Decision No. 20448

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of the Investigation upon the Commission's own motion into the rates, tolls, rentals, charges, classifications, contracts, practices, rules, regulations and service of SOUTHERN CALIFORNIA GAS COMPANY, a public utility corporation, under its Schedules A-1 and A-5.	Case No. 2463.
In the Matter of the Investigation upon the Commission's own motion into the rates, tolls, rentals, charges, classifications, contracts, practices, rules, regulations and service for the distribution of gas to its consumers by LOS ANGELES GAS AND ELECTRIC CORPORATION, a public utility corporation.	Case No. 2464.
In the Matter of the Investigation upon the Commission's own motion into the rates, tolls, rentals, charges, classifications, contracts, practices, rules, regulations and service of SOUTHERN COUNTIES GAS COMPANY, a public utility corporation.	Case No. 2465.
THE CITY OF LOS ANGELES, a municipal corporation, Complainant, vs. LOS ANGELES GAS & ELECTRIC CORPORATION, a corporation, Defendant.	Case No. 2453.
In the Matter of the Application of SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA, for an increase of its existing rates, and to establish reasonable rates for natural gas supplied to its consumers in its Western District.	Application No. 13477.

ORIGINAL

CG
LV

In the Matter of the Application of SOUTHERN COUNTIES GAS COMPANY OF CALIFORNIA for authority to increase its rates for the service of natural gas to its consumers in its San Pedro District, which consists of the City of Seal Beach, Wilmington, San Pedro, and contiguous territory.	Application No. 12965.

Jess E. Stephens, City Attorney, and James L. Ronnow, Deputy City Attorney, for the City of Los Angeles.

Clyde Woodworth, City Attorney, for the City of Inglewood.

H. G. King, for Culver City.

Chester L. Coffin, City Attorney, for City of Santa Monica.

Paul Overton, for the Los Angeles Gas and Electric Corporation.

Thomas J. Reynolds and Hugh Gordon for the Southern California Gas Company.

LeRoy M. Edwards, for the Southern Counties Gas Company.

J. J. Deuel, and L. S. Wing, for the California Farm Bureau Federation, and all incorporated communities of the County of Ventura, excepting the City of Ventura.

R. C. McAllister, City Attorney and Leonard Diether, Deputy City Attorney, for the City of Pasadena.

SEAVEY AND DECOTO, COMMISSIONERS:

OPINION

The complaint of the City of Los Angeles vs. Los Angeles Gas and Electric Corporation alleges that domestic and commercial gas rates, fixed in Decision No. 17830, rendered December 31, 1926, are excessive and asks that this Commission review the facts and fix just and equitable rates.

It was anticipated that the rates, as set forth in Decision No. 17830, would return to the corporation approximately 7.8% of its Gas Department capital investment. During 1927, due to the unforeseen increase in the sales of natural gas, arising from a complexity of causes, it became apparent that the corporation's earnings would greatly exceed the 7.8% return expected in Decision No. 17830. Subsequent studies show the rate of return for the year 1927 to have been not less than 9.13%. This unexpected increase in earning capacity, immediately following the introduction of straight natural gas service, forms the basis of the complaint filed by the City of Los Angeles and the subsequent investigation on the part of the Commission.

Since investigation in connection with the above complaint cannot reasonably be limited to gas service of Los Angeles Gas and Electric Corporation within the City of Los Angeles, but involves, as well, service rendered to the balance of the territory served by that corporation and to similar service rendered by Southern California Gas Company within Los Angeles, the Commission instituted proceedings to make the necessary investigation sufficiently broad.

For convenience, these matters were consolidated for hearing with those proceedings which involve gas rates charged by Southern Counties Gas Company, particularly in its western and southern districts, where temporary rates were established by Decision No. 18009 and Decision No. 18310, respectively.

Public hearings were held in Los Angeles and the matters were submitted for decision June 5, 1928. Evidence taken involved the gas operations of Los Angeles Gas and Electric Corporation only, Southern California Gas Company having stipulated that its case be consolidated with that of Los Angeles Gas and Electric Corporation. No cause appearing for change in the rates of Southern Counties Gas Company which are here involved, the order will provide for dismissal of the proceedings relating to that company.

The discussion which follows deals with the gas department of Los Angeles Gas and Electric Corporation and the order establishes rate schedules for that corporation and for Southern California Gas Company.

For complete description of the gas properties of the companies here involved, reference is made to the decisions enumerated above. Attention is called to the subsequent purchase and operation by Southern California Gas Company of the properties of Midway Gas Company.

Rate Base.

The corporation submitted an estimate of Gas Department fixed capital, amounting to $55,883,351.64, as of January 1, 1928. With the exception of three parcels of land, this estimate is based on the finding of this Commission in its Decision No. 17830. The three parcels of land in question are estimated by D. F. McGarry to have increased in value by $318,574., the Gas Department proportion of this increase being $256,984.37. The testimony relating to this alleged increase in land value for these certain parcels was neither complete nor conclusive, as it was apparent that the real estate market was generally inactive and that there might reasonably be a decline in the value of other parcels of land which had not been considered. For the purpose of this proceeding only, we will allow as Gas Department proportion $140,000. of the claimed increase in value testified to by applicants' witness.

The estimates of net Additions and Betterments for the year 1928 varied between $2,046,000. and $2,292,073. However, for purposes of this decision, the estimate of $2,292,073., as made by the corporation, will be accepted. One-half of this amount will be added to fixed capital as of January 1, 1928, to obtain the average fixed capital operative throughout the year 1928.

The various estimates of necessary materials and supplies and working cash capital submitted are substantially in agreement, when consideration is given to moneys on hand for state tax payments. An allowance of $1,800,000. will be made for these items.

Consumers' advances in aid of construction were estimated at $705,000. by the corporation and, as this amount is available to the corporation without payment of interest, it will be treated as a proper deduction in determining the rate base.

Table I, below, shows 1928 average rate base:

TABLE I.
RATE BASE, 1928
LOS ANGELES GAS & ELECTRIC CORPORATION
GAS DEPARTMENT

Fixed Capital, Jan. 1, 1928,	$55,626,367.
1/2 Est. Net A's & B's, 1928,	1,146,037.
Average Fixed Capital, 1928,	$56,772,404.
Allowance for Increased Land Value,	140,000.
Working Cash Cap. & Mat. & Supplies,	1,800,000.
Sub-Total,	$58,712,404.
Cons. Advances (Deduct),	705,000.
Rate Base, Year 1928,	$58,007,404.

Mr. Ralph U. Fitting testified for the Corporation as to Reproduction Value, Deduction to Determine Present Value, and Going Value. In view of those considerations which were developed in cross-examination of this witness, namely:

(1) Failure to reflect downward trend of prices since the period upon which witness has based his calculation,

(2) Omission of any reflection of depreciation and obsolescence,

(3) That certain elements claimed as value have been paid by consumers through rates or advances carrying no interest charges,

we cannot but conclude that witness' claimed value when properly modified is but slightly, if at all, higher than the rate base herein used.

Revenue.

Estimates of gross revenue from gas operations, for the year 1928, were submitted by witnesses for the Corporation, the City of Los Angeles and the Commission's Engineering Department. As will be seen from an examination of these estimates, as given below, the basis of determination and the amounts estimated vary greatly.

TABLE NO. II

Estimates of Revenue from Sale of Gas for Year 1928.

	Domestic & Commercial	Industrial	Total
Los Angeles Gas & Electric Corporation:			
Based on 20 yr. Ave. Mean Monthly Temps.,	$13,959,886.	$344,965.	$14,304,851.
Based on sales trend per consumer for period 1922-27, incl.,	13,418,232.	344,965.	13,763,197.
Actual for Jan.,Feb. and 27 days of Mar., 1928. Balance of year based on 20 yr. Ave. Mean Monthly Temps.,	13,736,397.	344,965.	14,081,362.
Actual for Jan.,Feb. and 27 days of Mar., 1928. Balance of year based on sales trend for period 1922-27,	13,430,124.	344,965.	13,775,089.
City of Los Angeles:			
Based on 50 yr. Ave. Mean Monthly Temps.,	$14,840,813.	$303,237.	$15,144,050.
Engineering Department California Railroad Commission:			
Based on sales trend per consumer for 1921-26 and 1927 with adjustments,	$13,715,448.	$306,000.	$14,021,448.
Based on 50 yr. Ave. Mean Monthly Temps. with unit sales on basis of sales 1924-27, inclusive,	14,457,516.	275,222.	14,732,738.
Based on 50 yr. Ave. Mean Monthly Temps. with unit sales on basis of 1927 sales,	15,176,538.	275,222.	15,451,760.

It is evident from the above estimates that the temperature conditions assumed as the basis of the estimates, or temperatures which existed during a period upon which an estimate was based, very materially affect the results obtained. Further complication enters because of lack of agreement between engineers as to the proper percentage of unaccounted for gas to be expected with a natural gas distribution system after such system has reached a condition of stability. Differences of opinion also exist as to the comparative efficiency of use of natural, as compared to mixed gas.

The problem before us devolves primarily upon a determination of what temperature conditions can reasonably be assumed for the next few years, during which the rates herein established will apply. Consideration must also be given to the relative efficiency of use of natural gas as compared to mixed gas with consumers' appliances adjusted for the respective kind of gas served.

In view of the evidence submitted, we feel that the "twenty-year average mean temperatures" (or the average of temperatures which were experienced during the period 1908 to 1927, inclusive), as advanced by the corporation, are extremely conservative but, for purposes of this decision only, may be accepted as the temperature conditions to be expected on the average during the next few years. Therefore, the calculation of sales, based on these temperatures, which was presented by the corporation, with certain exceptions, will be used in the present proceedings. These exceptions are based on additional operating data for the period immediately subsequent to the preparation of the corporation's exhibit.

Mr. Masser, testifying for the corporation, estimated the 1928 domestic and commercial gas sales to be 15,424,020 M.C.F., under twenty year average temperature conditions, with a corresponding revenue of $13,959,886. Subsequently, this witness revised his estimate of the number of independent active meters by months, which revised estimate, when applied to the basic figures, results in a reduction of the estimate of domestic and commercial gas sales to 15,366,120 M.C.F. and a consequent reduction in the estimated revenue to $13,907,062. In arriving at his estimates, he adds two per cent of sales calculated on the former mixed gas basis, to allow for the estimated lower efficiency of use during the next few years of natural gas over that of mixed gas.

Column 1, of the following table, shows Mr. Masser's estimate of the percentage increase in sales of natural gas, as compared to mixed gas, for the same temperature conditions. The downward trend was explained by him to represent the effect of the decreasing percentage of appliances remaining to be adjusted. He stated that adjustment of appliances would be completed about August 1, 1928, from which date he estimated that natural gas sales would continue two per cent greater on a heating value basis than would be the case if mixed gas were served. Opposite his estimated figures, upon which he bases his final conclusion, are shown the actual percentages for these same months, based on operating data subsequently available and calculated in accordance with the methods set forth in the Corporation Exhibit.

Year 1928	Mr. Masser's Est.	Actual
January,	4.40%	3.10%
February,	3.90	5.64
March,	3.45	9.34
April,	3.00	-2.15
May,	2.60	14.18
June,	2.25	11.87
July,	2.00	16.77

Based on the above, we conclude that the corporation's estimate of the future inefficiency percentage is low and that a four (4) per cent allowance for this item is reasonable. Making this correction, we obtain a revised domestic and commercial sales estimate of 15,667,416 M.C.F. and a corresponding revenue of approximately $14,180,000.

The corporation estimated industrial gas sales at $344,965., which is somewhat in excess of the estimates of the City and Commission, and other miscellaneous operative revenues at $109,000. This gives a total estimated revenue of $14,633,965. which, under the record before us, may reasonably be expected to obtain under existing rates for the year 1928, assuming temperature conditions to be as accepted above.

Operating Expense.

The main item of operating expense is the purchase of natural gas, this being roughly proportional to sales. Testimony indicates a reasonable estimated unit cost for 1927 of 17.99¢ per M. C. F., delivered to this utility's transmission lines. The domestic and commercial sales herein found reasonable are 15,667,416 M. C. F., unaccounted for gas being according to testimony 14.6% of sendout, or a total domestic and commercial sendout, on the above basis, of 18,345,904 M. C. F. We will use as reasonable for industrial sendout 1,925,000 M. C. F., transmission losses of 175,000 M. C. F., and a deduction of 90,000 M. C. F. from the total calculated sendout because of oil gas that, under extremely cold weather conditions, might be manufactured for peak or emergency use. This gives a total gas purchase of 20,355,904 M. C. F. at 17.99¢, or a total expense for this item of $3,662,027.

Estimates of operating expenses, exclusive of taxes, depreciation and gas purchase expense, vary from $3,091,450. to $3,519,270., the higher figure being that submitted by the corporation. While this latter estimate reflects certain exceptional maintenance and operating conditions which should not recur in the following years, it is not greatly in excess of what this Commission feels should reasonably be expended as a total to maintain a high degree of service. The total will, accordingly, be accepted without passing upon the reasonableness of any specific item of expense.

Gross operative revenue for 1927, less uncollectibles and revenue from company use, was $14,451,239. State tax is taken as 7½% of this amount, or a total of $1,083,843. Federal income tax is based on the net revenue before Federal tax, less allowable deductibles of $2,295,056, as shown in Corporation Exhibit 31, upon which taxable revenue the present rate of 13½% is applied. Other operative taxes total $50,500.

Depreciation Annuity.

The corporation estimated the necessary depreciation annuity for the year 1928 to be $1,122,478. After deduction of $30,386., which the corporation included in addition to the normal depreciation annuity, this estimate is substantially in agreement with other estimates presented.

The $30,386. noted above, was claimed by the corporation as being necessary to amortize the undepreciated balance that will remain in certain production accounts, due to the expected retirement, in 1932, of several gas generators and accessory equipment. It is estimated that this equipment will have to be replaced at that time, due to the increase of peak loads /beyond the capacity of the equipment in question. If this takes place, it will result in the removal from service of certain property before it has served its estimated useful life.

However, while depreciation annuity is calculated on the basis of the expected life spans of the countless items going to make up the complete property, it should be treated as a whole and consideration should, therefore, not be given to the chance variation from the average of any particular class of equipment or single item. Considered as a whole, the estimated lives are conservative and we do not feel that the inclusion of $30,386., over and above the depreciation annuity based on those lives, to be warranted. The amount of $1,092,092., which remains after deducting the $30,386., will be accepted for purposes of this decision.

Rate of Return.

Based upon the above findings, it is possible to calculate the rate of return to be expected for the next few years if rates now in effect are left undisturbed. Such calculation is set forth in the following table:

TABLE NO. III
ESTIMATED RATE OF RETURN
LOS ANGELES GAS AND ELECTRIC CORPORATION - GAS DEPARTMENT
BASED ON ESTIMATE OF NUMBER OF CONSUMERS DURING 1928.

Estimated Gross Revenue,		$14,633,965.
Gas Purchased,		3,662,027.
Other Operating Expense,		3,519,270.
State Tax,		1,083,843.
Miscellaneous Tax,		50,500.
	Sub-total,	$8,315,640.
Depreciation,		1,092,092.
	Sub-total,	$9,407,732.
Federal Income Tax,		395,709.
	Total	$9,803,441.
Net for Return,		$4,830,524.
Rate of Return (Rate Base $58,007,404.),		8.33%

It is apparent that a return of 8.33% is excessive.

In view of the marked decline in the cost of money to large utilities during the past few years, this Commission has held, in a number of instances, that a return of 7½% upon capital invested is reasonable for the larger utilities operating in California. This particular utility being a distributing agent, and incurring no exceptional hazard, we can find no justification for granting a return in excess of 7½% and, therefore, conclude that such a return is reasonable.

It is apparent, from the fact that gas sales and revenue fluctuate in accordance with variations in temperature, that the rate of return for any one year may be either above or below what is considered adequate. This is particularly true for the area involved in this proceeding, where heating sales have developed under comparatively low rates which have been possible because of large supplies of natural gas available. Recognizing this fact, and giving consideration to the past few years of somewhat higher than normal temperatures, we will fix rates that will yield slightly in excess of 7½% over a long period of years, and which can safely be relied upon to give 7½% return during the next two or three years.

Rates.

The fixing of rates in this procedure involves not only the total revenues to be produced but form of rate, differentials between rate areas, and the boundaries of these areas as well.

All interested parties have agreed on a minimum charge form of rate, such minimum to include a small quantity of gas, with a constant commodity price for use in excess of the minimum allowance. These parties have suggested a uniform charge of 80¢ for the first 300 cu. ft. per meter per month in all districts.

There are certain advantages to this form of rate, such as the lower commodity charge, which results in view of the increased minimum. We are satisfied that such a rate more nearly approximates the cost of service and will ultimately result to the benefit of the entire group of consumers.

As a result of studies made, we conclude that there should be but two rate areas; the first area to consist of the present first and second rate areas, and the second to consist of the present third rate area and that, together with a general reduction of rates, there should be a material reduction in the rate differential of the two areas. The rates herein established will so provide.

This decision is based upon the maintenance of a straight natural gas service of approximately 1,100 B.t.u. per cubic foot, and the order will provide for that character of service.

It is apparent from the discussion above that gross revenues will fluctuate considerably from year to year, depending upon weather conditions, with a resulting marked effect upon yearly net revenue available for return. It would seem that the most effective method of stabilizing net revenues so that a fairly uniform return might be earned through a period of years of varying weather conditions, would be by means of a reserve set up for this purpose, similar to the contingency reserve made effective some years ago on the Southern California Edison electric system for the purpose of minimizing the yearly variations in water conditions and hence in steam generation fuel cost.

Such a step cannot be taken without co-operation from the utility involved, and we therefore suggest that these utilities give serious thought to the establishment of reserves impounding excessive yearly revenues in years of low temperature conditions, and from which withdrawals could be made in years of high temperature conditions with consequent lower revenue.

We recommend the following form of order:

ORDER

The Railroad Commission, having made investigation into certain rates and operations of Los Angeles Gas and Electric Corporation, Southern California Gas Company of California, and Southern Counties Gas Company, public hearings having been held, the matters having been submitted and now being ready for decision, hereby finds as a fact that gas rates of Los Angeles Gas and Electric Corporation and Southern California Gas Company of California now in effect are unjust and unreasonable, in so far as they differ from the gas rates hereinafter set forth, which rates are hereby declared to be just and reasonable rates, and basing its order upon the foregoing finding of fact and the findings of fact contained in the opinion preceding this order,

IT IS HEREBY ORDERED that Los Angeles Gas and Electric Corporation be and it is hereby ordered to charge and collect for natural gas service, effective with bills based on regular meter readings taken on and after December 1st, 1928, the schedule of rates set forth in Exhibit "A," attached hereto and made a part hereof, such rates to be filed with this Commission on or before December 1st, 1928;

That Southern California Gas Company be and it is hereby ordered to charge and collect for natural gas service, effective with bills based on regular meter readings taken on and after December 1st, 1928, the schedule of rates set forth in Exhibit "B," attached hereto and made a part hereof, such rates to be filed with this Commission on or before December 1st, 1928;

That none other than straight natural gas of approximately 1,100 B.t.u. per cubic foot shall be served or charged for under the rates provided herein, except as authorized by this Commission, acting through its appointed Gas Administrator;

That those proceedings herein relating to Southern Counties Gas Company, namely, Applications No. 12965 and No. 13477 and Case No. 2465 be and the same are hereby dismissed.

For all other purposes the effective date of this order shall be twenty (20) days from and after the date hereof.

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

Dated at San Francisco, California this 13th day of November, 1928.

Leon O. Whitsell

C. L. Seavey

Emmet Scott

Thos. B. Lovett

W. J. Carr

Commissioners.

CG/LV

EXHIBIT "A"

SCHEDULE NO. 1.

(Superseding Schedules No. 1 and No. 2)

General Service

Applicable to Domestic and Commercial Service for lighting, heating and cooking.

Natural Gas

Territory

Districts No. 1 and No. 2. (Rate Area #1)

Rate

First 300 cu. ft. or less per meter per month 80¢

For use in excess of 300 cu. ft. per meter per month, ...7.25¢ per 100 cu. ft.

SCHEDULE NO. 2.

(Superseding Schedule No. 3.)

General Service

Applicable to Domestic and Commercial Service for lighting, heating and cooking.

Natural Gas

Territory

District No. 3. (Rate Area #2)

Rate

First 300 cu. ft. or less per meter per month 80¢

For use in excess of 300 cu. ft. per meter per month, ...7.7¢ per 100 cu. ft.

CG/LV

EXHIBIT "B"

SCHEDULE NO. A-1.

(Superseding Schedules Nos. A-1 and A-5)

General Service.

Applicable to the service of natural gas for domestic and commercial lighting, heating and cooking.

Territory.

Districts No. 1 and No. 2.

Rate.

First 300 cu. ft. or less per meter per month	80¢
For use in excess of 300 cu. ft. per meter per month	7.25 ¢ per 100 cu. ft.