revenue of $92.00, we will not require further study of the reserve in this proceeding. PG&E is put on notice that it did not prepare its reserve requirement study in the manner contemplated by Standard Practice U-4.

Following is a summary of how the steam department rate base adopted herein is derived:

$1,831,600	Total weighted average depreciated rate base proposed by the staff (including the adjustments for Boiler No. 7 previously discussed on page 10)
(500,700)	Allowance for total working capital based on the four-factor method is disallowed (includes working cash and materials and supplies)
(571,900)	Common plant disallowance
60,000	Working cash allowed
20,000	Materials and supplies allowed
$ 839,000	Adopted weighted average depreciated test year rate base

6/ Standard Practice U-16 Determination of Working Cash Allowance.

The adopted rate base results from our review of the evidentiary record before us. In the next PG&E steam proceeding we can reevaluate whether Boiler No. 7 remains excess capacity (see p. 10 for discussion) and whether it should be included in rate base. Based on this record we are not convinced that the four-factor methodology reasonably reflects a sound allocation of common plant to the steam department. Staff and PG&E may address the question of allocating common plant in the next steam rate proceeding. We have, however, included an allowance for working capital which is our best estimate given the evidentiary record.

Rate of Return

Any rate of return determination necessarily requires the weighing of a number of economic intangibles which are difficult to measure by statistical comparisons. It devolves upon the judgment of the Commission after weighing the evidence presented by all of the experts, to determine and set a fair and reasonable rate of return. (Pac. Tel. & Tel. Co. (1968) 69 CPUC 53.) It was the statement of PG&E's counsel that the rates proposed in the application would produce an 8.04 percent rate of return on rate base if in effect for 1977. PG&E recognizes that such rate of return is less than the 9.20 percent requested by PG&E.

The staff's financial expert would have recommended a rate of return of 9.35 percent on rate base, except for the fact he understood PG&E had only requested 9.20 percent. For the purposes of this proceeding, we will adopt a 9.20 percent rate of return as reasonable.

Adopted Results

Based upon the above discussion we will adopt the following results of operation. The gross revenue increase authorized is $394,800 instead of PG&E's requested $1,131,900.

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PACIFIC GAS AND ELECTRIC COMPANY STEAM SALES SYSTEM
SUMMARY OF EARNINGS
YEAR 1977 ESTIMATED AT 9.20 PERCENT RATE OF RETURN
(Dollars in Thousands)

Item	
Operating Revenues	
Revenue From Sales	$3,281.0
Total Operating Revenues	3,281.0
Operating Expenses	
Production	2,948.4
Distribution	384.4
Customer Account	5.4
A & G	21.0
Subtotal	3,359.2
Deprec. & Amort.	48.5
Taxes Other Than On Income	228.4
State Corp. Franchise Tax	(70.4)
Federal Income Tax	(361.9)
Total Operating Expenses	3,203.8
Net Operating Revenues Adjusted	77.2
Rate Base	839.0
Rate of Return	9.20%

(Red Figure)

Rate Design

The declining block rate structure is inconsistent with this Commission's current rate design policy and should be replaced by the staff proposed flat commodity rate. Similarly, we agree with the staff's recommendation to replace the current minimum charge with a monthly customer charge. These rate design changes reflect our belief that a customer should not be economically penalized for conserving.

With regard to PG&E's request to eliminate the nominal ceiling on lost and unaccounted for steam from the Fuel Cost Adjustment, we are convinced that it must be retained. The nominal ceiling serves as the company's main economic incentive to reduce levels of lost and unaccounted for steam. We urge that where economically feasible the company continue to minimize steam losses.

Findings of Fact

1. Rate base and expenses associated with the installation of Boiler No. 7 and the plant addition at Station "T" are not reasonable for this proceeding.

2. The staff recommended rate design should be adopted.

3. The nominal ceiling on Lost and Unaccounted for Steam set forth in the Fuel Cost Adjustment is reasonable and should be retained.

4. A reasonable rate of return applied to the adopted rate base is 9.20 percent which will increase gross revenue by $394,800 based on the test year 1977.

5. The base rates shown in Appendix A reflect a weighted average base cost of fossil fuel of 192.340 cents per million Btu, the equivalent steam cost being $1.0390 per thousand pounds.

6. Applicant established a tax initiative account pursuant to OII 19 issued June 27, 1978.

7. The tax initiative account balance on December 31, 1978 was $24,159.

Conclusions of Law

1. The Petition to Set Aside Submission and Reopen the Proceeding filed by Grosvenor Properties, Ltd. should be denied.

2. PG&E Steam Department should be allowed to increase its steam rates as provided in the order which follows.

3. PG&E should be ordered to change its accounting procedures to record amounts received in connection with the relocation of plant facilities to conform with those recommended by the Revenue Requirements Division of this Commission.

O R D E R

IT IS ORDERED that:

1. The Petition to Set Aside Submission and Reopen the Proceeding filed by Grosvenor Properties, Ltd. is denied.

2. After the effective date of this order, Pacific Gas and Electric Company (PG&E) is authorized to file the revised steam rate schedule attached to this order as Appendix A. Such filing shall comply with General Order No. 96-A.

3. PG&E shall, within thirty days after the effective date of this order, change its accounting procedures to record

amounts received in connection with the relocation of plant facilities to conform with those recommended by the Revenue Requirements Division of this Commission.

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

Dated FEB 13 1980, at San Francisco, California.

John E. Bryson
President

Vernon L. Sturgeon

Richard D. Gravelle

Claire T. Dedrick

Leonard M. Grimes
Commissioners

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APPENDIX A

Pacific Gas and Electric Company

Steam Department

Applicants tariff rates are changed to the level or extent shown below for Schedule S-1:

RATES

	Per Meter Per Month	
Customer Change	$7.00	
	Base Rate	Effective Rate
Commodity Charge:		
For all deliveries, per 1000 lbs.....	$4.6637	$7.5927

Fuel Cost Adjustment:

A fuel cost adjustment of $2.9290 per thousand pounds, as provided for in Part B of the Preliminary Statement, is included in the Effective Rates for service hereunder set forth above.[1/]

1/ The $2.9290 fuel cost adjustment is the difference between the imbedded fuel cost of $1.039 (see Finding No. 5) and the current rate of $3.968, effective December 1, 1979 as authorized by Resolution No. G-2326.