Decision No. 22102

ORIGINAL

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of the Investigation upon the Commission's own motion into the rates, charges, classifications, rules, regulations, practices and contracts of LOS ANGELES GAS AND ELECTRIC CORPORATION.	Case No. 2747.

Herman Phleger and Paul Overton, for Los Angeles Gas and Electric Corporation.

Erwin P. Werner, Thurmond Clarke, Frederick Von Schrader and Milton Bryan, for the City of Los Angeles.

Leonard A. Diether, Deputy City Attorney, for the City of Pasadena.

John J. O'Toole, City Attorney of the City and County of San Francisco, and Dion R. Holm, Special Counsel, Associated Counsel for the City of Los Angeles.

J. O. Marsh and F. F. Ball, for the Board of Public Utilities of the City of Los Angeles.

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

CARR, Commissioner:

O P I N I O N

This is a proceeding instituted by the Commission on its own motion as one of a series of investigations into the rates of various utilities in the State which from data on file apparently were realizing a better net earning than was deemed reasonable.

The proceeding was called on November 12, 1929, when members of the Commission's technical staff presented evidence and exhibits indicating the earning position of the Company, both in its gas and in its electric departments.

Electric Department Rates.

In its electrical business the Company is in competition with the City of Los Angeles. After the institution of this proceeding the City announced a reduction in its lighting and power rates effective in January, 1930, and the Company requested permission to meet these reduced rates. This, it was estimated, would effect a reduction in the Company's revenue of approximately $737,000.00 in the year 1930. Evidence presented by engineers of the Commission was to the effect that with such a reduction the Company would still be earning in its electrical department approximately 7.03 percent on its investment as shown on its books but with land accounts adjusted to current values. The Company claimed a somewhat lesser yield than this on the theory that its sales would suffer because of business depression. Under the circumstances an interlocutory order was made permitting the Company to charge the rates sought. Actual experience during the pendency of this proceeding has not borne out the fears of the Company. Its sales have increased normally. Under the circumstances the interim electrical rates should be made permanent.

Gas Rates.

In the initial stages of the proceeding the Company protested vigorously that the business depression was seriously affecting its gas business and that it was engaged in making an inventory of its gas property which would require some months to complete. Time for this, as well as to determine more definitely the effect of the business depression on its gas sales, was sought. Finally all parties stipulated that evidence should be in by July 1, 1930, a program which was substantially carried out, the hearings being completed on July 16th.

In all, twenty-four days were occupied in the presentation of evidence, the transcript of testimony numbering 2130 pages and the exhibits mounting in number to 67. Decisions in various prior rate cases affecting the Company, together with the voluminous records upon which based, as well as the Company's annual and other regular reports, were received in evidence. About every aspect of rate base and valuation was covered extensively by testimony and exhibits, as well as all other items bearing upon what would be a reasonable rate structure for the future.

Out of all of the conflicting and inconsistent claims in evidence it becomes necessary to reach a sane and just conclusion as to what will constitute reasonable rates for the future - rates which will be in harmony with the bases applied to other utilities subject to regulation by this Commission.

Test of Reasonableness.

This Commission for many years, in the exercise of its jurisdiction to establish reasonable rates for utilities of this character, has fixed rates to yield upon the historical or actual cost of the property, taking land, however, at current values and depreciation calculated on a sinking fund basis, a return somewhat in excess of the cost of the money invested in the property. Where the books were accurately kept these have been deemed to most accurately reflect the actual cost of the structural and other property. Sometimes, when these were not reliable, it has been found necessary to estimate what it cost to produce the whole or parts of the property historically.

(Re Coast Valleys Gas & Electric Co., (1917), 14 C.R.C. 460; Southern Sierras Power Co., (1920) 18 C.R.C. 818; Southern California Edison Company, (1921) 19 C.R.C. 595, and (1923) 23 C.R.C. 981; San Joaquin Light & Power Corporation, (1922) 21 C.R.C. 545; Pacific Gas & Electric Co., (1922) 22 C.R.C. 744; Great Western Power Co., (1923) 22 C.R.C. 814; Pacific Tel. & Tel. Co. (1929) 33 C.R.C. 737).

Under rates fixed on this basis utilities of this character have grown strong and prosperous. They have experienced no difficulty in securing capital for extensions and new development. Confidence in investments in such utilities has increased and capital has flowed to this field of investment readily and at a gradually decreasing rate or cost.[1]

The Los Angeles Gas & Electric Corporation in respect to its gas operations has been before this Commission frequently since the time the Commission was given jurisdiction over its rates, sometimes on its application for authority to increase its rates, sometimes at the instance of the Commission or of complainants looking

1. In the published annual report of the Railroad Commission for 1918-9 it appears that at the close of the year 1918 the aggregate fixed capital of the gas and electric utilities of the State was $468,688,407.07. Between 1918 and 1928 this increased rapidly, the total aggregate fixed capital mounting to a total of $1,185,372,478.71 by the close of 1928 (annual report for 1928-9). The aggregate par value of issued bonds and stock of gas and electric utilities, as taken from the annual reports of the Commission, was $543,285,594.04 in 1918 and $1,123,658,757.82 in 1928, an increase of $580,373,163.78. The increase includes $310,500,627.50 of bonds. An analysis of reports filed with the Commission shows that the remainder of $269,872,536.28 consists of $219,943,547.94 of preferred stock and $49,928,988.34 of common.

The following tabulation shows the basis on which the Railroad Commission has authorized Southern California Edison Company and Pacific Gas and Electric Company to issue bonds and preferred stocks, being indicative not only of their growth but of the lessening cost of money:

to reduction of rates.[2] In all of these various proceedings rates were tested or measured by the standard stated above. Its rate base for its gas department has grown from approximately $12,500,000. in 1916 to nearly $59,000,000. in 1929, and its independent active meters from 131,500 to 351,000 during the same period.

1 Cont'd:

Southern California Edison Co.

Year	Bonds: Reference	Bonds: Amount	Bonds: Effective rate %	Preferred Stock: Reference	Preferred Stock: Amount	Preferred Stock: Effective rate %
1919:	16 CRC 423	$ 9,000,000.	6.58			
1920:	18 CRC 164	5,000,000.	7.54			
1921:	20 CRC 294	6,000,000.	7.80			
1922:	22 CRC 417	5,160,000.	5.75	22 CRC 45	$ 9,500,000.	7.00
1923:	24 CRC 46	12,500,000.	6.50	23 CRC 651	5,000,000.	7.00
1924:	24 CRC 594	14,000,000.	6.45	25 CRC 579	10,000,000.	6.86
1925:				27 CRC 130	10,000,000.	6.25
1926:	Dec. 16781	40,000,000.	5.40	28 CRC 370	10,000,000.	6.25
1927:	30 CRC 355	30,000,000.	5.20	30 CRC 754	10,000,000.	5.85
1928:				31 CRC 439	10,000,000.	5.61
1929:	33 CRC 461	15,000,000.	5.40	32 CRC 745	10,000,000.	5.61
1930:	Dec. 22121	5,000,000.	5.18			

Pacific Gas and Electric Co.

Year	Bonds: Reference	Bonds: Amount	Bonds: Effective rate %	Preferred Stock: Reference	Preferred Stock: Amount	Preferred Stock: Effective rate %
1918:	16 CRC 184	$ 5,000,000.	6.20	16 CRC 184	$ 5,000,000.	7.27
1919:				16 CRC 983	3,500,000.	7.06
1920:	19 CRC 140	10,000,000.	7.63	19 CRC 7	5,000,000.	7.50
1921:	19 CRC 875	1,000,000.	7.63	20 CRC 688	2,000,000.	7.50
1922:	21 CRC 128	10,000,000.	6.40	22 CRC 166	5,000,000.	6.85
1923:	23 CRC 339	10,000,000.	6.06	22 CRC 923	2,500,000.	6.67
1924:	25 CRC 307	12,500,000.	5.90			
1925:	26 CRC 531	10,000,000.	5.87	27 CRC 335	2,500,000.	5.32
1926:	28 CRC 62	10,000,000.	5.37	29 CRC 137	1,000,000.	6.00
1927:	30 CRC 377	15,000,000.	4.90	29 CRC 276	5,000,000.	6.12
1928:	31 CRC 114	20,000,000.	4.75	32 CRC 221	10,000,000.	5.61
1930:	Dec. 22708	25,000,000.	4.92	Dec. 22488	10,000,000.	5.61

2. By constitutional amendment adopted in 1914, the Railroad Commission was vested with jurisdiction over the rates of the Company. Shortly thereafter application was made for an increase in rates while the City of Los Angeles filed a complaint attacking the rates. An extensive investigation followed and the two matters were disposed of by a decision handed down in August 1917. (Re Los Angeles Gas & Electric Corp., 13 C.R.C. 724). Rates were fixed on the basis stated, estimated to yield an 8 percent return. The

The growth in its gas department has been even exceeded by that in its electrical department, its rate base in that having increased from approximately $6,000,000. in 1916 to over $41,000,000. in 1929. The Company's total invested capital during the past fifteen years has increased to a sum more than five times the amount at the beginning of that period.

This remarkable growth has been financed largely by the sale of the Company's bonds and preferred stock, these having been marketed at a gradually lessening cost, so that the present annual cost of its bond and preferred stock money is 6.17 percent. Also, its depreciation reserve has been invested in the property. If this be included with its bond and preferred stock money at the rate of 6 percent, being the rate at which it is required to account for its reserve, the annual cost of its bond, preferred stock and depreciation reserve money is but 6.14 percent. On December 31, 1929 the Company had outstanding in the hands of the public $47,070,000. par value of bonds, $19,469,995. par value of preferred stock, and $20,000,000. par value of common stock. Its depreciation reserve on that date was reported at $16,804,105.15. All of its common stock is owned by Pacific

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2 Cont'd:
following year the Company again sought an increase in rates in the form of a surcharge and rates were fixed to yield an estimated return of 7.87 percent. (Re <u>Los Angeles Gas & Electric Corp.</u>, 16 C.R.C. 478). In June 1921 this Commission again, on application of the Company, granted an increase in rates, the charges authorized being calculated to yield a return on the basis stated of 8 percent and 9 percent on certain capital which had called for a high interest rate. (Re <u>Los Angeles Gas & Electric Corp.</u>, 20 C.R.C. 93). Rates were next fixed at the close of the year 1926, the matter coming before the Commission in the Company's application for an increase. The same basis for determining reasonableness was used and the rate of return deemed reasonable was 7.8 percent. (Re <u>Los Angeles Gas & Electric Corp.</u>, 29 C.R.C. 164). Following a complaint by the City of Los Angeles rates of the Company were reduced late in the year 1928, the rates fixed being estimated to yield a return of slightly in excess of 7½ percent. (Re <u>Los Angeles Gas & Electric Corp.</u>, 32 C.R.C. 379).

Lighting Corporation. Since 1916 but $4,500,000. of this stock has been purchased for cash, $5,500,000., however, having been distributed to Pacific Lighting Corporation in the form of stock dividends, representing earnings left in the property. Dividends have been paid on its common stock of 7.20 percent per share ($100 par value) in 1916, 1917 and 1918; 7.4 percent in 1919; 8.4 percent in 1920, 1921 and 1922; 8.7 percent in 1923; 33.75 percent in 1924, included in which is 25 percent as a stock dividend of $2,500,000.; 9 percent in 1925; 9.815 percent in 1926; 35.17 percent in 1927, which includes a stock dividend of 21.42 percent, or $3,000,000.; 15 percent in 1928, and 17 percent in 1929. The Company's surplus has grown from $381,212.97 in 1916 to $4,176,663.09 in 1929, while its depreciation reserve increased from $3,804,383.36 to, as said above, $16,804,105.15.

Past Earnings.

Table I, built up from findings in Commission's decisions, records upon which such decisions are based, and the Company's annual reports, indicates the earning position of the Company for the years 1916 to 1929, inclusive, on the basis upon which its rates and the rates of other utilities have been measured as to reasonableness, except that in view of the conclusions hereafter reached respecting consumers' advances this item has not been deducted in building up the rate bases. In this table adjustments have not been made for temperature conditions or otherwise. The figures are those reported by the Company checked against Commission findings. Land values not having been fixed each year, the latest value has been taken and carried back to a year in which they have been fixed.[3] As to its electric properties, land values of date have been carried back to 1920. Figures for working cash capital and materials and supplies have had to be approximated.

3. The effect of this in increasing the rate base and consequently lowering the rate of return is illustrated by the testimony of Mr. Masser, of the Company, on November 23, 1925, where in testifying as to the earnings of the gas department of the Company in preceding years he pointed out that the return in 1922 was 7.4 percent, in 1923 6.31 percent, and in 1924 6.81 percent, all, it will be observed, slightly in excess of that shown in Table I.

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TABLE NO. 1

RATE BASE, RETURN AND RATE OF RETURN
GAS AND ELECTRIC DEPARTMENTS
YEARS 1916-1929

Year	Gas Department			Electric Department			Combined Department
	Rate Base	Net for Return	Rate of Return	Rate Base	Net for Return	Rate of Return	Rate of Return
1916	$12,592,434.	$1,153,122.	9.16	$6,070,000.	$499,571.	8.23	8.86
1917	13,039,710.	1,114,879.	8.54	6,289,000.	353,842.	5.62	7.60
1918	13,398,711.	906,576.	6.77	6,438,000.	407,916.	6.34	6.63
1919	13,971,705.	1,160,816.	8.31	6,517,000.	424,990.	6.52	7.74
1920	15,211,534.	1,207,429.	7.94	7,030,000.	507,698.	7.22	7.71
1921	21,327,234.	1,119,569.	5.25	8,348,000.	740,298.	8.87	6.27
1922	29,043,144.	2,067,732.	7.12	10,379,000.	1,174,793.	11.32	8.23
1923	37,503,115.	2,293,835.	6.12	13,352,000.	1,809,164.	13.55	8.07
1924	45,466,184.	3,022,031.	6.65	17,483,000.	2,603,692.	14.89	8.94
1925	51,317,326.	3,483,619.	6.79	24,426,000.	2,323,659.	9.51	7.67
1926	54,699,052.	3,480,761.	6.36	31,030,000.	2,751,426.	8.87	7.27
1927	56,802,039.	5,046,259.	8.88	33,741,000.	3,072,487.	9.11	8.97
1928	57,682,659.	5,095,917.	8.83	37,567,000.	3,298,277.	8.78	8.81
1929	59,070,663.	5,705,990.	9.66	41,338,000.	3,621,764.	8.76	9.29
Average,			7.65			9.44	8.26

Further consideration of the record and the order which should be made logically falls under four divisions or parts as follows:

Part I. Earning position of the Company in 1928, 1929, and 1930, on the basis heretofore used in respect to this and other comparable utilities in fixing rates.

Part II. Comparable earning position of the Company in the same years on the so-called fair value basis.

Part III. Reasonable return and rates proper to be established.

Part IV. Temperature reserve.

As prefatory to the discussion which follows, it is pertinent to point out that when the system of regulation of public utilities first took form in this State it became necessary to establish, and there were established, uniform system of accounts for various classes of utilities, including gas and electric, subject to the jurisdiction of the Commission. In framing this system of accounting every reasonable or conceivable item of expenditure was covered in one way or another. Some clearly fell into the category of capital expenditure, such as the direct material and labor costs of physical property; others, with equal clarity, fell into the classification of current operating expense; others were of a nature to be grouped with balance sheet income or surplus accounts. Some accounts were not of a character to be so clearly classified. New business expense, for instance, into which account there was intended to flow all items of expenditure having to do with the cost of attaching business, might have been considered as a capital expenditure or as an operating expense. It was put into the latter classification.

Into organization expense, a capital item, there was permitted to flow not only all expenses of organizing the corporation but also costs of promotion and the expenses incident to the sale of common and preferred stock.

The Commission, in exercising its functions of determining reasonable rates for utilities and in otherwise exercising its jurisdiction over them, has always attached great importance to the utilities' accounts and accounting where the books and records have been accurately kept, as appears to have been done by this Company. The same policy is here observed.

PART I.

The order here made deals with the future but in determining probable operative results great weight must be given to the actual experience of the Company.[4] Rates of course are not fixed for any particular calendar year. However, what happened in 1928 and 1929 and what is likely to happen for the year 1930, due allowance being made for abnormal or non-recurring conditions in those years both as they affect revenue and operating expense, will be helpful in appraising the future. Here there are present various abnormal conditions for which due allowance must be made. The gross revenue, as well as net operating revenue, for instance, is substantially affected by temperature conditions. Nearly 65 percent of the Company's gross revenue is derived in the months from November to April, inclusive. If low temperatures are experienced over this period revenues are correspondingly high. Conversely, warm weather means low revenues. However, the ingenuity of the engineers has evolved formulas by which sales, revenue and cost of purchased gas may be translated to normal temperature conditions.

The following Table II states operating results of the Company's gas department for the year 1928, adjusted in respect to

4. In recent rate cases the Commission has experienced difficulty in fixing rates which yielded the rate of return intended and thought reasonable. Late in 1926 rates were fixed to yield a return of 7.8 percent (29 C.R.C. 164). They actually yielded in 1927 8.88 percent and in 1928 8.83 percent (see Table I). Again, late in 1928, the Commission fixed rates to yield a return of 7½ percent (32 C.R.C. 379). They actually yielded a return of 9.66 percent.

operating revenue and cost of natural gas to reflect normal temperature conditions and existing rates and depreciation on the basis hereinafter discussed and found to be reasonable; for the year 1929 likewise adjusted to reflect normal temperature conditions and for depreciation, and also to eliminate the Pacific Lighting Corporation payment herein found to be unjustified; and for 1930 as estimated by the Company adjusted to a normal temperature year and adjusted for depreciation and with the Pacific Lighting Corporation payment eliminated and for cost of gas from Southern California Gas Company at the present authorized rate. Taxes for each of these years have been adjusted to reflect the adjustments in gross and net revenues. The rate base figures used will be treated subsequently.

TABLE NO. II.

ADJUSTED OPERATING RESULTS OF GAS DEPARTMENT OF LOS ANGELES GAS AND ELECTRIC CORPORATION FOR YEARS 1928, 1929 and 1930 - HISTORICAL BASIS.

	1928	1929	1930 Est.
Operating Revenue,	$14,959,000.	$15,989,000.	$16,415,000.
Operating Expenses:			
Production,	4,597,000.	4,617,000.	4,612,000.
Transmission,	1,000.	6,000.	-
Distribution,	847,000.	780,000.	1,123,000.
Commercial,	829,000.	889,000.	885,000.
New Business,	112,000.	110,000.	114,000.
General,	701,000.	720,000.	1,005,000.
Sub-Total,	$ 7,087,000.	$7,122,000.	$7,739,000.
Depreciation,	$ 943,000.	$ 967,000.	$ 990,000.
Taxes,	1,525,000.	1,615,000.	1,647,000.
Uncollectible Bills,	130,000.	180,000.	182,000.
Sub-Total,	$ 2,598,000.	$2,762,000.	$2,819,000.
Total Operating Expense,	$9,685,000.	$9,884,000.	$10,558,000.
Net for Return,	5,274,000.	6,105,000.	5,857,000.
Rate Base,	57,838,000.	59,226,000.	60,704,000.
Rate of Return,	9.1%	10.3%	9.6%
Weighted Average Return for 3-year Period		9.7%	

Rate Base.

The rate bases in this table are built upon that established in 1917 (13 C.R.C. 724) augmented by net additions and betterments as entered upon the Company's books but with land in 1928, 1929 and 1930 at its value as of December 31, 1929, as testified to by Mr. McAuliffe, land appraiser of the Commission.[5] These bases have not been raised as urged by the Company because of the claimed omission of so-called overhead charges, allocated by the Company from year to year and in the

5. The break-down of the rate base figure used for 1930 is as follows:

Intangible capital as of December 31, 1929:		
Organization, ...	$415,735.	
Franchises, ...	13,391.	
Total Intangible Capital		$ 429,126.
Tangible Capital as of December 31, 1929:		
Land, ...	$ 3,500,888.	
Production Capital	19,215,650.	
Distribution Capital	32,205,912.	
General Capital, ...	3,335,611.	
Total Tangible Capital		$58,258,061.

(Continued)

ordinary course of its accounting practice to operating expense. In the initial case involving the gas rates of this Company a rate base was fixed including overhead charges substantially higher than those charged by the Company in preceding years and approximating those now claimed. The Company was thus fully apprised of a basis of assigning to capital certain general charges allocatable in part to capital and in part to operation. Notwithstanding the fact that it was thus definitely advised of the propriety of allocating more of these to capital and less to operation, the Company, in subsequently making these splits or allocations, saw fit to allocate on its books the bulk of these to operation much as it had done prior to 1917. Under

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5 Cont'd:

Additional Allowance for Interest during Construction	$ 155,000.
Grand Total Fixed Capital as of December 31, 1929	58,842,187.
One-half (Company's Estimate) Net Additions and Betterments for 1930	767,103.
Average Fixed Capital, 1930	59,609,290.
Materials and Supplies	450,000.
Working Cash Capital	645,000.
Rate Base	60,704,290.
Rate Base Used	60,704,000.

Estimates of the historical cost of the structural property were made in this proceeding, both by the Company and by the Commission's Valuation Department. Excluding overheads, the Company reached a figure approximately $300,000. higher than the one obtained by taking the 1917 rate base as fixed by the Commission in its first decision and building up on that, while the Valuation Department of the Commission reached a figure approximately $300,000. lower than the one thus obtained. The fact that each of these estimates, independently reached by employing somewhat different methods and procedure, corresponded so closely to the historical cost figure as used and accepted by the Commission and by the Company as correct in the series of rate determinations running from 1917 to 1928, confirms its substantial accuracy. The figure used conforms to the accounting practice of the Company as to the bulk of its investment, which has increased from approximately $13,000,000. in 1917 to over $58,000,000. in 1929, the difference representing net additions and betterments during this period as inscribed in the Company's books and records. Mr. McAuliffe and the Company's land appraisor were surprisingly close in their results. In the few points of difference Mr. McAuliffe's testimony was the more convincing.

the uniform system of accounts a considerable range of discretion in making allocations such as here involved rests with the Company.[6] Either the responsible accounting officers of the Company made these allocations in the exercise of their best judgment at the time when all of the facts were fresh in their minds or, for reasons presumably to the advantage of the Company, deliberately undercharged capital and overcharged operation. In the various proceedings before the Commission it reported additions and betterments, as well as operating expenses, based upon its books and the allocations there recorded.[7]

6. Section 2 of General Instructions and Definitions respecting classification of fixed capital accounts provides that "so far as possible overhead construction costs, such as engineering costs, law expenses, injuries and damages, taxes and interest during construction, shall be assigned or apportioned to particular accounts, to the end that each item of property shall bear its proper share of such cost and that the entire cost of the item of property, both direct and overhead, may be deducted from the fixed capital accounts at the time the item of property is retired." The Company claims, and it is not questioned, that its books and records are unusually full and complete and most carefully kept. Accounting practices are worked out in considerable detail for the allocation and assignment of overheads to capital accounts. The whole record negatives any idea of omissions or oversights in respect to making these.

7. Thus, Mr. W. E. Houghton, controller of the Company, testifying on March 21, 1921, respecting the rate base as of July 1, 1920, testified as follows:

"I started with the rate base which was arrived at by the Railroad Commission in its Decision No. 6139, which I believe was the last gas rate fixing case for this Company, and found that the allowance, exclusive of that for working cash capital and materials and supplies, was $12,868,711.44. To that amount are then added the net additions to the plant as shown by our books, amounting, from July 1, 1918, to December 31, 1918, to $48,013.93; for the year 1919, $886,611.40; for the period from January 1, 1920, to June 30, 1920, $462,860.48; making total additions of $1,397,485.81. I then added materials and supplies at the average for the year 1920, amounting to $585,455.02, and I further added working cash capital at an amount equal to about one month's operating expenses of the year 1920, amounting to $300,334.34; those two items totalling $885,789.36, and making a grand total as of July 1, 1920, which is the mean date for the year in question, of $15,151,986.61."

Four years later, on November 23, 1925, when rates were again under examination, Mr. H. L. Masser, then in charge of the operation of the Company's gas department, testified as follows:

"MR. OVERTON: Q. Mr. Masser, taking up this exhibit at section 4, which, I believe, deals with fixed capital of the corpora-

The findings of the Commission indicate that determinations as to rates went on the assumption that such allocations were properly made. With the exception of interest during construction, of which special mention will be made, the effect of this long continued practice and course of action has been that the Company has been allowed in the form of operating expense allowances items which it now says should have been added to capital, and which it now seeks to add to capital.

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7 Cont'd:
tion, in developing your table showing the fixed capital of the corporation, you use -- did you use the production cost, actual cost of the corporation on its books and records of the physical component parts of the property of the corporation?

"A. I did, except for lands, wherein we used the present value of lands as prepared by an appraisal at this time.

"Q. So that with respect to the depreciable part of the property it does represent actual cost?

"A. Yes, actual book figures.

"Q. Taking as a starting point the amount determined by the Commission in 1921 in its Decision No. 9132?

"A. That is correct.

"Q. Then adding to that the actual cost of net additions and betterments to property since that date?

"A. That is correct."

And later on the same day to further clarify and make definite his testimony, he testified as follows:

"Q. Now, Mr. Masser, with respect to the total fixed capital, as I understand it, these figures represent the investment or production cost of the property in question?

"A. That is correct.

"Q. That is to say, actually what was paid out by the corporation for the materials, labor, supplies, interest during construction, taxes, supervision and so forth in this property?

"A. That is correct, the actual cost of building the plant."

Testifying on behalf of the Company on April 25, 1928, the same Mr. Masser again explains how he built up a rate base by adding book additions and betterments to the bases previously established by the Commission, land, however, being specially appraised and included at its then value. And Mr. Masser was under no misunderstanding respecting the Commission's accepting and acting upon the Company's book figures, for he testified:

"Page 186, Table 135, sets forth a detail of gas department capital which is based primarily on this Commission's finding and decisions in the preceding rate case, being Decision No. 17830. It goes back to a period six months earlier than the date set forth in the Commission's decision so as to check the figures as of January 1, 1926. Those figures were submitted in evidence in the former case and were used by the Commission in its decision."

There is no equity in the Company's claim; and by its conduct and election it has created a quasi estoppel against now seeking to gain advantage by repudiating its own books and records as well as its position repeatedly taken before this Commission. The foregoing observations are not entirely applicable to the overhead expense of interest during construction. That, when not charged to capital, was charged to the income accounts and did not get into operating expense. The Company's course in this was somewhat erratic. For a few years none was charged to capital. In fairness, the rate base should be increased by the difference between interest during construction as actually incurred and the amount thereof charged to capital. This has been done.[8]

Working Cash Capital and Materials and Supplies.

An allowance has been made for working cash capital and materials and supplies in accordance with the policies customarily followed by the Commission in dealing with the rates of other utilities, for the year 1930, $645,000. being included for the former and $450,000. for the latter. These allowances are deemed to be adequate. The allowance for working cash capital differs from the Company's claim in this case principally in that it is based upon the cost rather than the retail value of the service which at all times has been rendered, but on account of the lag in monthly meter readings and collections has not been paid for by consumers. The allowance for materials and supplies

8. The record is not clear as to just what allowance should be made. Mr. Wehe's study based upon the period 1921 to 1929 indicated proper interest during construction cost of 1.75 percent. Interest during construction was included in the rate base first fixed by the Commission for 1916 and upon which succeeding bases have been built. From 1916 to 1921 the Company, though definitely advised that this was a proper capital charge, did not so make it. In 1921, however, it commenced charging interest to capital. For the purposes of this proceeding there has been added the sum of $155,000. to the 1928 and 1929 base, which is estimated to be ample to cover this item.

is based upon the amount currently carried, with allowance made for a proportion of these held for construction purposes and against which the Company charges interest during construction.

Consumers' Advances.

Principally to protect the majority of consumers against increases in rates that would ultimately result from comparatively large investments in non-remunerative extensions, the Commission has approved rules for this Company requiring that part of the cost of such extensions shall be advanced to the utility without interest by the individuals benefitted. Manifestly, if the utility is allowed a return on the total investment in such extensions the purpose of this rule will be largely defeated. The practice of the Commission has been to deduct the amount of such advances. However, the Company, notwithstanding the many advantages of a continuance of this rule, has seen fit to insist upon its right to a return upon the money thus advanced. Under these circumstances consumers' advances have not been deducted to obtain a rate base figure. The logical corollary of this treatment of this item, thus made at the insistence of the Company, is to modify the rule so as to require such advances to be returned with interest. The order herein will direct such modification.

Generating Plants.

No deduction is made on account of the Company's artificial generating plants and equipment being rendered unnecessary by the introduction of natural gas. There can be no question that money invested in these was invested prudently and in good faith. When made, at least, the investment was a proper and necessary one. The theory of the basis of testing rates here under consideration contemplates protection of investments thus made. Were the cost of these plants deducted from the base it would be necessary to provide for its amortization. The City's setup provides for their amortization over a longer period of time than their normal life expectancy upon which current depreciation expense is calculated. A shorter and more logical amortization period would substantially change the result. While the evidence adduced by the City in respect to these plants presents a serious question as to whether all of the investment they represent should be continued in the rate base, it is not established with sufficient definiteness that the elimination of the whole or a part of the investment would be fair to the Company, or to the interest of the consumers. A somewhat different situation arises in connection with the Company's claims to the reproduction value of these plants. This is treated under Part III.

Operating Revenue.

While the formulas for translating revenue to normal temperature conditions vary slightly, the one used by the Company's Mr. Masser is here employed. The year 1930 is in many respects an abnormal year. Not only have the temperatures been higher than normal but the business depression has had an effect upon sales. Various revenue estimates were presented for that year. The one set out in the table is that of the Company's Vice-President, Mr. Masser, who is the responsible officer in charge of gas operations, changed only to reflect normal temperatures throughout the entire year.

Operating Expenses.

Production expense for 1930, the largest item of which is the cost of purchased gas, is that estimated by the Company, except that the present authorized rate for gas from Southern California Gas Company is used instead of a higher charge which it was claimed might be anticipated and total requirements for gas is adjusted to a year of normal temperature. Other operating expenses for 1930 for distribution, commercial, new business and general expense, except for Pacific Lighting Corporation's fee, are those estimated by the Company.[9] Mr. Wehe, of the Commission's staff, made a very careful study of the depreciation allowance proper to be made, involving both an inspection of the physical property and a detailed study of the Company's actual experience. This Company is of sufficient age so that its experience is an important guide to the correct determination of the amount of annual charge necessary to meet recurring depreciation expense. Mr. Wehe's exhaustive study makes it plain that the allowance heretofore made, and which the Company claims, is larger than necessary. His figure, adjusted to cover average additions and betterments for 1930 and adjusted to plant as it existed in 1928 and 1929, has

9. For the operating expense for 1930, except for cost of purchased gas and the Pacific Lighting Corporation's fee, depreciation, taxes and uncollectible bills, the Company estimated $3,571,696. Mr. Spelce, an engineer of the Commission, made estimates of reasonable expenses for these aggregating but $3,031,603., as appears more fully from the following table:

Operating Expenses for 1930, as Estimated by Masser and Spelce.

	Masser	Spelce
Production other than cost of gas	$ 444,812.	$491,563.
Distribution and Transmission	1,123,322.	858,020.
Commercial	884,552.	904,520.
New Business	114,003.	109,500.
General	1,005,007.	668,000.
Total of these	$3,571,696.	$3,031,603.

The Company has recently shifted certain items of expense heretofore included in production to distribution. Mr. Masser followed this new classification. Otherwise his production expense as shown in the table would have exceeded Mr. Spelce's, while his distribution expense would not have shown the same margin of difference.

been used.

Pacific Lighting Corporation Fee.

Commencing in 1929 the Company has been paying to the Pacific Lighting Corporation, the owner of all of its common stock, an annual fee of $120,000., of which $80,000. was charged to the gas department in the year 1929, and a substantially similar amount in 1930. This charge is eliminated in the above table from the operating costs in both years. Mr. Day, the President of the Company, sought to justify the payment of such fee largely upon the theory that he felt the need of advice in respect to major company policies and wished to be free to consult with officers of the Pacific Lighting Corporation and its legal staff in respect thereto. He has consulted, he testified, chiefly with C. O. G. Miller and R. W. Miller, both of whom were and are directors also of Los Angeles Gas & Electric Corporation. As to services rendered by attorneys of Pacific Lighting Corporation, allowances for legal expense appear in considerable amount in the operating expenses stated in Table II. The record does not show that any services were rendered by Pacific Lighting Corporation, as claimed, during this period in respect to financing or in respect to operation, nor does it show that the payment of the fee resulted, as claimed, in a saving in general officers' salaries. In fact, the fee was coincident with substantial increases in officers' salaries. The payment of such a fee to the holding corporation made for the first time in 1929, does not find sufficient justification in the record to warrant its inclusion in the operating expenses of the Company.

Return.

Table II, without further adjustments, indicates that the present rates have been at a level to yield the Company on the average for this period a return of 9.7 percent.[10] This represents an earning level higher than heretofore deemed reasonable in respect to this or to other comparable utilities.

PART II

The Company sharply challenges the propriety of the Commission fixing rates upon the basis heretofore followed. Estimated replacement cost rather than investment, it insists, is what it is entitled to earn a return upon; and by reproduction cost new estimates of value, with large overheads, claims of value for the cost of financing, promoters' profits and going concern, all fabricated about a theoretical reconstruction program, it has built up an asserted fair value, upon which even a very low return would call for rates substantially in excess of those now in effect. No increase, however, is requested.

Rate Base Claimed.

The rate base or value thus erected aggregates the somewhat staggering figure of $95,767,351. It is made up as follows, appropriate changes being made in the form of exhibits 32 and 50 to illustrate the various major items going to constitute the total:

1.	Organization and Franchises (Ex. 32)....	$ 831,781.
2.	Gas Production Capital (Ex. 32)..........	20,819,402.
3.	Gas Distribution Capital (Ex. 32).......	51,412,932.
4.	General .... " "	4,522,585.
5.	Cash Working Capital ... " "	2,333,850.
6.	Materials and Supplies . " "	612,735.
7.	Cost of Financing....... " "	5,921,470.
8.	Promoters' Remuneration. " "	2,500,000.
9.	Additions and Betterments for 1930............ (Ex. 50)......	1,054,255.
10.	Going Concern Value .... " "	9,228,667.
	Total . .	$99,237,677.
11.	Less Accrued Depreciation (Ex. 32)	3,470,326.
		$95,767,351.

10. It is interesting to note the effect on the rate of return were the Company's claim as to overhead allowances recognized to the extent of allowing overheads of 11.25 percent. This, on the basis of Table II, would mean an increase in rate base for 1930 of approximately $2,750,000. and an increase in annual depreciation expense of approximately $50,000. The weighted average return for the three year period would be reduced to 9.2 percent.

Items (2), (3) and (4) represent the asserted value of the physical plant (before deduction for accrued depreciation) less additions and betterments for 1930. It is interesting to ascertain upon the Company's own basis how much of this is for direct and indirect labor and material costs exclusive of so-called overhead allowances. The Company in these figures included overheads at 24.27 percent, applying this to land as well as to the structural properties. Making deduction for the item of overhead reduces the total for these three items from $76,754,919. to $61,764,640. Adding to the figure of $61,764,640. items (5), (6) and (9) gives $65,765,480. as the total claimed reproduction cost of the property, exclusive of overheads (except as some overheads are in item 9), organization expense and other intangibles amounting in the aggregate to $33,472,202., a sum equal to more than 50 percent of the claimed direct replacement cost of the physical property. Again, from the grand total claimed value undepreciated of $99,237,677. the Company deducts but $3,470,326. for accrued and realized depreciation, or less than 3½ percent, although the physical plant has been built up over a period of many years and although the Company claims over one-third of this amount as an annual contribution to a depreciation reserve.[11]

11. Another striking illustration of the effect of the Company's methods is found in a colloquy between Mr. Guillou, of the Commission's staff, and Mr. Luick, the Company's witness. By deductions from both Mr. Luick's historical and reproduction cost appraisals for organization, land and overheads it was developed that the difference between the two because of change in price levels was approximately $5,400,000. Then follows:

"Q. Now then, if you will take your total historical appraisal of $67,507,000 and deduct that from the total reproduction appraisal of $85,484,000 I get a difference of approximately $18,000,000.
A. That is correct.

"Q. Now, of that difference of $18,000,000. approximately $5,400,000. has been accounted for as the difference in the price level of the direct labor and the actual material?

"A. Yes."

And later:

"Q. So that of this difference in the two appraisals of about $18,000,000., why, something over -- put it the other way -- something less than five and a half million is attributable to price

In addition to actual cost and historical cost estimates, to which reference has been made in Part I, there were made estimates of cost on the current price level basis, both undepreciated and depreciated, as well as various so-called reproduction cost new and reproduction cost new less depreciation estimates, the estimates varying widely in result according to the particular assumptions upon which grounded or particular method or theory employed. Table III lists the more important of these, the valuations being as of December 31, 1929 and covering only the usual capital accounts. Material and supplies, working cash capital and various claimed intangibles are not included. Current price level estimates proceeded upon the assumption that the property was put together historically but that during its entire life prices had been those now current and that actual cost, with this adjustment for change in price level, was a reasonable and proper measure of value. Reproduction new estimates went upon the theory that value can best be measured by theoretically reproducing the property under an assumed reconstruction program. Some of the differences which appear in these estimates are due to a relatively small difference in the value placed upon land. Others are explainable by minor differences in practice in applying prices. The large differences, however, find their explanation in the varying assumptions and the results which follow these as they are reflected in overhead allowances, estimated difficulty factor costs and the like. The wide variances in accrued depreciation figures find their explanation in the diverse theories or assumptions upon which based and from which the results flow. Curiously enough, the effect of change in price level is one of the least important factors contributing to many of the results

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11 Cont'd:
levels and approximately twelve and a half million is attributable to these difficulties that are inherent in a reproduction on a wholesale scale? A. Exactly. The cost of reconstructing the property as of January 1, 1930, as against the historical reproduction cost."

expressed, the extreme range of the effect given to this running from $3,086,000. to $5,900,000., or, expressed in percentage on actual historical cost, from 5.6 percent to 10.6 percent. Even this range is lessened when certain factors appearing perhaps in one estimate and not in another are taken into account.

TABLE III

PARTIAL TABULATION OF VALUATION ESTIMATES

	Valuation as of December 31, 1929		
		Depreciated	
	Undepreciated	Sinking Fund Basis	Straight Line Basis
1. Historical Cost - Actual, land at present value,	$58,687,186.*	--	--
2. Historical Reproduction Cost - Estimate, land at present value, overheads as charged (Dufour)....	58,399,353.	--	--
3. Historical Reproduction Cost - Estimate, land at present value, overheads at 11.25% (Dufour)....	61,019,622.	--	--
4. Historical Reproduction Cost - Estimate, land at present value, overheads of 14.48% (Luick).....	63,413,246.	--	--
5. Current Price Level -Prices as of June 15,1930, but excluding Difficulty Factor, overheads on basis charged, (Dufour - Wehe)..	63,212,221.	$55,437,354.	$47,866,067.
6. Same as 5, but Reproducing so-called Wrought Iron Pipe with Steel Pipe, (Dufour - Wehe)..	61,668,210.	54,356,546.	47,170,861.
7. Reproduction Cost New, overheads of 24.27% (Luick)...	77,586,700.	74,116,374.**	--
8. Reproduction Cost New - Four Year Average Pricing Period, 22.32% overheads, (Dufour - Wehe)...	73,637,542.	64,179,071.	55,676,886.
9. Same as 8, but reproducing so-called Wrought Iron Pipe with Steel Pipe, (Dufour - Wehe)...	71,805,296.	62,896,499.	54,852,378.

* Mr. Dufour in his exhibit had this at $58,578,773.
** Cost to Restore Basis.
*** Items 2, 3, 5, 6, 8 and 9 contain non-operative land in the amount of $192,203.

There is one other estimate of value to which reference may be made. In the rate case affecting this Company, which culminated in the decision and order reported in 32 C.R.C. 379, Mr. R. U. Fitting, Valuation Engineer of the Company estimated the reproduction new value of the Company's gas property as of January 1, 1928 to be $64,363,650. This estimate for January 1, 1928 is comparable to Mr. Luick's estimate for December 31, 1929 of $77,586,700. Additions and betterments during 1928 and 1929 did not exceed $2,750,000. in round figures.

Results such as heretofore indicated and as expressed in the table necessarily draw into question the soundness of the methods, theories and assumptions leading up to them. It is one thing to attempt in a sane and reasonable way to estimate and give effect to changes in prices. It is quite another matter, because there is a change in price levels to devise and utilize formulas and methods for measuring its effect, which result in values and claims of value far in excess of what the property would have cost if current prices had prevailed during its entire life.

Except for realized depreciation, "reasonable cost," as said by the court in McCardle v. Indianapolis Water Co., 272 U.S. 400, "is good evidence of ** value at the time of the construction. And such actual cost will continue fairly well to measure the amount to be attributed to the physical elements of the property so long as there is no change in the level of applicable prices."

Regulatory bodies, such as this Commission, naturally prefer to deal with actualities rather than theories and assumptions. Actual cost may be determined with a high degree of precision; and the effect upon such actual cost of the simple and single assumption that current prices prevailed during the life of the property may likewise be determined with a definiteness sufficient for the purposes of measuring the effect of higher price levels. Cost with adjustments for changes in price level and allowance for realized depreciation should be and is, for the purposes of this part, taken as a dominant consideration in arriving at a current value of the property here involved. It is deemed a much simpler, safer and more dependable guide than estimates based upon rebuilding the property under a hypothetical construction program under conditions which do not and could not reasonably exist and with far-fetched assumptions which make possible almost any result desired by their designer.

Going Concern Value.

The Company claims $9,228,667. as going concern value, based largely upon the testimony of Col. Alten S. Miller.[12] This claim is associated with the Company's reproduction new valuation and is built up on theories and methods analogous to those employed in respect to the structural properties. Just as these theories and methods lead to extreme results when applied to plant, they lead to this large figure when it is sought to measure the cost of attaching the business under a theoretical reconstruction program. Under the methods employed by Col. Miller the results vary widely according to the assumptions respecting this program. Indeed, it may be said that by altering the assumptions, particularly those as to the rate at which business is attached, almost any desired result may be obtained. A careful analysis of Col. Miller's exhibit and testimony makes it plain that in his total figure there is contained a very substantial sum on account of assumed early losses.

Were going concern to be treated as an independent item of value, it should be measured with due regard to actualities rather than

12. Estimates and claims of going concern value of the Company have steadily grown in amount. In 1916 and 1917 the claim and estimate was $1,000,000. (13 C.R.C. 724). In 1926 the claim had increased to $5,000,000. (29 C.R.C. 165).

upon theories and assumptions such as employed by Col. Miller. And it would seem that what it did cost this Company to attach its business is a far more reliable guide than an estimate of what it might cost under a theoretical reconstruction program. By the prescribed accounting rules all costs incident to attaching business are required to find lodgment in New Business Expense. Col. Miller's position in essence is an attack upon the classification of New Business Expense as an operating item, his line of reasoning inferring that this expense should have been added to capital year by year. Were new business expense to be added to capital the corollary would be its elimination from operating expense. No very appreciable change in result would follow from allowing a reasonable amount in rate base to represent the cost of attaching the business (following largely Col. Miller's theory but reducing theory to actuality) and at the same time disallowing New Business Expense in operation.[13]

It is true that Col. Miller includes in his total figure $506,789. as "cost of organizing property and personnel" but he does not attempt to explain how this figure is arrived at. The actual cost of building up the personnel and organizing the property has of

13. Had new business expense been accounted for as a capital item capital would have been augmented in round figures by the sum of $1,358,000. during the period 1913 to 1929, inclusive, or at the rate of $5.42 per independent active meter. At the close of 1929 the Company had 346,000 meters, which at this average cost would represent in round figures a total cost of $1,875,000. New business expense as incurred ranged from $109,000. to $114,000. a year in recent years.

course, under accounting procedure and Commission practice, been included in current operating expense, and if viewed in the light of capital expenditure, just as in the case of the cost of attaching the business, has been taken care of and in effect amortized year by year as incurred.

Substance rather than form is to be considered. So viewed, this Commission does allow for the so-called intangible going concern value by treating its cost as a current operating expense.

Cost of Financing and Promoters' Profits.

These intangible items as claimed by the Company are rejected as too hypothetical and far removed from actuality to properly find lodgment in a rate base. The sum of $413,734. is included in the historical rate base for organization. The uniform system of accounts provides that there should be entered under this head, in addition to fees paid for incorporation, "all office and other expenditures incident to organizing the corporation or other enterprise and putting it in readiness to do business." This includes "cost of preparing and distributing prospectuses, cost of soliciting subscriptions for stock, cash fees paid to promoters and the actual cash value at the time of organization of securities paid to promoters for their services *** special counsel fees ********; also costs incident to *** negotiation and issue of stock ********.

Allowance for organization in the current price level appraisement was not stepped up. It should be raised somewhat to adequately care for possible higher costs because of the current level of prices.

Accrued Depreciation.

The amount of the accrued depreciation in the property is greatly in excess of Mr. Luick's figure of $3,470,326.[14] It is not less than $7,650,000. The record clearly shows that this result, which was testified to by Mr. Wehe, was arrived at only after an ex-

14. The depreciation reserve on December 31, 1929 was $9,350,689., as shown by the Company's books (including 72.5 percent of the General Capital Reserve).

Mr. Luick's views on accrued depreciation are illustrated by his testimony respecting depreciation in distribution mains and automobiles. As to the former, his exhibit No. 35 shows that he made no deduction on over 86 percent of the steel-wrought iron mains. The record shows these mains to have been in service a considerable time and further that there actually existed a physical deterioration.

The automotive equipment of the Company is not new as shown by the priced inventory and as indicated by the Company's depreciation reserve of over 90 percent of the book costs. Mr. Luick's theory of taking an old Model T Ford, for example, and by the expenditure of relatively small amounts for tires, painting and general overhaul, making it the equivalent in value of a new car - even from the point of view of service alone, is contrary to known facts and conditions. In this particular instance it was deemed to be the equal of a new Model A Ford, for the Company used the substitute theory in pricing these old cars. It is apparent that the application of Mr. Luick's service theory (called by him cost to restore theory) of depreciation gives results which cannot be accepted.

ceedingly careful and detailed study involving a physical inspection of the property and analysis of Company records. In the translation of the results of these physical inspections and analysis of past performance the record further shows that the present age, the expected future life, the present operating costs in respect to maintenance, the interest and depreciation expense to keep these properties in service and other factors were all considered.[15]

Fair Value.

Subject to deduction for accrued and realized depreciation in a sum of approximately $7,650,000., the fair value of the property here involved as a going property with business attached, giving full effect to the current level of prices and allowing for any intangible elements of value not fully cared for in the usual and current operating expense allowances but excluding various built up claims of value incident to a reproduction of the property under an assumed reconstruction program as too uncertain and hypothetical to enter into a rate base figure, did not for the year 1928, using round figures, exceed $62,500,000., and for the year 1929 $64,000,000., and for the year 1930 does not exceed $65,500,000., which figures, for the purposes hereof, are spoken of as rate base. These figures include the allowances for additions and betterments, working capital and materials and supplies corresponding to those included in the rate bases set out in Table II.

Although depreciation is thus treated as a deductible item to arrive at fair value, operating results under the so-called fair value theory may best be illustrated by using undepreciated fair value (if such an expression be permitted) in making an operative set-

15. It is interesting to note that Mr. Wehe's estimate of accrued depreciation is less than that made in 1926 by Mr. Masser, Vice-President of the Company and in charge of Gas Operations. Testifying for the Company then, he expressed the opinion that the condition percent of the depreciable property was slightly less than 86 percent, the accrued depreciation being $9,275,688.

up comparable with that contained in Table II. Should a depreciated rate base (fair value) be used the depreciation annuity would have to be computed only for the expected life of the property and would be more than an annuity computed on the basis of age plus expected life. In brief, while the base upon which the return would be figured would be less, the depreciation annuity would be greater. The lower the condition percent of the physical property the higher is the depreciation annuity expense. Indeed under the form of operative set-ups, with the method of depreciation expense accounting customarily used, and used here for the purpose of this part, the amount of the accrued depreciation is of theoretical rather than actual importance. The only figure in the record for depreciation annuity expense which could be used with a depreciated base or fair value is that of Mr. Luick of $1,300,000., and it is very doubtful if the use of this figure would indicate a fair or representative result.[16] There is in the record well supported estimates of depreciation annuity which harmonize with an undepreciated base and the use of which with such a base will give a correct indication of operative results and return.

<u>Operative Results on Fair Value Basis.</u>

Table IV indicates operative results for 1928, 1929 and 1930, being comparable to Table II. Revenue is the same in each as is also operating expense, except as adjusted to conform to the higher bases as in the case particularly in respect to the depreciation annuity. The rate bases there indicated are those found above and like the bases in Table II do not reflect any deduction for accrued depreciation.

16. The use of this depreciation expense estimate in lieu of that employed in Table IV, infra, and a depreciated base in lieu of the undepreciated base, shows a return for 1930 of 9.6 percent as compared with that of 8.8 percent shown in the Table.

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TABLE IV

ADJUSTED OPERATING RESULTS OF GAS DEPARTMENT
LOS ANGELES GAS AND ELECTRIC CORPORATION
FOR THE YEARS 1928, 1929 AND 1930.

FAIR VALUE BASIS

	1928	1929	1930 (Est.)
Operating Revenue,	$14,959,000.	$15,989,000.	$16,415,000.
Operating Expenses:			
Production,	$ 4,597,000.	$ 4,617,000.	$ 4,612,000.
Transmission,	1,000.	6,000.	-
Distribution,	847,000.	780,000.	1,123,000.
Commercial,	829,000.	889,000.	885,000.
New Business,	112,000.	110,000.	114,000.
General,	701,000.	720,000.	1,005,000.
Sub-Total,	7,087,000.	7,122,000.	7,739,000.
Depreciation,	1,026,000.	1,049,000.	1,072,000.
Taxes,	1,515,000.	1,606,000.	1,637,000.
Uncollectible Bills,	130,000.	180,000.	182,000.
Sub-Total,	2,671,000.	2,835,000.	2,891,000.
Total Operating Charges,	$ 9,758,000.	$ 9,957,000.	$10,630,000.
Net for Return,	$ 5,201,000.	$ 6,032,000.	$ 5,785,000.
Rate Base,	$62,500,000.	$64,000,000.	$65,500,000.
Rate of Return,	8.3%	9.4%	8.8%

Weighted Average Return for 3-year period, 8.9%

PART III

It is apparent from the results indicated in Parts I and II that the rates of the Company should be lowered and this presents two questions:

1. By what amount should the revenue and rates be reduced?

2. What form of rates should be fixed to accomplish this reduction?

Amount of Reduction.

A careful consideration of the present earning position of the Company, as indicated by Tables II and IV, and of all other pertinent factors, some of which are subsequently discussed, leads to the conclusion that rates should be fixed which in the future will lower the Company's domestic and commercial gas revenue by approximately 9 percent.

Such a reduction will have certain effects upon the amount of taxes which the Company will be called upon to accrue, currently as to the Federal tax and in the ensuing year as to the State tax. This is illustrated by the following Table V, which corresponds with Tables II and IV except that it assumes rates were in effect during the years 1928, 1929 and 1930 yielding a domestic and commercial revenue 9 percent less than the yield of the present rates. The Table further illustrates the earning position of the Company under such a reduction.

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TABLE NO. V

ADJUSTED OPERATING RESULTS FOR GAS DEPARTMENT OF LOS ANGELES GAS & ELECTRIC CORPORATION 1928-1930 ON BOTH HISTORICAL COST BASIS AND FAIR VALUE BASIS ASSUMING 9% REDUCTION IN DOMESTIC AND COMMERCIAL REVENUE.

	1928		1929		1930 Est.	
	Historical Basis	Fair Value Basis	Historical Basis	Fair Value Basis	Historical Basis	Fair Value Basis
Operating Revenue,	$13,669,000.	$13,669,000.	$14,626,000.	$14,626,000.	$15,003,000.	$15,003,000.
Operating Expenses:						
Production,	4,597,000.	4,597,000.	4,617,000.	4,617,000.	4,612,000.	4,612,000.
Transmission,	1,000.	1,000.	6,000.	6,000.	-	-
Distribution,	847,000.	847,000.	780,000.	780,000.	1,123,000.	1,123,000.
Commercial,	829,000.	829,000.	889,000.	889,000.	885,000.	885,000.
New Business,	112,000.	112,000.	110,000.	110,000.	114,000.	114,000.
General,	701,000.	701,000.	720,000.	720,000.	1,005,000.	1,005,000.
Sub-Total,	7,087,000.	7,087,000.	7,122,000.	7,122,000.	7,739,000.	7,739,000.
Depreciation,	943,000.	1,026,000.	967,000.	1,049,000.	990,000.	1,072,000.
Taxes,	1,371,000.	1,362,000.	1,382,000.	1,373,000.	1,404,000.	1,395,000.
Uncollectibles,	130,000.	130,000.	180,000.	180,000.	182,000.	182,000.
Sub-Total,	2,444,000.	2,518,000.	2,529,000.	2,602,000.	2,576,000.	2,649,000.
Total Operating Charges,	9,531,000.	9,605,000.	9,651,000.	9,724,000.	10,315,000.	10,388,000.
Net for Return,	$4,138,000.	$4,064,000.	$4,975,000.	$4,902,000.	$4,688,000.	$4,615,000.
Rate Base,	$57,838,000.	$62,500,000.	$59,226,000.	$64,000,000.	$60,704,000.	$65,500,000.
Rate of Return,	7.2%	6.5%	8.4%	7.7%	7.7%	7.0%

Weighted Average return for three-year period - Historical Basis 7.8%
Weighted Average return for three-year period - Fair Value Basis 7.1%

The various operating setups (Tables II, IV and V) have not been taken or used as a sole criterion or guide in determining the earnings and rates which in the future will be just and reasonable. Certain results there indicated clearly are subject to qualification, and there are other factors that have been taken into consideration in reaching a conclusion.

1928-1930 Operating Results.

The operating results indicated in these Tables are not entirely representative. It will be observed from the Tables that normal temperature revenue increase for 1929 over 1928 was nearly twice the increase estimated for 1930 over 1929. Investment or fair value increase, as the case may be, was about the same in the two years. Yet it will be observed that the general operating expenses in 1929 increased over those of 1928 by less than $50,000., although more natural gas was purchased in the latter year, while in 1930, with a lesser corresponding increase in this item of expense, there is an estimated increase in total expense of over $600,000. The year 1928 as to operating expense was somewhat out of line because the Company was in the transition period from the service of a mixed gas to a straight natural gas. 1929 was a more normal year. The sharp increase in expense as estimated for 1930 is in part explainable. There are included in the figures used certain large items of a somewhat unusual and non-recurring nature. $159,867. in general expense is for the cost of appraisal and regulatory commission expense. The average annual cost for these items for 1921 to 1930, inclusive, was $40,500. $159,867. exceeds by more than 50 percent the expense to the Company for these items in any year in its history. If the past experience of the

Company means anything it is over $100,000. in excess of what may be expected in the future. $139,320. is included for legal expense, within which is what is claimed to be the gas department's share of the expense of a pending litigation, in which the City of Los Angeles seeks to enjoin the Company from conducting a power business as distinguished from a lighting business under the franchise extended it by Sec. 19 of Art. XI of the Constitution prior to its amendment in 1911. It is asserted that if the City is successful in this the determination will apply to the right of the Company to operate a gas business except for illuminating purposes. It is not clear that this expense will continue, nor is it at all clear that the allocation of such a large proportion of it to the gas department can be justified. General legal expense for the period 1926 to 1929, inclusive, was $30,600. a year.

Again, as indicated in footnote No. 9, the Company estimates expenses for the year 1930 on a much more liberal basis than that adopted by the engineer of the Commission. In brief, the expenses indicated in these tables for 1930 cannot be taken, without qualification, as a guide to what expenses in the future will be.

Factors Affecting Rate Base.

The fair value rate base figures are subject to some adverse effect by factors which have not been taken into account in arriving at them and which are not easily susceptible to admeasurement in dollars and cents but which should be adverted to as entitled to consideration with the many other factors leading to the conclusions reached as to the reasonable earning basis for the future.

The evidence convincingly and satisfactorily establishes the existence of a natural gas supply adequate for years to come. This presents a serious question as how the artificial gas plants of the Company should be treated. Are they all necessary as a standby or would a part of them be adequate for this purpose? Under the basis of fixing rates heretofore followed by the Commission, which essentially is to provide a fair return on money prudently invested, if any part of these were eliminated as operative property it would follow that provision would be made for the amortization of the money invested in them. In Part I some consideration was given to the matter of these plants and the conclusion reached that the evidence under all of the circumstances did not justify their retirement and amortization at this time. A different situation is presented when the Company demands a return on the present fair value of its property, for the somewhat doubtful need of all of these plants does have an appreciable adverse bearing upon their value, as included in the rate base figures in Tables IV and V.[17]

The Company claims that prior to 1913 a considerable amount of pure wrought iron main was installed. Since 1913 it has used steel mains. In the figures in Tables IV and V are included the cost of all of the claimed wrought iron mains at current prices. Had an equivalent amount of steel mains been included at present prices the figures would be approximately $1,500,000 less and the annual depreciation annuity would be decreased by $25,000, in round figures. The evidence is not at all convincing as to the amount of pure wrought iron main in the

17. The City's presentation was based upon the elimination of all of the plants. Some of the property included is now used in the distribution of natural gas. The record does not contain satisfactory figures indicative of the effect of eliminating the older plants, numbers 1 and 2. However, the effect of their elimination may be approximated. The fair value figure here used would be reduced by from $2,750,000 to $3,250,000. Operating expense would be reduced from $100,000 to $125,000 a year. Very roughly, if such eliminations were made the Company's return as indicated in Tables IV would be higher by around one-half of one percent.

system, nor is it at all clear that wrought iron, although much more costly than steel, has any real superiority.

Litigation is in progress affecting the electric franchise of the Company in Los Angeles, the City having attacked its right under the so-called constitutional franchise, "to use the public streets for the distribution of electric energy for purposes other than lighting." As claimed by the Company in its Ex. 50 "while the action in question involves only the service of electric energy, it is only reasonable that the gas department should sustain its proportion of the expense of this litigation, since its franchise right is derived from the same constitutional provision." This situation would tend to minimize any intangible values included in the figures used in Table IV.

Cost of Money.

The present actual annual cost to the Company for its bond and preferred stock money is 6.17 percent. However, just as the assumption that the Company's property was constructed at prices now current increases the actual cost figure, so a similar assumption that the Company was financed on the basis of current money cost or value would reduce the figure of 6.17 percent to 5.46 percent. If the Company is to derive the advantage due to economic changes which raise the value of its property over its actual cost, it should at the same time in fairness expect to suffer any detriment due to economic changes which may lessen the cost or earning ability of money.

Business Depression.

The present business depression unquestionably has had an adverse effect upon the Company's growth and revenue. It is reflected in revenue figures for 1929 and 1930. For the year 1930, as heretofore pointed out, the various revenue figures used are those of Mr. Masser based upon actual sales for the first five months of the year and estimated sales for the remaining months, the actual sales, however, having been here adjusted to reflect normal temperatures. Since the submission of this case the monthly reports of the Company filed with the Commission show the actual sales for three additional months. Not only do sales show a slight falling off from those estimated for these months, but these monthly reports also show a lesser growth in new meters than was estimated. There is nothing in these reports or in the record to indicate that on a normal temperature basis the Company's business is not growing. The record, however, does indicate that its rate of increase or growth has been perceptibly slowed up. The situation here adverted to calls for and has received careful consideration as showing that the revenue estimates used for 1930 may not be entirely representative, just as the greatly increased operating expense figures used for the year are not entirely representative.

Actual Earning Position of Company.

Not only has the business depression had an adverse effect upon this Company's current earning position, but there are two other factors which have accentuated this. Operating expense for 1930 has shown a startlingly large increase, and the winter months of 1929-30 were unusually warm ones and this has reduced the Company's sales and revenues.

This Commission does not, in fixing rates for the future, pretend to make up for past depletion in net earning because of a run of warm weather or extraordinary operating expenses, as it does not in this way seek to expropriate past earnings enjoyed in a larger amount than may appear reasonable. In prescribing rates for the future it must almost necessarily go on the assumption that temperatures will be normal. Operating expense also must be assumed to be on a more nearly normal basis than in 1930. Existing business conditions, on the other hand, should be and are given consideration and weight.

Other Factors.

There are other factors of which brief mention may appropriately be made. Notwithstanding the effect of the depression upon growth of business, this Company's business is growing. With growth, the tendency is for the rate of return to increase. Added operating expense and the earning on added investment or property with growth is usually less than the increased revenue. Again, lower rates tend to stimulate sales.[18] Again, while present prices applied to the structural property produces a slightly higher figure than the actual historical cost, even though present price levels continue without change, the gradual retirement of the older property in the plant - property installed during the period of low prices - means that the difference between the actual cost of the structural property and what it would have cost under current prices will grow less and less and soon disappear entirely.

Earning Position Under Rates Fixed.

The rates here fixed will place this Company in an earning position at least as good as, and probably slightly better than, that which this Commission intended it should enjoy when its rates were reduced in the latter part of 1928 (32 C.R.C. 379). A return or earning position on such basis and as now found to be reasonable is consonant with that allowed other comparable utilities and has proven

18. A reduction in rates, it was recognized, as testified by Mr. Masser, "unquestionably does stimulate load to some degree" and unquestionably has some effect on the percentage of the increase in sales, the extent of which effect he was unable to state. To get the best results from a reduction in rates would, in his opinion, call for capitalizing its effect by advertising. It is somewhat significant here that the business depression apparently has not had the same effect in slowing up increased sales in the electrical department of the Company's business as it has in its gas department. It is not an unreasonable deduction that the reduced electric rates in effect in 1930 have contributed to some extent to this result. The Company in its estimate of operating expenses for 1930 includes additional amounts for advertising. This is not disturbed. The Company will thus be in a position to feature a reduction in rates in a campaign to increase sales.

sufficiently liberal to attract large amounts of capital into the field of utility investment. Investors, at least, have not considered such a return or earning position to be unfair, unreasonable or unattractive to capital. The Company will be receiving a reasonable return on the fair value of its property[19] and will be able to meet its fixed charges, pay its preferred stock dividends, liberal dividends on its common stock and augment its surplus.[20]

Rates.

It seems inadvisable to attempt any general re-arrangement of districts (although Altadena has requested that it be incorporated

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19. This Company has constructed the bulk of its property since 1917. Much of its property was installed during a period when prices were higher than at present. The tendency is for the actual and current price level cost of its structural property to come closer and closer together. The current value of money is lower than the cost to the Company on its outstanding securities. It is apparent that rates reasonable on the basis heretofore used in respect to the rates of this Company will likewise be reasonable on the so-called fair value basis.

20. The Company's statement for the year ending August 31, 1930 filed with the Commission in compliance with the Commission's General Order No. 65, and which statement under stipulation is deemed in evidence, shows for its gas and electric departments a net profit of $4,725,780. Deducting from this $1,170,630. for dividends on the Company's preferred stock, leaves $3,555,150. for common stock or earnings at the rate of 17.77 percent on such stock, or 14.6 percent on common stock and surplus. This period felt the incidence of eight months of the reduced electric rates, the warm winter of 1929-30 with its decreased gas revenue and ten months of business depression. Also much of the increased and abnormal operating expenses occurred during this period. It is here found that the Company's annual depreciation expense for its gas department is unnecessarily large by the sum of approximately $230,000. The Company has included this amount in its operating expenses for the year ending August 31, 1930. Adding this amount and the $120,000. paid to the Pacific Lighting Corporation as an annual fee, to the $3,555,150. makes a total of $3,905,150. for the common stock and surplus. This represents 19.5 percent on the common stock and 16.1 percent on common stock and surplus combined. If the Company's gas revenue for the year ending August 31, 1930 had been nine percent less than it actually was, such nine percent being the reduction herein ordered, the Company's net profit for the common stock and surplus would have been $2,576,507., or 12.8 percent on the common stock and 10.6 percent on its common stock and surplus. (No adjustment in these figures is made on account of taxes.)

into the primary district) or to make any radical changes in the form of rates. To accomplish either of these results would in fairness call for further hearings and a consequent delay in extending to consumers the advantages of reduced rates. Under the circumstances and having in mind the importance of making the reductions effective at an early date, the reductions should take the form of a lowering of the meter rates. A somewhat greater reduction for the lower blocks is advisable. The rates established in the order are carefully calculated and intended to effect a reduction in the Company's gross domestic and commercial revenue of 9 percent.

PART IV.

At the risk of repetition and that there may be no misunderstanding, it may be restated that the conclusions expressed in Part III are premised on the assumption that temperature conditions in the future will be normal and that business conditions will approximate those of the year 1930 and that the gross revenue of 1931 with normal temperatures will not be less than that of 1930. It is there recognized that revenue for the year 1930 may, because of business conditions, be less than that estimated by the Company and expressed in the various tables. On the other hand, operating expense for 1930 as expressed in the tables is not at a normal figure. Any diminution in revenue is offset by the amount by which the operating expense is out of normal.

However, the Commission cannot close its eyes to the fact that the _actual_ earning position of the Company in the year 1931, during which rates here established will be effective, may be either worse or better than it would be were these assumptions realized. A coincidence in that year of high temperatures (with correspondingly reduced sales) and added and unexpected severity of the present business depression may lessen the return anticipated by from ½ of 1% to 1%. On the other hand, a coincidence of a cold year with improved business conditions may increase the anticipated return by a corresponding amount. The degree in which these uncertain factors are present and their relationship may produce actual results anywhere between these extremes.

Any device or plan by which these elements of uncertainty may be reduced obviously would be of advantage and benefit both to the utility and to its consumers. That the disturbing element of varying temperature conditions may be guarded against by the establishment of a temperature reserve is clear. This became impressed upon the Commission several years ago. In its decision affecting the rates of this Company in November 1928, reported in 32 C.R.C. 379, the Commission said:

> "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 can not be taken without cooperation 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."

The Southern California Edison Company reserve, to which reference is made in the quoted excerpt, grows out of the decision and order in re Southern California Edison Company, 19 C.R.C. 595, 922.

The Company did not see fit to move along the line of the suggestion thus made. However, since the date of that decision formulas by which sales, purchases of natural gas, and gross and net revenue may be made to reflect with substantial accuracy average or normal temperatures have been greatly refined.

While the Commission does not assume the power to direct the establishment of a reserve, it is taking the liberty of again pointing out its desirability from the standpoint of the Company, the consumers and the Commission, and, in addition, to authorize by its order a temporary optional rate under a plan which, if the Company elects to accept it, not only will lead towards the creation of such a reserve but will incidently tend to soften the effect upon the Company of a warm year in 1931 or severer business conditions than those of 1930, and on the other hand prove of advantage to consumers if 1931 proves to be a cold year or if business conditions improve over those of 1930.

The creation of such a reserve from the standpoint of the Company would mean an earning position not subject to fluctuation because of varying temperatures; published earning statements would no longer be provocative of rate investigations when earnings are high with a cold winter or detrimental to its financial standing when they are low because of a warm year. The existence of such a reserve would be of benefit to the consumers and would make the work of the Commission easier because it would do away with the urge, ever present when rates are being fixed, to guard against hardship or embarrassment to the Company by fixing rates on the basis of a warm year with its lesser sales and revenues.

A temperature reserve should be set up so that periodically it could be drawn upon to make up for depletion in gross and net revenue due to a period of high temperature, and be augmented by gross and net revenue above normal due to a period of low temperatures and consequent increased sales. The details of making withdrawals and accretions and the formulas by which to be determined should be expressed in a stipulation by the Company, approved by the Commission.

Such a reserve should of course be started with a substantial credit. The Company could, it is believed, well afford to establish a reserve and create an adequate credit therein.

The record in this case suggests at least two possible sources from which such a credit could be created without injury to the Company. In past years there have been over-accruals of taxes, particularly in respect to the Federal tax, which, together with other tax accruals, have built the Taxes Accrued Account to $2,154,027.40 as of December 31, 1929. Included in this amount is the sum of $320,728.63, representing Federal excess accruals for years prior to 1927. Apparently this sum is free to be transferred. It is not clear from the record whether this was derived from the gas operations or electric operations. At any rate, it is in effect a Company asset.

The depreciation reserve of the gas department on December 31, 1929 was $9,350,689., subject to some variation according to the basis employed in splitting the Company's total reserve. The Company's reserve has had an interesting history. It appears that about 1918 a substantial amount was transferred from the depreciation reserve to a contingency reserve and that finally nearly all of this landed as a credit to the electric reserve. Even as thus reduced, the reserve is substantially in excess of the amount of accrued depreciation. As heretofore pointed out, the annual amounts allowed for depreciation expense have proven somewhat larger than the experience of the Company has indicated was necessary. The Company now is required to account for the entire reserve. A further consideration of its size might well lead to the conclusion that from $500,000. to $1,000,000. could, with propriety, be transferred to a temperature reserve. In this connection it is pertinent to point out that the Company is now setting up a special reserve for extraordinary hazards.

The creation of a credit by the Company in the manner pointed out, or otherwise, is for the purposes hereof, at least, assumed to be purely a matter of Company policy. Under the alternative rate plan referred to, however, provision is made for the possible establishment of a credit to the reserve adequate for its creation and operation.

This alternative plan, the acceptance of which is authorized in the order, is as follows:

1. Temporary and provisional rates for the year 1931, and until further order of the Commission, involving a reduction in domestic and commercial revenue of approximately 7% to be authorized.

2. The Company to agree:

   (a) To establish, effective on January 1, 1932, a temperature reserve along the lines heretofore indicated, the basis of credits and debits to which to be approved by order of the Commission.

   (b) To credit to such reserve any actual net earnings available for return for the year 1931 in excess of $4,650,000, in the determination of which specific operating expenses herein found to be unreasonable not to be included.

3. Jurisdiction to be retained by the Commission to make such further orders herein as may be deemed necessary and appropriate.

I recommend the following form of order:

ORDER

The Railroad Commission having instituted a proceeding upon its own motion inquiring into the rates, rules and regulations of the

Los Angeles Gas and Electric Corporation, and the matter having been submitted and being now ready for decision;

THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA HEREBY FINDS AS A FACT that the domestic and commercial rates for gas now being charged by Los Angeles Gas and Electric Corporation are unjust and unreasonable, and further finds as a fact that the rates now charged by said Corporation for electric energy as set forth and authorized in a supplementary order herein, Decision No. 21846, of date December 2, 1929, are just and reasonable rates.

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

IT IS HEREBY ORDERED that Los Angeles Gas and Electric Corporation shall:

1. Charge and collect for domestic and commercial gas sales, as measured by meter readings on and after January 1, 1931, the rates set forth in Exhibit "A", which rates are herein found to be reasonable rates.
2. Charge and collect for electric energy sold the rates authorized by said interlocutory order herein.
3. File, effective on January 1, 1931, a revision of its rule No. 20, eliminating the provisions therein for a return of advances without interest, and in lieu thereof to provide for such return with interest at the rate of 6% per annum, interest to run from January 1, 1931, or from date of advance if made subsequent to said date.

IT IS HEREBY FURTHER ORDERED that Los Angeles Gas and Electric Corporation, in lieu of charging the rates set out in Exhibit "A" hereof, may under the terms and conditions hereinafter specified and during the calendar year 1931 and until further order of the Commission herein charge and collect for domestic and commercial gas sales, as measured by meter readings on and after January 1, 1931, the rates set forth in Exhibit "B" hereof, which rates, under the special circumstances adverted to in the opinion and subject to the terms and conditions hereinafter specified, are found to be reasonable rates.

The foregoing optional rates herein authorized shall become effective upon the following terms and conditions and not otherwise:

1. The Company shall by stipulation agree to set up and establish, effective on January 1, 1932, a temperature reserve of the character described in Part IV of the opinion, the details of which are to be subject to approval by the Commission.
2. The Company shall by stipulation agree to credit to said temperature reserve the amount by which the net earnings of its gas department for the year 1931 available for return exceeds the sum of $4,650,000., in the computation of which net revenue available for return specific operating expenses herein found to be unreasonable not to be included as an operating expense.
3. Such rates shall be deemed to be temporary or trial rates effective for the year 1931 and until further order of the Commission.
4. This proceeding shall be kept open for such further orders as may be proper.
5. The Company's election to accept the optional rates herein provided for shall be made at least five days prior to January 1, 1931.

Except as otherwise provided, 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 24th day of November, 1930.

C. L. Seavey

Leon Whitsell

Thos. D. Lowell

M. J. Carr

Commissioners.

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Decoto, Commissioner. dissenting:

From the time of the institution of state regulatory bodies few utilities and regulatory bodies have had the proper conception of regulation. Regulatory bodies have advocated as their policy the adoption of a method of fixing a rate base that would bring the lowest rates to consumers. Public utilities have advocated as their policy the adoption of a method of fixing a rate base that would bring to them excessive returns. The first advocate of reproduction cost new was William Jennings Bryan representing the consumers. At the time he advocated this method it would produce the lowest rate base. He was opposed by public utilities advocating the stock and bond base and the prudent investment or historical rate base, because they would be the highest.(1) Now the position of most regulatory bodies and most public utilities is completely reversed, each having executed a complete about face, regulatory commissions now advocating historical cost and utilities advocating reproduction cost new.(2) Both sides seem to have lost sight of the fact that the purpose of regulation is to procure for the consumers reasonable rates and service and at the same time secure to the utility adequate return upon the value of its property, such value being determined in accordance with the many decisions of the United States Supreme Court. From time to time the federal

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(1) Smith vs. Ames 169 U.S. 466,

(2) For an instructive treatise on the situation and valuation in general, see "Valuation in the Supreme Court" by Alfred Evans in Vol.XVI - No. 8 of the American Bar Association Journal.

courts have stepped between these opposing views and have quite consistently pointed out the proper method of fixing a rate base. For thirty two years the Supreme Court of the United States has consistently adhered to the controlling principles of valuation laid down by it.(3) In spite of the fact that the pathway is now made reasonably clear by the decisions of the courts, some state commissions seem to be inclined to be a law unto themselves and persist in ignoring the law as laid down by the courts.

The California Commission has to all outward appearance been one of these. It has clung ostensibly and theoretically to the historical rate base. In reality it has given effect to the different elements mentioned by the federal courts including fair value including going value by allowing a rate of return between 8% and 8½% on historical cost. If there be added to the historical rate base an amount between 10 and 12½%, the rate base so obtained will approximate fair value including going value. So, also, if there is deducted from 10% to 12½% from a rate of return of 8% or 8½% on an historical cost rate base, it is readily seen that there is an actual return varying from 7% to 7.75% upon fair value including therein a reasonable amount for going value. With this arrangement our public utilities have been content.

During the last two years this commission has shown a tendency to cut the rate of return upon an historical rate base from between 8% and 8½% to 7%, which reduced the rate of return upon a fair value bases to 6.12½% to 6.3%.(4) This is confiscation

(3) Smith vs. Ames 169 U.S.466. San Diego L.& T.Co. vs.National City,174 U.S.739, Stanislaus Co.vs. San Joaquin, etc. 192 U.S. 201, Wilcox vs. Consolidated Gas Co. 212 U.S. 119, Missouri ex rel. S.W.Bell Tel.Co. vs. Public Service Com. 262 U.S. 276, McCardle vs. Indpls.Water Co.272 U.S. 400, St.Louis & O'Fallon Ry.Co. vs. U.S. et al, 279 U.S. 461.

(4) Railroad Commission vs.L.A.Railway Corporation,280 U.S. 145. In this case the refusal of this commission to grant increase in street car fares was set aside. In Decision

(4) No.21766 - App. 13795, Pac. Tel. & Tel. Co. this commission fixed rates calculated to result in a return of 7% on an historical base. For the first six months of 1930, the actual return was 6.05%.

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and not regulation. It cannot be expected that our public utilities will long content themselves with such a return. The result will be an appeal to the courts for proper redress. This is in effect a shirking of its responsibility by the commission and will lead to an era of regulation by the courts.

The present opinion is just another step in the direction I have pointed out and for that reason I desire to review the majority opinion pointing out its many obvious weaknesses and setting up what I believe to be proper rate bases, both historical and fair value, and a proper estimate of revenue and expenditures for the next few years.

Table No. I, of the majority opinion is misleading for the reason that 6.35% overheads are used and no going value whatever is allowed. If 11.25% overheads were used and a going value allowed to the extent of 10%, the average rate of return for each of the years quoted would be nearer 6% than 7.74% therein shown.

Table No. II is also misleading for the same reasons as Table No. I.

Table No. III is misleading for the reason that parts 1, 2, 5 and 6 are again based upon 6.35% overheads.

Table No. IV is also misleading in that it is based upon 6.35% overheads and only $422,886.00 is allowed for going value.

Table No. V is also misleading because for the year 1930, the fair value basis contains only $422,886.00 for going value as shown in Table VII of this opinion and in arriving at the historical basis and fair value basis 6.35% overheads is used.

The historical basis used in Table No. V is not derived from any of the exhibits made by the valuation department of this commission in this hearing but is based upon former rate bases fixed by this commission in previous hearings. It is set up as follows:

TABLE NO. VI

DETAIL OF HISTORICAL RATE BASE
OF
LOS ANGELES GAS AND ELECTRIC CORPN.

YEAR 1930.

Item	Fixed Capital As of December 31, 1929.
INTANGIBLE CAPITAL:	
Organization,	$415,734.71
Franchises,	13,391.23
Total Intangible Capital,	$429,125.94
TANGIBLE CAPITAL:	
Land,	$3,500,888.00
Production Capital,	19,215,650.10
Distribution Capital,	32,205,911.59
General Capital,	3,335,611.09
Total Tangible Capital,	$58,258,060.78
GRAND TOTAL FIXED CAPITAL,	$58,687,186.72
Additional Allowance for Interest during construction,	$155,000.00
Total Fixed Capital Dec. 31, 1929,	$58,842,187.00
One-half Net A's and B's, 1930, (Company Estimate)	$767,103.00
Average Fixed Capital, 1930,	$59,609,290.00
Material and Supplies,	450,000.00
Working Cash Capital,	645,000.00
Rate Base Used, ...	$60,704,290.00

The fair value basis used in Table No. V is set up as follows:

TABLE NO. VII

DETAIL OF FAIR VALUE RATE BASE OF LOS ANGELES GAS AND ELECTRIC CORPORATION

YEAR 1930

Item	Fixed Capital as of Dec. 31, 1929, One Day Pricing Period, June 15, 1930
INTANGIBLE CAPITAL:	
Organization,	$415,000.00
Franchises,	12,406.00
Total Intangible Capital,	$427,406.00
TANGIBLE CAPITAL:	
Land,	$3,693,191.00
Production Capital,	15,013,689.00
Distribution Capital,	37,125,587.00
General Capital,	2,731,120.00
Total Tangible Capital,	$58,563,587.00
Total Capital,	$58,990,993.00
Intangibles and Land,	$4,120,597.00
Total Capital Less Intangibles & Land,	$54,870,396.00
Less Difficulty Factor Exh.No.32,pp.147,	580,195.00
	$54,290,201.00
Wrought Iron Pipe Allowance,	1,456,614.00
	$55,746,815.00
Book Overheads, at 6.35%,	3,539,922.00
	$59,286,737.00
Operative Land as of Dec. 31, 1929,	3,500,888.00
	$62,787,625.00
Organization and Franchises,	427,406.00
Total Fixed Capital, Dec. 31, 1929,	$63,215,031.00
Add 1/2 A's and B's for 1930,	767,103.00
	$63,982,134.00
Materials and Supplies,	450,000.00
Working Cash Capital,	645,000.00
Sub-total	$65,077,134.00
Going Value,	422,866.00
Rate Base Used,	$65,500,000.00

I have set up in the following two tables an historical and a fair value basis built up on the studies and exhibits made by the engineering department of this commission.

TABLE VIII

HISTORICAL RATE BASE WITH GOING VALUE

Ex. 52 Vol. 1 Table 1, C.R.C. Dufour 11.25 Overhead, ...	$61,019,662.00
Add 10% for Going Value	6,101,966.00
	$67,121,628.00
Add 1/2 of A's and B's, 1930	767,103.00
	$67,888,731.00
Materials and supplies, ...	450,000.00
Working cash capital, ...	645,000.00
Rate base, ...	$68,983,731.00
Rate base used, ...	$69,000,000.00

TABLE NO. IX

FAIR VALUE BASIS BASED UPON

REPRODUCTION COST NEW DEPRECIATED.

Ex. 52 Vol. 1 - Table 2, Colm.3, C.R.C. 22.35% overhead, Undepreciated, ...	$73,637,542.00
Ex. 56, - Same depreciated, ...	$64,179,071.00
Deduct difference between $3,693,191.00 of Ex.52, Vol.1 - Table 2 - Colm. 3, and $3,500,888.00 allowed by Com. Carr for operative land, . .	$192,313.00
	$63,986,758.00
Add 10% for Going Value, . . .	6,398,675.00
	$70,385,433.00
One-half A's and B's, 1930, . .	767,103.00
Materials and supplies, ...	450,000.00
Working Cash Capital, ...	645,000.00
Reproduction cost new depreciated rate base, ...	$72,247,536.00
Fair Value Used, ...	$72,500,000.00

I have used a fair value of $72,500,000.00 for the reason that I have not used the going value of $10,000,000.00 set forth in the record. If I had used such going value, the fair value here used would be much less than a fair value based upon reproduction cost new depreciated.

I have also set up in Table No. X an estimate of the operations of the gas division of the company for the year 1930, basing the operating revenues upon the actual revenue for the year to September 1st, and projecting the earnings for the remaining months on the curve, extended, formed by the actual receipts to September 1st.

TABLE NO. X

ESTIMATE OF OPERATING REVENUE AND EXPENSES FOR 1930.

OPERATING REVENUE,(1)		$16,061,000.00
OPERATING EXPENSES		
Production) Transmission)		4,538,000.00
Distribution,		1,123,000.00
Commercial,		885,000.00
New Business,		114,000.00
General,		1,005,000.00
	Sub-total	$7,665,000.00
DEPRECIATION		$1,222,023.00
Taxes,		1,594,000.00
Uncollectibles,		182,000.00
	Sub-total	$2,998,023.00
Total Operating Charges,		$10,663,023.00
Net for Return,		5,394,977.00
Rate base - fair value,		72,500,000.00
Rate of Return, on fair value,		7.4+%
Rate base, historical with going value, Table No. VIII,		$69,000,000.00
Rate of Return - on historical basis with going value - Table No. VIII,		7.8+%

(1) - Based on actual receipts to Sept. 1st, and projected on same basis for remaining months of 1930.

Overheads

As I have pointed out, both the historical and fair value rate bases used in the majority opinion are based upon 6.35% overheads. There is no evidence in the record of any weight that justifies the adoption of any such overhead percentage. The lowest percentage of overheads that is at all supported by the record in this case is 11.25. In all the cases in which I have sat in the last five years, I have never heard the Commission's engineers advocate an overhead charge of less than 14%, so in adopting the engineering study which used an overhead of 11.25%, I feel that I have been conservative.

Going Value.

Going value is not measured alone by the cost of attaching new business. It is a present element in every paying business over and above physical value. It is an intangible element that can be determined only by the judgment and opinion of men eminently qualified by long experience in the design, construction and operation of gas properties and thoroughly conversant with the particular business.

The testimony of Colonel Miller that the going value of the company's property over and above the value represented by its physical elements was at least $9,288,667.00, and the testimony of Mr. Luick that such value was at least $10,000,000.00 stands unchallenged and undisputed and undenied by any testimony anywhere in the record. To adopt, in the face of such undisputed testimony as the majority opinion has done, a going value of $422,866.00 (shown in Table No. VII), is an absolute disregard of all testimony and all law.(5) In fixing the going value

(5) Des Moines Gas Co. vs. City of Des Moines 238 U.S.153, McCardle vs. Indianapolis Water Co. 272 U.S. 400.

at 10% of the physical property, I feel that I have been conservative indeed, and probably would have been justified in using $10,000,000.00.

Economic Conditions.

A study of the actual operating revenue for the year 1930, shows it to be under that estimated by the company. This is due to the economic pressure and economies made necessary by the drastic change in the business of the community. It is only a part of the business depression affecting the whole country and in my opinion will continue through the year 1931, and probably well into 1932. To fix rates upon the former normal trend of business, is to close our eyes to what is everywhere about us, and to forget that we are faced with actualities, and that theories should yield to actual facts.

Rate of Return

Table No. V is predicated upon a 9% reduction in the estimated earnings of the company as shown by its exhibits. It will yield to the company upon the historical rate base shown in Table No. VIII, a return of 6.8-% and upon the fair value base shown in Table IX a return of 6.3+%. These returns are less than the cost of money.

There are several other matters in the majority opinion with which I disagree in part, but I have deemed it best to discuss only the major points of difference. Under the evidence in this case any reduction in revenue is questionable.

It seems to me that this Commission should adopt the legal method of fixing a rate base on fair value including therein a proper allowance for going value. However, if it still persists in adhering to the historical cost rate basis, EWD:LN

it should also adhere to its past practice and allow a return between 8 and $8\frac{1}{2}\%$.

Commissioner.

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EXHIBIT "A"

SCHEDULE NO. G-1.

DOMESTIC AND COMMERCIAL GAS SERVICE.

CLASS OF SERVICE.

Applicable to the general domestic and commercial service of natural gas for lighting, heating, cooking and water heating, including use by apartment houses, churches, hotels, hospitals, restaurants, schools, business buildings, etc.

TERRITORY.

Applicable to Rate District No. 1, as set forth in detail in the Preliminary Statement, comprising that territory:

1. Within the City Limits of Los Angeles as they existed May 30, 1926, except that portion of the West Coast Addition west of a southerly continuation of the westerly boundary of Buckler Addition.

2. Within the unincorporated territory in the vicinity of Sherman contiguous to Laurel Canyon, Melrose and Fairfax Additions.

3. Within the unincorporated territory west of Alameda Street and north of an easterly continuation of the southerly boundary of Watts Addition to the City of Los Angeles.

4. Within the City Limits of Pasadena, South Pasadena, Alhambra, Huntington Park and Vernon.

RATE.

For continuous service for periods of one month or more:

First	300 cu.ft. or less per meter per month ...	80 cents.
Next	3,700 cu.ft. per meter per month..	6.9 cents per 100 cu.ft.
All over	4,000 cu.ft. per meter per month..	5.9 cents per 100 cu.ft.

MINIMUM CHARGE.

A minimum charge of 80 cents per meter per month will be made for the first 300 cu.ft. of gas used during any one month, or fraction thereof, if service is opened and closed during any 33 day period.

PRORATION OF OPENING OR CLOSING GAS BILLS.

The minimum charge for opening or closing bills for a fraction of a month or for less than 300 cu.ft. will be prorated

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for the period of service in accordance with the schedule of pro-rated minimum charges, as set forth below:

Period of Use - Days	1 to 10	11 to 20	21 to 33
Minimum Use - First	100 c.f.or less	200 c.f.or less	300 c.f.or less
Minimum Charge	27¢	53¢	80¢
Over Minimum Use			
at 6.9¢ per 100 c.f.	Next 1,200 c.f.	Next 2,500 c.f.	Next 3,700 c.f.
at 5.9¢ per 100 c.f.	Over 1,300 c.f.	Over 2,700 c.f.	Over 4,000 c.f.

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SCHEDULE NO. G-2

DOMESTIC AND COMMERCIAL GAS SERVICE.

CLASS OF SERVICE.

Applicable to the general domestic and commercial service of natural gas for lighting, heating, cooking and water heating, including use by apartment houses, churches, hotels, hospitals, restaurants, schools, business buildings, etc.

TERRITORY.

Applicable to Rate District No. 2, as set forth in detail in the Preliminary Statement, comprising:

All districts not included under Schedule No. G-1, namely:

1. City of San Marino.
2. City of San Gabriel.
3. City of Monterey Park.
4. City of Inglewood.
5. Culver City.
6. Unincorporated territory north, east and south of Pasadena and Alhambra.
7. Territory served east of City Limits of Huntington Park including portions of Maywood and Bell.
8. Unincorporated territory south of southerly limits of Watts Addition to City of Los Angeles.
9. Territory south and west of the City of Los Angeles including Hawthorne and that portion of West Coast Addition to the City of Los Angeles west of a southerly continuation of the west boundary of Buckler Addition.

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RATE.

For continuous service for periods of one month or more:

First	300 cu.ft. or less per meter per month.......	80 cents.
Next	3,700 cu.ft. per meter per month...	7.3 cents per 100 c.f.
All Over	4,000 cu.ft. per meter per month...	6.3 cents per 100 c.f.

MINIMUM CHARGE.

A minimum charge of 80 cents per meter per month will be made for the first 300 cu. ft. of gas used during any one month, or fraction thereof, if service is opened and closed during any 33 day period.

PRORATION OF OPENING OR CLOSING GAS BILLS.

The minimum charge for opening or closing bills for a fraction of a month or for less than 300 cu. ft. will be prorated for the period of service in accordance with the schedule of prorated minimum charges, as set forth below:

Period of Use - Days	1 to 10	11 to 20	21 to 33
Minimum Use - First	100 c.f.or less	200 c.f.or less	300 c.f.or less
Minimum Charge	27¢	53¢	80¢
Over Minimum Use			
at 7.3¢ per 100 c.f.	Next 1,200 c.f.	Next 2,500 c.f.	Next 3,700 c.f.
at 6.3¢ per 100 c.f.	Over 1,300 c.f.	Over 2,700 c.f.	Over 4,000 c.f.

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EXHIBIT "B"

SCHEDULE NO. G-1.

DOMESTIC AND COMMERCIAL GAS SERVICE.

CLASS OF SERVICE:

Applicable to the general domestic and commercial service of natural gas for lighting, heating, cooking and water heating, including use by apartment houses, churches, hotels, hospitals, restaurants, schools, business buildings, etc.

TERRITORY:

Applicable to Rate District No. 1, as set forth in detail in the Preliminary Statement, comprising that territory:

1. Within the City Limits of Los Angeles as they existed May 30, 1926, except that portion of the West Coast Addition west of a southerly continuation of the westerly boundary of Buckler Addition.

2. Within the unincorporated territory in the vicinity of Sherman contiguous to Laurel Canyon, Melrose and Fairfax Additions.

3. Within the unincorporated territory west of Alameda Street and north of an easterly continuation of the southerly boundary of Watts Addition to the City of Los Angeles.

4. Within the City Limits of Pasadena, South Pasadena, Alhambra, Huntington Park and Vernon.

RATE:

For continuous service for periods of one month or more:

First 300 cu.ft. or less per meter per month .... 80 cents
Next 3,700 cu.ft. per meter per month ......7.0 cents per 100 cu.ft.
All over 4,000 cu.ft.per meter per month....6.2 cents per 100 cu.ft.

MINIMUM CHARGE:

A minimum charge of 80 cents per meter per month will be made for the first 300 cu.ft. of gas used during any one month, or fraction thereof, if service is opened and closed during any 33 day period.

PRORATION OF OPENING OR CLOSING GAS BILLS:

The minimum charge for opening or closing bills for a fraction of a month or for less than 300 cu.ft. will be prorated for the period of service in accordance with the schedule of prorated minimum charges, as set forth below.

Period of Use - Days	1 to 10	11 to 20	21 to 33
Minimum Use - First	100 c.f. or less	200 c.f. or less	300 c.f. or less
Minimum Charge	27¢	53¢	80¢
Over Minimum Use			
at 7.0¢ per 100 c.f.	Next 1,200 c.f.	Next 2,500 c.f.	Next 3,700 c.f.
at 6.2¢ per 100 c.f.	Over 1,300 c.f.	Over 2,700 c.f.	Over 4,000 c.f.

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SCHEDULE NO. G-2.

DOMESTIC AND COMMERCIAL GAS SERVICE

CLASS OF SERVICE:

Applicable to the general domestic and commercial service of natural gas for lighting, heating, cooking and water heating, including use by apartment houses, churches, hotels, hospitals, restaurants, schools, business buildings, etc.

TERRITORY:

Applicable to Rate District No. 2, as set forth in detail in the Preliminary Statement, comprising:

All districts not included under Schedule No. G-1, namely:

1. City of San Marino.
2. City of San Gabriel.
3. City of Monterey Park.
4. City of Inglewood.
5. Culver City.
6. Unincorporated territory north, east and south of Pasadena and Alhambra.
7. Territory served east of City Limits of Huntington Park including portions of Maywood and Bell.
8. Unincorporated territory south of southerly limits of Watts Addition to City of Los Angeles.
9. Territory south and west of the City of Los Angeles including Hawthorne and that portion of West Coast Addition to the City of Los Angeles west of a southerly continuation of the west boundary of Buckler Addition.

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RATE:

For continuous service for periods of one month or more:

First 300 cu.ft. or less per meter per month ....80¢
Next 3,700 cu.ft. per meter per month .... 7.4¢ per 100 c.f.
All over 4,000 cu.ft.per meter per month .... 6.6¢ per 100 c.f.

MINIMUM CHARGE:

A minimum charge of 80¢ per meter per month will be made for the first 300 cu.ft. of gas used during any one month, or fraction thereof, if service is opened and closed during any 33 day period.

PRORATION OF OPENING OR CLOSING GAS BILLS:

The minimum charge for opening or closing bills for a fraction of a month or for less than 300 cu.ft. will be prorated for the period of service in accordance with the schedule of prorated minimum charges, as set forth below:

Period of Use - Days	1 to 10	11 to 20	21 to 33
Minimum Use - First	100 c.f.or less	200 c.f.or less	300 c.f.or less
Minimum Charge	27¢	53¢	80¢
Over Minimum Use			
at 7.4¢ per 100 c.f.	Next 1,200 c.f.	Next 2,500 c.f.	Next 3,700 c.f.
at 6.6¢ per 100 c.f.	Over 1,300 c.f.	Over 2,700 c.f.	Over 4,000 c.f.

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