GER

Decision No. 17830.

ORIGINAL

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

In the Matter of the Application of Los Angeles Gas and Electric Corporation for increase in rates charged for gas.	Application No. 11354.
In the Matter of the Application of Southern California Gas Company, a corporation, for authorization to increase rates.	Application No. 11379.
In the Matter of the Application of Midway Gas Company, a corporation, for authorization to increase rates.	Application No. 11380.
In the Matter of the Investigation on the Commission's own motion into the Rates to be charged by Southern Counties Gas Company of California for Natural Gas furnished to Los Angeles Gas and Electric Corporation.	Case No. 2186.

Paul Overton and S. W. Guthrie, for Los Angeles Gas and Electric Corporation.
Hugh Gordon, Thomas J. Reynolds, and Chickering Gregory, by Evan Williams, for Southern California Gas Company and Midway Gas Company.
Jess E. Stephens, City Attorney, and Milton Bryan, Deputy City Attorney, for the City of Los Angeles.
J. H. Howard, City Attorney, for City of Pasadena.
Chester L. Coffin, City Attorney, for City of Santa Monica.
K. K. Knapp, for West Hollywood and Sherman District.
H. E. Vedder, for City of South Pasadena.
Charles R. Dyer, for Montrose Territory.
T. A. Berkebile, City Attorney, for City of Monterey Park.
R. C. Waltz, City Attorney, for City of Beverly Hills.
Glenn M. Ely, City Attorney, for City of San Gabriel.
Brewton A. Hayne, for City of South Gate.
J. J. Deuel, for California Farm Bureau Federation.
Leroy M. Edwards, for Southern Counties Gas Company of California.

SEAVEY AND DECOTO, COMMISSIONERS:

OPINION

The above entitled applications involve the wholesale rates for natural gas delivered at Los Angeles and the retail rates of two competitive distributing companies operating in the City and suburbs. The four proceedings are therefore so intimately connected as parts of a single situation that they have been combined for hearing and decision. The applications of the utilities were filed early in July, 1925, and hearings on them were held in Los Angeles over a period from September, 1925, until June 3, 1926, when all matters were submitted on briefs.

Midway Gas Company purchases natural gas from oil producing companies in the oil fields and transports it to Los Angeles and there sells it wholesale to its affiliated corporation, Southern California Gas Company, and to Los Angeles Gas and Electric Corporation. Part of the gas supplied to the Los Angeles Company is sold to the Southern California Company and resold by it. The system of the Midway Company comprises approximately 605 miles of high pressure transmission lines, 26 compressor stations, metering, and patrol stations, etc., delivering up to 100 million cubic feet of natural gas per day to Los Angeles. The Company also operates a system in the southern portion of the San Joaquin Valley which it calls its Valley Division and by means of which it supplies gas to oil fields, industrial and wholesale consumers in the vicinity of Bakersfield. In its application, the Midway Company alleges that the cost of purchasing natural gas in the oil fields is increasing, that with the discovery of new fields and the depletion of the older ones, the cost of compression and transmission is increasing, and asks for authority to increase the rates at which natural gas is supplied to the distributing companies in Los Angeles. The gas for the Valley Division is not handled through the transmission lines involved in the service of the Los Angeles distributing companies, and the Midway Company does not include rates on its Valley Division in its application.

Southern California Gas Company, which is controlled by the same stockholders that control the Midway Company, purchases natural gas at wholesale from the Midway Company for distribution in towns and suburban territory in Los Angeles, Orange, Riverside, and San Bernardino Counties. It also operates a gas works and distributes a mixture of natural and manufactured gas in parts of the City of Los Angeles. To meet the variation in the demand for gas by domestic consumers it has built up quite a large business in the sale of surplus gas for industrial purposes. This gas is sold at low rates and is subject to shut-off at times when such action is necessary in order to meet domestic requirements. The Southern California Company also purchases and resells a large part of the gas which is supplied by the Midway Company to the Los Angeles Company. The Southern California Company asks permission to increase the rates which it charges for mixed gas served to consumers in the City of Los Angeles and the rates which it charges the Los Angeles Company for natural gas supplied wholesale. This application involves approximately 65,000 domestic and commercial consumers in Los Angeles with an annual gross revenue of approximately $3,000,000.

Los Angeles Gas and Electric Corporation is the older and larger of the two companies supplying domestic gas service in Los Angeles. It operates a gas works in Los Angeles and distributes a mixture of natural and manufactured gas throughout most of the City of Los Angeles and in Pasadena, South Pasadena, Alhambra, Huntington Park, Inglewood and suburban territory. During recent years, it has developed a comparatively small amount of industrial service of surplus natural gas. It serves over 300,000 domestic and commercial consumers and its gross revenue is in excess of $10,000,000. per year. In its application, it alleges that as a result of an increase in the investment per consumer, the cost of service has increased, and it asks authority to increase all of its rates.

Southern Counties Gas Company of California, which is controlled by the same stockholders that control the Los Angeles Company, purchases natural gas in the Los Angeles basin and operates distribution systems in parts of Los Angeles and Orange Counties. It has recently entered into a contract for the purchase of natural gas in the Ventura Avenue Field and built a high pressure transmission line from Ventura to Los Angeles in order to supplement its diminishing supply of natural gas from the Los Angeles Basin oil fields. Part of the gas transported by means of the Ventura line is sold to the Los Angeles Company. As the price agreed upon between the two affiliated companies was higher than the price being paid by the Los Angeles Company to the Midway and the Southern California Companies, the Commission instituted an investigation to determine the fair rate to be paid by the Los Angeles Company for this service. This proceeding covers only the prices charged by the Southern Counties Company for gas delivered to the Los Angeles Company.

The applications of these companies were opposed by the communities which they serve, represented chiefly through the city attorneys of the various towns and cities involved. Early in the course of the hearings, a working organization was effected by these representatives of the public and their case was presented by the City Attorney of the City of Los Angeles. The protestants not only answered the claims of the applicants but, in addition, presented affirmative evidence to show that the distributing companies should be required to discontinue the service of mixed gas and in its place to serve natural gas to all consumers. Such a change in operating methods would have an important bearing on operating expenses, the consumption of gas by consumers, the demand on the wholesale companies for natural gas, the supply available for industrial sales, etc. This phase of the case will therefore be discussed in detail before taking up the operating expenses and rates of the individual companies.

Character of Service:

Prior to the advent of natural gas, consumers in the City of Los Angeles were supplied with gas manufactured from oil and having a heating value of approximately 600 British Thermal Units per cubic foot. In 1913, the Midway Company began to deliver to Los Angeles natural gas having a heating value of about 1,000 B.t.u. per cubic foot. At that time, the Los Angeles Company and the Southern California Company commenced the service of a mixture of natural and manufactured gas and soon adopted a half and half mixture having a heating value of approximately 815 B.t.u. per cubic foot. While the demand for gas increased with the growth of the City, new fields were discovered from which natural gas was obtained and this standard of service was maintained until 1921, when because of a reduction in the relative supply of natural gas, the quality of mixed gas was reduced to 750 B.t.u. per cubic foot. In 1923, additional natural gas became available and the quality of mixed gas was increased to 850 B.t.u. per cubic foot.

At first the mixed gas served to the consumers was a mixture of natural gas and gas manufactured from oil. In the summer of 1918, the Southern California Company began to use the natural gas in place of oil for a fuel in the manufacture of gas. Without going into the technical detail of the so-called "reforming process", it may be said that by treating natural gas in the usual gas generators, the volume is increased and the heating value is reduced, the resulting product being quite similar to gas manufactured from oil. The manufactured gas, whether made from oil or by reforming, is mixed with natural gas in proportions necessary to obtain a mixture with a uniform value of 850 B.t.u. per cubic foot. In the summer months when the demand for gas by domestic consumers is small and there is a surplus of natural gas available, consumers are supplied a mixture of natural gas and reformed natural gas. In winter when the demand of the domestic consumers increases and there is not enough natural gas available, consumers are supplied with a mixture of natural gas and manufactured oil gas which is of the same quality as the gas served during the summer.

The necessity for the maintenance of a fairly uniform quality of gas is generally recognized, not only by most of the witnesses appearing in these hearings and by the authorities which they cite, but also by practically all authorities that have come to our attention in this or other matters. The vast majority of appliances in which gas is burned for the production of heat, mix the gas with air in order that complete combustion may be secured and unless the appliances are adjusted to properly proportion the gas and the air, their operation will be unsatisfactory, inefficient, and, under certain conditions, dangerous. A material change in the character of the gas supplied calls for a readjustment of the appliance or results in unsatisfactory operation.

On the system of the Los Angeles Company, which supplies domestic and commercial consumers almost exclusively, the send-out of mixed gas varied from 100 million cubic feet on some days last winter, which was not a severe one, to less than 30 million cubic feet per day during the following summer. It is estimated that had the temperature conditions of previous years been repeated the peak days' send-out would have been about 125 million cubic feet or approximately four times that of the following summer. As natural gas must be purchased in the field at a fairly uniform rate, it is obvious that as far as the domestic and commercial consumers are concerned, there must be a serious overproduction in the summer or a shortage in the winter. This situation has been met partly by the reforming process and the distribution of mixed gas, and partly by the development of an industrial market for surplus natural gas. During the summer natural gas is sold for use under kilns, boilers, etc., where it ma be quickly replaced by oil fuel in the winter time.

As transmission lines have been built connecting the oil fields with the principal market for gas in Los Angeles, the outlying towns have been served from them and a number of small gas manufacturing plants have been shut down. The large gas plants in the City of Los Angeles are still operated and mixed gas is distributed to the concentrated population served from them.

The contention of the cities in this case is that the supply of natural gas now available and to be expected for the next few years is sufficient to justify the abandonment of the service of mixed gas in favor of a service of natural gas supplemented when necessary by manufactured gas. They do not question the necessity of maintaining the gas plants for protection against interruption of transmission lines or future diminution of the supply of natural gas. They point out, however, that during a considerable part of the year these plants could be closed down entirely if natural gas were supplied direct to consumers with a consequent saving in operating costs. It is urged that the plants could be heated up and maintained in readiness for operation during the winter season and that a satisfactory mixture of natural and manufactured gas could be supplied on occasions when the domestic demand exceeds the supply of natural gas. While the companies admit that during a large part of each year there is now ample natural gas available for the service of domestic consumers, they emphatically claim that most unsatisfactory service would result from any variation in the quality of gas supplied. They introduced evidence contradicting the cities' claims and tending to the conclusion that a shortage of natural gas must be looked for in the near future. They further brought out in considerable detail the cost and practical difficulty of attempting to adjust all of the consumers appliances for proper operation upon a richer gas.

The benefit to the public through a change from mixed gas to natural gas service is measured by the reduction in operating expenses due to the complete shut-down of the gas works during the summer season and their partial operation during the winter season when they would be held in readiness for emergency service only. Large gas generators such as those now in question can be placed in active operation only after being gradually "heated up" over a period of two or three days. If they are to be of value for the protection of the consumers against shortage of gas caused by the interruption of transmission lines or heavy demands due to the advent of unexpected cold weather, they must be kept hot throughout the period of possible call. This not only involves necessary fuel but means that full crews of expert operators must be on duty throughout the winter season just as if the plants were in continuous operation. The saving through this change in method of operation of the gas plants is therefore less than might be expected at first thought.

A careful analysis of the evidence presented by representatives of both the companies and the cities leads to the conclusion that the savings for a year of average operation might be fairly estimated as follows:

	L.A.G.& E.Corp.	S.Cal.G.Co.	Total
Fuel,	$360,000.	$30,000.	$390,000.
Operatinn and Maintenance,	400,000.	80,000.	480,000.
Total,	760,000.	110,000.	870,000.

These savings would, of course, be much larger if it were possible to entirely eliminate the gas plants, but that, it is agreed, is not the condition we are considering. The actual savings will, of course, depend somewhat on weather conditions and will vary from year to year with the growth in the domestic requirements and with the supply of natural gas available. The figures given are for general comparison with other figures used in this decision to picture the operations of the two companies.

The companies claim that the savings from natural gas service would be very largely offset by the cost of adjusting all of the gas appliances in use on the mixed gas system. Considerable evidence was presented to show the cost of making thousands of such adjustments and that from the practical standpoint it would be almost a physical impossibility to make them. The cost is estimated at $425,000. for the change from mixed to natural gas and at a still larger sum when an increased number of appliances are adjusted to change back from natural to mixed gas. Undoubtedly a great many appliances would have to be readjusted to operate with any degree of satisfaction upon natural gas but we are more impressed with the evidence as to the difficulty of making such adjustments on the wholesale scale contemplated, than with the estimate of cost. It seems certain that no wholesale adjustment of all appliances now in use would or could be made and the estimate of the cost of adjustment therefore appears entirely too high.

Natural or mixed gas can be used by the consumer with equal satisfaction and from his standpoint the difference is one of cost. We need not consider the question raised by the companies regarding the jurisdiction of this Commission to order a change in the character of the service, for no such order is required by the public interest. Believing, as we do, that the supply of natural gas is sufficient to permit a reasonably adequate service of natural gas, in lieu of the present mixed gas service, we will consider the operating expenses of the companies upon that basis and fix alternative schedules of rates. The companies may then render whichever kind of service they choose and in either case the consumers will receive the benefit of the use of an available natural resource.

Since the submission of the evidence in this proceeding, information has come to the Commission concerning an offer made to the City of Long Beach jointly by the interests controlling the Midway and Southern California companies. These interests have offered to guarantee for five years a supply of natural gas of ten million cubic feet per day to be delivered to the municipal gas distribution system of Long Beach by means of a third high pressure pipe line to be built from the Ventura Avenue oil field. The rate at which this supply has been offered is twenty-four cents per thousand cubic feet. The City of Los Angeles and the territory covered by the present proceedings, is part of the area which these companies profess to serve directly or indirectly and which must look to them for service, while the City of Long Beach is not. As public service corporations they would deserve greater respect and support from the public if they completely fulfilled their obligations to their own territory before taking available natural gas to other territory where it commands a higher price.

Midway Gas Company.

The Midway Gas Company was organized in 1911 for the purpose of transporting to Los Angeles natural gas which had been discovered in some quantity in the Buena Vista Hills oil field in Kern County about two years before. During 1912 a transmission line 111 miles long was built over the Tehachapi mountains to Los Angeles and gethering lines and compressor stations constructed. The ownership and operation of the system was to some extent divided between the Midway Company and the Southern California Gas Company. Gas was first delivered to Los Angeles in 1913 and sold at wholesale to various companies then in the field distributing manufactured gas. In 1913 the Railroad Commission made an investigation of the costs and operation of the Midway line and by Decision

No. 1145 (3 C.R.C. 1085) fixed a rate of fourteen cents per thousand cubic feet to apply to gas delivered by the Midway Company to the Los Angeles and Southern California companies at the West Glendale terminal of the Midway line. Reference is made to this decision for a more complete description of the origin, financing, construction and business of the Midway Company. While the gas production in the Buena Vista Hills field has declined to almost the vanishing point, other fields have been discovered in the same general neighborhood and the Midway line is now operating at more than its original capacity, parallel lines having been laid in the more accessible sections at each end. The fourteen cent rate established early in 1914 still applies to the gas delivered at West Glendale.

Beginning about 1915 gas was discovered in one field after another in the Los Angeles basin and the Midway Company made contracts for the purchase of gas in many of these fields and built transmission lines connecting them with the Southern California Company's system in Los Angeles. Much of the gas so collected by the Midway Company has been supplied to the Los Angeles Company through the medium of the Southern California Company under contracts negotiated between the Companies from time to time. This is the first proceeding in which all of these rates have been placed before the Commission for review.

Rate Base.

In presenting its claims for an increase in rates, the Midway Company has followed the usual procedure in rate cases by showing its capital investment, the annual requirements for a fair return on the investment, an allowance for depreciation and estimates of operating expenses and of revenue under present rates. An engineer representing the cities was given access to the company's books and records and placed in evidence a study along lines somewhat parallel to those followed by the Company.

For the calculations involved in this case the Company has segregated the gathering system in the San Joaquin Valley oil fields, referred to as the Production Department, and has figured the cost of gas delivered to either the "Valley Division" or "Midway Division" as the transmission line is designated. The calculations of the Company and City being in substantial accord on this cost, we may pass to the studies of the Company and the Cities on the Midway lines.

While the capital figures arrived at in the two reports vary somewhat in detailed distribution, the totals as shown in Table I are in comparative agreement, considering the magnitude of the figures. The principle difference in the make-up of the figures appears to be in the allowance for overhead and indirect costs such as engineering and superintendence, interest during construction, etc. In making its analysis, the Company went through its books and deducted from the figures there found, all items which were considered to be properly classified as overhead charges. An analysis was made of both construction and operating expenditures for a period of several years and the ratio of the Company's total overhead expense to the total operating and construction expenditures was determined. This percentage was then added to the total capital figure without overheads previously determined from the books and the result is presented by the Company as its claim for the fixed capital account. The City's engineer followed substantially the same procedure except that instead of analyzing construction and operation expenditures in order to determine the overhead percentage, he used an arbitrary percentage fixed by the exercise of his judgment. It appears that he must have followed a somewhat different definition of overheads than did the Company's engineer for his figures for direct expense are larger, while his allowance for overheads is smaller and the combination of the two is slightly lower than the Company's figure.

In presenting its claims, the Company included the present value of land instead of book cost. A detailed examination and appraisal of present value of the Company's real property made by Mr. E. P. McAuliffe, the Commission's land appraiser, produced results far from in accordance with the claims of the Company. A comparison of the Company's appraisals and the costs of various recently acquired parcels leads to the conclusion that the Company's estimates of present value of land are rather optomistic. This is somewhat borne out by the figures which have been assigned to various small parcels of mountain land used for patrol stations and the like.

We will, therefore, combine with the figures for structural physical capital the present value of real property as estimated by the Commission's land appraiser. The addition of customary allowances for working cash capital and material and supplies, which must be kept on hand for the operation of the system, lead to the total figures for rate base set forth at the foot of the third column in Table 1. To set up this table in a comparative way it has been necessary to make certain minor prorations of undistributed items, but such changes are in full accord with the basis upon which the figures were prepared.

In Decision No. 1145 this Commission allowed a return of 10 percent because of uncertainty and hazard of the business. The experience and results flowing from that decision lead to the conclusion that for the reasonable period in the future over which the present decision will extend a return of 8 per cent will be proper and ample.

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TABLE NO. 1

MIDWAY GAS COMPANY

RATE BASE

YEAR ENDING JUNE 30, 1926.

MIDWAY, VENTURA AND LOS ANGELES DIVISIONS

CAPITAL (Averaged):	Company	Cities	Found Reasonable
Intangible Capital:			
Organization,	$42,186.95	$29,588.72	$42,186.95
Franchises,	8,253.37	6,577.59	8,253.37
Miscellaneous,	-	15,625.18	-
Total,	50,440.32	51,791.49	50,440.32
Tangible Capital:			
Production,	242,788.69	253,291.39	242,788.69
Transmission,	7,307,107.98	6,586,430.81	7,307,107.98
Distribution,	23,554.57	31,248.50	23,554.57
General,	257,400.02	68,413.40	257,400.02
Automobiles,	60,168.21	82,333.44	60,168.21
Overhead - Directly Assignable	(Included)	529,128.04	(Included)
- Undistributed	(above)	7,572.72	(above)
Land,	105,500.00	104,163.48	86,460.00
Rights-of-Way,	-	40,422.15	-
Total Tangible Capital,	7,996,519.47	7,703,003.93	7,977,479.47
Working Cash Capital,	361,806.91	316,750.00	200,000.00
Materials and Supplies,	26,000.00	33,375.00	26,000.00
TOTAL RATE BASE,	8,434,766.70	8,104,920.42	8,253,919.79
Rate Base, including Ventura Division for proportion of year only	8,023,333.00	-	7,850,000.00

Depreciation.

The Midway Company presented its claims for a depreciation allowance at some length, basing them upon the theory that depreciation of its property depended upon the depletion of underground gas supply rather than upon ordinary wear and corrosion of compressors, piping and such equipment. A rather elaborate study of the amount of gas heretofore produced in the fields and the amount of gas available to the Midway Company from these fields in the future was testified to by an expert geologist. We are of the opinion that the usual sinking fund basis of depreciation has been accepted by the courts as adequate, and it will, therefore, be accepted by us for the purposes of this decision.

Operating Expenses and Revenues.

The principal differences in the estimates of operating expenses presented in evidence were in the quantities of gas which engineers for the Companies and for the Cities assumed would be handled. Since the submission of this case, the period for which the estimates were made has expired, and we are therefore in the fortunate position of having our judgment of these estimates guided by facts. Using the actual amount of gas handled by the Company for the year ending June 30, 1926, we have estimated the operating expenses as shown in the last column of Table No. 2. The combination of the previously discussed items of fair return, depreciation allowance and the estimate of operating expenses indicates that in order to earn the fair return herein considered reasonable the Company would have required a total revenue for the year ending June 30, 1926 of $6,907,284.95.

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TABLE NO. 2

MIDWAY GAS COMPANY

OPERATING EXPENSES AND REVENUE REQUIRED

YEAR ENDING JUNE 30, 1926.

MIDWAY, VENTURA AND LOS ANGELES DIVISIONS

	Company	Cities	Found Reasonable
Natural Gas Purchased,	4,503,731.35	5,001,750.00	4,933,477.34
Gas used by the Company,	-82,936.50	-	-90,850.30
Production Expense,	53,395.00	60,000.00	58,489.95
Transmission Expense,	672,847.00	490,500.00	680,760.80
General and Misc. Expense,	173,596.71	161,900.00	173,596.71
Joint Operating Expense,	-94,080.00	-	-94,080.00
Amortization of Gas Wells and Land,	4,926.46	-	4,926.46
Adjustment to Overhead,	-120,118.32	-	-131,580.01
Distribution Expense,	6,000.00	6,000.00	6,000.00
Commercial Expense,	1,380.00	1,500.00	1,380.00
Total Operating Expense,	5,118,741.70	5,721,650.00	5,542,120.95
Taxes,	406,828.35	446,500.00	420,000.00
Allowance for Depreciation,	1,288,974.14	317,164.64	317,164.00
Fair Return,	802,333.32	-	628,000.00
Total Reasonable Gross Revenue,	7,616,877.51		6,907,284.95
Industrial & Miscellaneous Revenue,	817,794.91		1,164,203.19
Necessary Wholesale Revenue,	6,799,082.60		5,743,081.76
Industrial Sales - M.C.F.	3,524,315		5,450,976
Wholesale Sales - M.C.F.	38,977,584		41,106,455
Total Sales - M.C.F.	42,501,899	48,000,000	46,557,431

Not all of this necessary revenue need be furnished by the wholesale business for the Midway Company serves a few large industrial consumers located along its main lines and in addition earns a certain amount of revenue by transporting or compressing gas for oil companies, gasoline absorption plants, etc. The total of this miscellaneous and industrial revenue amounts to $1,164,000. and leaves $5743,081. to be derived from the wholesale deliveries of gas to the Southern California and Los Angeles Companies. The foregoing estimates of operating expenses are based upon a delivery of 41,106,000. M.C.F. of natural gas to these two consumers and the resulting average rate is 14.0¢ per M.C.F. It is also apparent that some modifications of rates, particularly those to the Los Angeles Companies, should be made as the existing set-up of rates and operating conditions has led to a number of disputes and to more or less continuous friction in the daily relations of the Companies.

Service Conditions.

At the present time 15,000,000 M.C.F. per day of natural gas is delivered by the Midway Company direct to the Los Angeles Company at the West Glendale terminal at a price of 14¢ per M.C.F. The requirements of the Los Angeles Company in excess of this Glendale delivery are purchased from the Southern California Company which in turn receives the gas from the Midway Company. This Southern California Company delivery has, in the past, been covered by various contracts negotiated between the Southern California and the Los Angeles Companies and submitted to the Commission for its approval. The last of these contracts expired July 1, 1926, and the Companies failed to agree upon its renewal.

A disagreement that would have had a serious effect upon service to the consumers of the Los Angeles Company was averted only by a last minute agreement that the contract would be extended until the Railroad Commission in this Decision fixed the rates and conditions under which the service was to be rendered in the future.

A necessity for a continuation of contractual relations between the Midway and Southern California Companies separately on one hand and the Los Angeles Company on the other is not apparent. The Midway and Southern California Companies constitute essentially but one interest and if the Railroad Commission fixes the rates and conditions under which gas is to be supplied, they will have but little difficulty in arranging between themselves for the proper division of obligations and payments. For the purpose of this decision we will, therefore, include in the rate to be paid by the Los Angeles Company a proper charge for the service now being performed by the Southern California Company in handling gas received by it from the Midway Company. This is shown in Table No. 3.

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TABLE NO.3

SOUTHERN CALIFORNIA GAS COMPANY

REASONABLE COST OF TRANSPORTING NATURAL GAS

FROM MIDWAY GAS COMPANY TO LOS ANGELES GAS AND ELECTRIC CORP.

YEAR ENDING JUNE 30, 1926.

RATE BASE:	
Total Average Fixed Capital,	$ 430,567.
Materials and Supplies, (1% of fixed capital),	4,300.
Working Cash Capital:	700.
TOTAL RATE BASE	$ 435,567.
Return at 8%	$34,846.00
OPERATING EXPENSES:	
Cost of Unaccounted for gas(100,000 M.C.F. 14.0¢)	$14,000.00
Pro Rata Transmission Expense	20,384.00
" " General Expense,	13,700.00
TOTAL OPERATING EXPENSES	$48,084.00
Depreciation	$13,872.53
Taxes	$17,806.92
TOTAL COST OF SERVICE	$114,609.45
Volume of Gas Transported to L.A.G. & E. CO.	7,100,000 Mcf

The Southern California Company has built up a considerable business in selling surplus gas to industrial consumers during the summer period of light domestic demands. As the requirements of the Los Angeles Company increase with the coming of cold weather, it is necessary for the Southern California Company to cut back its deliveries to these industrial consumers in order that the gas may be available to the Los Angeles Company. One of the causes of the past difficulties has been the fact that all gas received by the Los Angeles Company was paid for at an average rate, and while it was proper that this average rate should be lower than the industrial rate, the Southern California Company suffered rather than profited in satisfying the demands of the Los Angeles Company.

To correct this situation the order accompanying this opinion will provide for a block rate so arranged that when the Southern California Company must cut back industrial service, it will receive at least as much money for the gas so made available to the Los Angeles Company as if it had been sold to industries. The rate for basic delivery is adjusted so that the total revenue will, as nearly as can be estimated, equal the total cost of the service.

An important feature of the wholesale supply of natural gas as handled in the Los Angeles market, is the establishment of a schedule of priorities. As the domestic demand increases with the coming of cold weather various other uses of gas must be discontinued, and it is important that the priority of various uses be established in a just and definite schedule. The detail of such a schedule should be based upon certain fundamental considerations, such as the value of the service to the consumer, the dependence of the consumer upon the service, the rate which is paid, etc. As a fuel gas is more valuable to the domestic consumer and small user because its outstanding characteristics of convenience and cleanliness play a more important part in such service. Domestic consumers, served from systems where only natural gas is available, should, of course, have first call upon the supply of natural gas as compared with other domestic consumers whose service may be supplemented with manufactured gas made from oil. The Gas Companies themselves, being more fully equipped, more closely in touch with the situation and, to some extent, having control over the supply of gas, should discontinue the use of gas as a boiler fuel etc., before discontinuing the service of industrial consumers using gas for similar purposes.

Wholesale natural gas is now delivered to Los Angeles by both the Midway and Southern California Counties Companies, and both Companies must expect that their deliveries to various classes of service will be governed by a definite schedule of priorities. While the Commission does not have before it in this proceeding the gas supply derived by the Southern Counties Company from the Los Angeles basin oil fields, we do have under consideration the supply which that Company delivers by means of its Ventura line. In granting the Southern Counties Company the right to exercise franchises for the construction of this Ventura line the Railroad Commission attached the following condition:

> "That in the event of a shortage in the supply of natural gas in Los Angeles, Orange, San Bernardino or Riverside Counties the natural gas distributed by means of said pipe line shall be disposed of and distributed in accordance with the orders of this Commission."
> (Dec. 15122, July 2, 1925. 26 C.R.C. 730).

In view of this condition, imposed at the time the Company was authorized to construct its line, it appears that the Railroad Commission would have jurisdiction to apply the same schedule of priorities to the distribution of gas supplied through the Ventura line of the Southern Counties Company as through the other lines in question, and both Southern Counties and Los Angeles Companies must look forward to the application of priorities in this way. The distribution system of the Southern Counties Company covers principally the smaller cities and towns and rural districts adjacent to Los Angeles. The industrial consumers served in this territory are generally smaller than those served by the Southern California Company and in most cases put gas to a higher use and pay higher rates for it. They are, therefore, less susceptible to shut-off in favor of domestic consumers and the discontinuance of their service is of less practical benefit. At the present time, the schedule of priorities, will, for these practical reasons, be confined principally to the natural gas supplied by the Midway and Southern California Companies but uniform treatment over all systems must be contemplated.

With these fundamental considerations in mind, the schedule of priorities contained in the order following this opinion have been prepared.

Southern Counties Gas Company of California:

The Southern Counties Company has operated distribution systems in many of the smaller cities and the rural territory in Los Angeles and Orange Counties for a number of years, and in addition supplied first manufactured gas and later natural gas through a separate system in Ventura and Santa Barbara Counties. A natural gas supply conforming to the requirements of this northern system was obtained for some years from the Ventura Avenue oil field. As a result of drilling activities by the oil companies, a larger natural gas production was developed in this field in 1925 at a time when the production of the Los Angeles Basin fields was showing evidence of a sharp decline. Confronted with this decline in its supply of natural gas and with the necessity of either exercising or forfeiting options for the purchase of the increased production of the Ventura Avenue field, the Southern Counties Company constructed a high pressure transmission line from Ventura to Los Angeles. To a large extent this line supplies the Southern Counties distribution systems in Los Angeles and Orange Counties, but the Los Angeles Company, which is controlled by the same interests through stock ownership, assisted the Southern Counties by purchasing its gas and making possible the operation of the new line at an economical capacity. This Ventura line of the Southern Counties Company, constituting a part of the source of supply of the Los Angeles Company and the price agreed to be paid by the Los Angeles Company being an element in its cost of service, the Railroad Commission, on its own motion, instituted an investigation to determine the proper rate to be paid by the Los Angeles Company for natural gas purchased from the Southern Counties Company."

The Southern Counties Company has presented figures showing the cost of the line, operating expenses, quantity of gas available etc., from which it draws the conclusion that the average cost of gas delivered to Los Angeles over the reasonable life of the line will be about 19.3¢ per M.C.F. This figure is based partly on the theory that the original cost of the pipe line, compressors, etc., must be amortized over a period of seven years and also that the amount of gas transported during the latter part of this period will be much less than at the beginning. In view of the probable life and future production of gas in this field, this theory appears unduly conservative and the cost figure, based on it, correspondingly excessive. Other considerations, however, render unnecessary a careful revision of this figure of 19.3¢ per M.C.F. As long as the Southern Counties Company's own consumers receive preference in the supply of gas transported through this line, it must be admitted that the value of the service rendered to the Los Angeles Company is less than that of the service supplied the rest of the Southern Counties system.

We cannot justify payment by the Los Angeles Company to the Southern Counties Company of a higher rate than would be charged by the Southern California Company for equivalent or better service. For the purposes of this decision we will, therefore, apply to this service the same rate that is being fixed for the service of the Midway and Southern California Companies to the Los Angeles Company, adjusting the base rate delivery in proportion to the total amount of gas delivered.

Los Angeles Gas and Electric Corporation:

The Los Angeles Gas and Electric Corporation was organized in 1909, taking over at that time various properties which dated back to the Los Angeles Gas Company, incorporated in 1867. The stock of the Los Angeles Gas and Electric Corporation is controlled by the Pacific Lighting Corporation, which also controls the Southern Counties Gas Company of California. The Los Angeles Company supplies electricity in Los Angeles and gas in Pasadena, South Pasadena, Alhambra, Huntington Park, Watts, Inglewood and adjacent territory and in most of the City of Los Angeles. Part of the City of Los Angeles is served by the Southern California Company alone and in part of it the Southern California and Los Angeles Companies are in competition. Throughout this territory the Los Angeles Company serves a mixture of natural and manufactured gas. As had been previously described, the manufactured gas in this mixture is made from oil when the supply of natural gas is insufficient and is made by re-forming natural gas when there is an excess of the latter commodity.

The entire send-out of the Los Angeles Company is handled through its main gas works at Center and Aliso Streets, Los Angeles. At this point there are located twenty-one generators having a total capacity of approximately 88,000,000 cubic feet per day and a number of holders. Other holders are located in the southwestern part of Los Angeles, at Hollywood and at Pasadena, making a total of thirteen with a total capacity of 68,000,000 cubic feet. One of the holders at the main gas works is of the recently developed waterless type with a capacity of 15,000,000 cubic feet. The outlying holders and portions of the distribution system are fed from the central plant by high pressure lines. As of Dec. 31, 1925, the distribution system contained a total of 2,650 miles of main. The Company's business has grown with great rapidity during recent years, the total sales of gas of 2,750,000,000 cubic feet in 1910, having been multiplied over six times to a total of 17,025,000,000 cubic feet in 1925. The present rates of the Los Angeles Company for gas service were fixed by the Railroad Commisson by Decision No. 11835 (23 C.R.C. 264) in March 1923. At that time the Company accepted without insisting upon a formal hearing, an increase in the heating quality of its gas from 750 to 850 b.t.u. per cubic foot at the rates which had previously been in effect. In the present proceeding the Company asks authority to increase its rates for mixed gas service, which, as a matter of fact, cover almost its entire business, as it serves only a comparatively small amount of surplus natural gas for industrial uses. In support of its application, its Gas Engineer, Mr. Masser, has made an unusually complete and detailed showing of its revenues, expenses and all other details of its business. As with the other companies involved, an engineer representing the cities made an investigation into the Company's figures and as to facts, his report is in substantial agreement with the Company's exhibits.

Rate Base:

The Company presented in some detail a statement of the historical cost of its structural property and the present value of its land and in addition put in a figure for the present value of the entire property, based upon reproduction cost at present prices, less depreciation, and including going value, etc. In its brief, the Company goes to some length in supporting so-called present value as a basis for rates, citing a number of Court decisions in support of its position.

The estimate of reproduction cost at present prices, less depreciation, is based upon the application of "Translation Factors" to a Historical Cost appraisal. The cost of each class of property included in the Historical Cost of January 1, 1915, is multiplied by a factor representing the change in price levels from 1914 to the present time as applying to that particular class of property. Net cost of additions and betterments for each year since 1914 is treated in a similar manner. It is at once apparent that many items of property represented in the January 1915 figure have since been abandoned or replaced, and corresponding deductions are in effect included in the net Additions and Betterments of later years. Price levels having generally increased since 1914, the "Translation Factor" applied to the figure at which such property appears in the Historical Cost of January 1, 1915, is greater than that applied to the figure at which the same property is deducted from the Gross Additions and Betterments of ensuing years. As a result of this fundamental error, great weight cannot be given to the estimates developed by this method.

The claim that $5,000,000 represents the "Going Value" of this Company's gas business is supported by the opinion of its Gas Engineer. From a study of various unspecified Court and Commission decisions, he came to the conclusion that Going Value should be about ten per cent of the original cost or present value of the physical equipment. Expressing the value of physical properties at $50,000,000. in round numbers and applying the percentage, he arrived at a Going Value of $5,000,000. This is certainly not the application of a universal rule, for it cannot apply to an ill conceived or mismanaged business operating at a loss. The method has been used in a number of cases, but its use must be guided by mature experience, sound judgment and fine discrimination as well as by the multiplication table. The record does not show that this Engineer is qualified as an expert on Going Value and we do not feel justified in considering his testimony in this regard.

TABLE NO. 4

LOS ANGELES GAS AND ELECTRIC CORPORATION

RATE BASE

YEAR ENDING DECEMBER 31, 1925.

EXCLUDING INDUSTRIAL SERVICE

Fixed Capital (Average):		
Intangible Capital,		$ 456,210.14
Tangible Capital:		
Land	$3,137,762.00	
Production	18,890,541.86	
Distribution	27,532,089.55	
General	2,878,861.94	
TOTAL TANGIBLE CAPITAL,		52,439,255.35
Total Fixed Capital, Including Industrial Service		$52,895,465.49
Fixed Capital - Industrial Service		215,000.00
Total Fixed Capital, Excluding Industrial Service		$52,680,465.49
Materials and Supplies		$1,226,000.00
Working Cash Capital		600,000.00
TOTAL RATE BASE		$54,506,465.00

Depreciation:

In working out their claim for an annual allowance for depreciation, the Company's engineers have used somewhat shorter lives for various classes of equipment than those that have previously been accepted. In this, the engineer representing the cities is in general agreement, his report showing some lives longer than those used by the Company and a few shorter. The total annuity which he calculates is somewhat smaller than that calculated by the Company but is larger than would be arrived at upon the lives heretofore used. The reason for using these shorter lives is not difficult to find. The rapid growth of the City of Los Angeles and of other communities in which this Company operates has resulted in an unusually extensive program of street opening, widening, paving, etc. Many changes in mains must be made to conform to such changes in the streets under which they are laid.

In addition, the rapid growth of the Company's load is calling for the replacement of many pieces of equipment on account of lack of capacity before they are worn out in service. To quite an extent it is more economical to install moderate sized equipment and replace it before it is entirely worn out than to carry the extra investment in the larger equipment to avoid such replacement.

MP

TABLE NO. 5.

LOS ANGELES GAS AND ELECTRIC CORPORATION.

DEPRECIATION ANNUITY.

YEAR ENDING DECEMBER 31, 1926.

	Average Deprecia-ble Fixed Capital July 1, 1926	Esti-mated Life - Years	Depreciation Rate	Depreciation Annuity
Production:				
Buildings	1,982,003.71	33	.010273	20,361.12
Holders	5,148,230.30	40	.006462	33,267.86
Furnaces, Boilers	1,272,560.31	25	.018230	23,198.77
Generators	2,215,991.63	18	.032357	71,702.84
Purifiers	1,424,448.71	20	.027185	38,723.64
Accessory Equipment	6,847,307.20	20	.027185	186,144.05
Total	18,890,541.86			373,398.28
Distribution:				
Mains	17,535,656.46	25	.018230	319,674.99
Services	5,600,876.22	18	.032357	181,227.55
Meters) Regulators)	3,949,946.11	25	.018230	72,007.52
Misc. Dist. Equip.	180,213.63	10	.075870	8,210.17
Distrib. Struct.	122,398.13	35	.008970	1,097.91
Total	27,389,089.55			582,218.14
General:				
General Structures	1,800,971.56	45	.004700	8,464.57
General Office Equip.	263,733.50	15	.042963	11,330.77
B. & C. Shop & Tools	62,275.91	12	.059227	3,688.42
D. Garage	552,550.90	6	.143363	79,215.35
Tools & Misc.	199,330.27	8	.101036	20,139.53
Total	2,878,861.94			122,838.64
Grand Total	49,158,493.35			1,078,455.06

Operating Expense and revenue.

Except for the choice between the service of natural and mixed gas, the principal question in regard to operating expenses and revenues is in connection with the probable amount of gas to be sold during the calendar year 1926, which has been accepted as a convenient rate year, upon the basis of which revenue, expense and capital may be compared. The figure presented by the City's engineer is somewhat larger than that presented by the Company's, both as to number of consumers and quantity of gas sold. Although the Company has experienced a rapid growth during the past few years, its claim, which is well supported with evidence, was that the communities served would not show the same rate of growth in the year in question, that they have in the past. The City's engineer uses a rate of growth more nearly comparable with that which has been experienced. Actual figures of sales and number of consumers for the first few months of 1926 go far toward supporting the estimates which the Company has given for the remainder of the year. Rates are not to be fixed for the calendar year 1926 by itself, but that year is being used as a typical period for the comparison of revenue, expense and capital, and the rates so determined are intended to apply until conditions change sufficiently to warrant a change in rate.

We, therefore, feel for the purposes of this decision we should use a figure more representative of normal growth than that presented by the Company. As a result of a consideration of this phase of the matter and of estimates prepared by the Commission's Engineering Department, this decision is based upon the figures for the number of consumers and for sales of gas greater than those anticipated by the Company and almost equal to those claimed by the City. Table 6 shows estimates of revenues and operating expense for the year 1926 as used herein. As has already been indicated we do not believe consumers should be required to pay the additional cost of furnishing a mixed gas service and these estimates are, therefore, based on the service of natural gas.

MP

ESTIMATE OF REASONABLE OPERATING

EXPENSES AND REVENUE

YEAR 1925

LOS ANGELES GAS & ELECTRIC CORPORATION

DOMESTIC AND COMMERCIAL SERVICE

ON NATURAL GAS BASIS

Production Expense:

Natural Gas & Oil	2,741,748.	
Operating & Maintenance	495,000.	$3,236,748.
Transmission Expense		9,000.
Distribution "		690,000.
Commercial "		917,000.
General & Miscl. "		543,000.
Taxes		1,030,000.
Uncollectible Bills		118,000.
Total Operating Expense		$6,543,748.
Depreciation		$1,078,000.
Total Cost of Service Excluding Return		$7,621,748.
Sales - Mixed Gas 17,290,000 M.C.F.		
Revenue from present rates for mixed gas or equivalent rate for natural gas		$11,900,000.
Net for Return		$4,236,252.
Rate of Return on Rate Base of $54,506,465.		7.8%

The Company asks for a return of 9% upon $2,800,000. of money borrowed several years ago during the period of high interest rates and a return of 8-1/2% on the balance of its investment. On a rate base of approximately $55,000,000. these figures result in an average rate of return of 8.53%. In the last decision in which this Commission considered the rate of return for the Gas Department of this Company (Decision 9132-20 C.R.C. 93) which was reached in June 1921, the Commission allowed 9% on the same $2,800,000. of borrowed money and 8% on the balance of a rate base approximately $20,000,000. an average of 8.14%. Since 1921 the Company has financed additions to its Gas Department property approximately equal to twice the entire rate base of our 1921 decision so that its Gas Department investment is now about three times what it was when an average rate of return of 8.14% was determined upon. This increase in business and size has brought increased strength and greater ease of financing. Interest rates have declined more or less steadily since 1921 and a lower rather than a higher rate of return is justified.

In recent cases involving large gas or electric companies, the Commission has considered as reasonable rates of return of 7½% to 8%, and we believe that the return of 7.8% shown in Table 6 is reasonable. The Los Angeles Company supplies three hundred thousand consumers with the exclusive service of an essential commodity and while the supply of natural gas may decrease or even fail entirely, these consumers must continue to buy gas made from oil or coal and if necessary will pay corresponding rates. We, therefore, see no particular hazard in this business as compared with the business of any other gas company or other public utility. Neither do we see the evidence of any unusual efficiency or progressiveness such as would warrant as unusual rate of return. The Company's property has for many years been managed along safe and conservative lines. The claim of low commercial expenses may be well founded but the Company has been slow to initiate other and more important economies, or progressive steps for the maintenance of its service.

Rates.

From the foregoing it appears that the present rates for mixed gas service may be considered just and reasonable if the Company desires to continue that character of service. If it should conclude to supply its consumers with pure natural gas, equivalent rates should be placed in effect, and provision is made in the order accompanying this opinion, for rates for such service.

Since rates for this Company were last before the Commission, many outlying sections of the City of Los Angeles have built up, and new territory has been annexed. Representatives of various improvement clubs and organizations of consumers in such communities, appeared at the hearings, asking that the Commission give consideration to reclassification of the Company's territory, for rate purposes. As a result of an investigation into this matter, it seems that if any change in rates is to be made, the boundaries of the geographical districts in which the various rates have heretofore been charged, should also be changed. The alternative rates for natural gas service, fixed in the accompanying order, provide for such changes as seem desirable.

Except for this change in territory and the corresponding adjustment, these alternative rates have been calculated to give a charge for a given number of heat units that will be the same for natural as for mixed gas. As the consumption of gas has been found to depend upon heating value, the bills of the consumers and the revenue of the Company should be the same for either character of service.

Southern California Gas Company.

The Southern California Gas Company was incorporated in October, 1910, and almost immediately took over the property of the Domestic Gas Company which had been operating in Los Angeles. Within a short time, additional gas systems were acquired in neighboring towns and in later years an extensive distribution system has been built up partly by the acquisition of other small independent systems and partly by extension and construction. The Southern California Company is closely connected in ownership and control with the Midway Company. Not only has the development of mixed gas service in Los Angeles on the Southern California system closely paralleled that on the Los Angeles Company's system as already described, but the Southern California Company has also developed an extensive industrial and domestic service of natural gas.

Natural gas is supplied for domestic purposes in San Bernardino, Redlands, Riverside, Corona, Downey, Redondo, Torrance, Lankershim, San Fernando, Glendale and adjacent territory and throughout this territory and in the industrial districts of Los Angeles a large amount of surplus natural gas is sold for industrial purposes at times when the domestic demand is low.

Mixed gas is supplied for domestic purposes in parts of Los Angeles and Beverly Hills, either in direct competition with the Los Angeles Company or in adjoining territory. Mixed gas is also supplied wholesale to Southern Counties Gas Company of California for distribution in Santa Monica, Venice, Sawtelle and vicinity. All mixed gas service is handled from a central gas works located at 10th and Santa Fe Streets in Los Angeles. At this point are located sixteen generators with a total capacity of 28,000,000 cubic feet per day as well as part of the holder capacity. These holders, together with outlying holders in various parts of the City, total six in number with an aggregate capacity of 18,000,000 cubic feet.

The rates for mixed gas in effect on this system were last considered in detail by the Commission in Decision No. 9133, (20 C.R.C. 111), dated June 22, 1921. In 1923, the Company waived formal hearings, etc., and accepted a recommendation by the Commission's Engineering Department that the quality of gas be increased from 750 to 850 B.T.U. per cubic foot. This increase in heating value was made without change in the then existing rates and was placed in effect by Decision No. 11836 (23 C.R.C. 268), dated March 28, 1923.

In addition to the rates established by these Decisions, there are in effect two schedules applying to industrial service of mixed gas from the system formerly operated by the Economic Gas Company. This system originally distributed natural gas from the Salt Lake and Sherman oil fields west of Los Angeles and these rates at that time applied to surplus natural gas service to industrial consumers. Some time after the purchase of this Economic system by the Southern California Company, the supply of natural gas from these fields failed and mixed gas was supplied to the system. The result is that the consumers formerly receiving surplus natural gas service under these particular rates are now receiving a uniform and thoroughly dependable supply of mixed gas at much lower rates than their neighbors who were originally supplied direct from the Southern California Company's mixed gas system.

This condition has resulted, and if permitted, will continue to result in discrimination in favor of these consumers of the former Economic system. The quality of service with which they are being furnished has been materially improved and they cannot fairly expect to receive a guaranteed service at rates established for a surplus service subject to suspension.

As in its opposition to the application of the Midway Company, the City has urged that the total system of the Southern California Company be considered in the determination of the reasonableness of its rates. The mixed gas service is supplied from a separate plant through separate mains and in distinct territories. If the situation were such that consumers in the City of Los Angeles expected to be burdened by the consolidation of the two systems, they would in all probability and very properly contend that the services were distinct. We believe that the same principle should apply consistently regardless of the effect of the combination or separation of the different services and will, therefore, consider the application as presented, covering only mixed gas service.

This mixed gas service is supplied either in direct competition with the Los Angeles Company or in areas that are adjacent to and in some cases entirely surrounded by the service of the Los Angeles Company. Under such conditions, it has in the past, seemed advisable that the rates on the two systems be identical. This condition has been recognized in several decisions fixing rates for mixed gas service of the Southern California Company, among which may be mentioned, Decision No. 4559, (13 C.R.C. 742), August 21, 1917; Decision No. 6138, (16 C.R.C. 475), February 21, 1919, and Decision No. 9133, (20 C.R.C. 111), June 22, 1921. In each of these decisions, the rates fixed for the Southern California system were the same as those fixed for the Los Angeles Company at approximately the same date, and in each of them, mention is made of the fact that the rate of return earned by the Southern California Company under such rates, will be less than that found reasonable for the Los Angeles Company.

The same considerations now require that the same rates be fixed for the Southern California Company as for the Los Angeles Company and if such rates result in a lower return, the condition must apparently be accepted. After the period of lower return covered by the foregoing decisions, the Southern California Company might be reasonably entitled to some additional return in excess of that found reasonable for the Los Angeles Company if such a result followed the fixing of equal rates. It does not seem likely, however, that any unreasonable return to the Southern California Company will result from the rates which in this decision are found to be reasonable for the Los Angeles Company.

In Table No. 7 are shown figures presented in the Company's and the City's Exhibits based on their estimates of the operating results for the year 1926 under conditions heretofore existing. At the foot of the Table are shown the modifications that would be made in the figures for revenue by the substitution of the rates herein fixed for those previously in effect.

TABLE NO. 7.

SOUTHERN CALIFORNIA GAS COMPANY - MIXED GAS SYSTEM

ESTIMATED RESULTS OF OPERATIONS - YEAR 1926.

Mixed Gas Basis.	Company Exhibit	City's Exhibit
Operating Revenue,	$3,024,855.	$ 3,361,815
Operating Expense & Taxes	2,322,781.)	2,353,233.)
Depreciation,	278,156.)	261,699.)
	$2,600,937.	$2,614,932.
Net for Return,	423,918.	746,883.
Rate Base,	$12,558,290.	$13,191,477.
Rate of Return,	3.4%	5.7%
Natural Gas Basis.		
Approximate Reduction in Expense through substitution of Natural Gas, for Mixed Gas.	$110,000.	$110,000.
Revenue as Estimated above,	$423,918.	$746,883.
Approximate Net Revenue from Natural Gas Service at equivalent rates.	$533,918.	$856,883.
Rate of Return	4½%	6½%

While the foregoing table does not indicate an extremely favorable situation, we find it hard to believe that the actual conditions will be as bad from the Company's standpoint as this table might indicate. The Company also does considerable business in its Los Angeles territory in the sale of surplus natural gas for industrial purposes and under normal industrial activities and oil prices, the return from this branch of the business should bring about a satisfactory return as to the whole territory.

We submit the following form of Order:

O R D E R

Midway Gas Company, Southern California Gas Company and Los Angeles Gas and Electric Corporation having applied to the Railroad Commission for authority to increase certain rates and charges, the Railroad Commission on its own motion having instituted an investigation into the rates of Southern Counties Gas Company of California for certain service, said applications and investigation having been combined for hearing and decision, public hearings having been held, and the matters having been submitted and now being ready for decision:

The Railroad Commission hereby finds as a fact that the rates of Midway Gas Company, Southern California Gas Company, Los Angeles Gas and Electric Corporation and Southern Counties Gas Company of California are unreasonable and unjust insofar as they conflict with the rates set forth herein; which rates are hereby declared to be just and reasonable rates.

Basing its order on the foregoing finding of fact and on the findings of fact in the Opinion preceding this Order,

IT IS HEREBY ORDERED THAT

1. Effective February 1, 1927, Midway Gas Company and Southern California Gas Company shall furnish natural gas to Los Angeles Gas and Electric Corporation at the rates and in accordance with the conditions set out in Exhibit A attached to this order and made a part hereof.
2. Effective February 1, 1927, Southern Counties Gas Company of California shall charge and collect for natural gas furnished to Los Angeles Gas and Electric Corporation in accordance with the rates set forth in Exhibit B attached to this order and made a part hereof.
3. Los Angeles Gas and Electric Corporation be, and it is hereby authorized, at its option and after fifteen days' notice in writing to this Commission to supply natural gas to its con-

sumers in lieu of the mixed gas now supplied, and to charge and collect for domestic and commercial natural gas service in accordance with the rates set out in Exhibit C attached to this Order and made a part hereof; such rates to become effective with bills based on regular periodic meter readings taken on and after fifteen days after the date of such change in character of service.

4. Southern California Gas Company be, and it is hereby authorized, at its option and after fifteen days' notice in writing to this Commission, to supply natural gas to its consumers in lieu of the mixed gas now supplied, and to charge and collect for domestic and commercial natural gas service in accordance with the rates set out in Exhibit D attached to this Order and made a part hereof; such rates to become effective with bills based on regular periodic meter readings taken on and after fifteen days after the date of such change in character of service.

5. Effective with bills based on regular periodic meter readings taken on and after February 1, 1927, Southern California Gas Company be, and it is authorized to charge and collect for industrial mixed gas service the rates set forth in Exhibit E attached to this order and made a part hereof, which rates are to supersede schedules A-2, A-3 and A-10 now in effect on the Economic Division of Southern California Gas Company and are to be open to all qualifying consumers.

6. Effective with bills based on regular periodic meter readings taken on and after February 1, 1927, Midway Gas Company is authorized to charge and collect for domestic and commercial natural gas service supplied from its Midway transmission lines, the rates set out in Exhibit F attached hereto and made a part hereof.

7. Before the dates upon which the schedules set forth in Exhibits C, D, E, and F attached hereto, become effective, Los

Angeles Gas and Electric Corporation, Southern California Gas Company and Midway Gas Company shall file with this Commission, revised tariff sheets setting forth the schedules herein authorized and such other modifications of Rates and Rules and Regulations as may be consistent therewith.

7. For all other purposes, the effective date of this order shall be twenty days from and after the date hereof and the authority herein granted for changing character of service or rates shall expire, unless sooner exercised, six months 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 31st day of December 1926.

H. W. Brundige

C. L. Seavey

Ezra W. Decoto

Leon O. Whitsell

Thos. S. Louttit

Commissioners.

143

"EXHIBIT A"

Rates and Conditions to apply to Delivery of Natural Gas to Los Angeles Gas and Electric Corporation by Midway Gas Company and/or Southern California Gas Company.

Rate.

For the first 40,000 M.C.F. each day from November 15th to April 14th inclusive and for all gas each day from April 15th to November 14th .... 14.0 per m.c.f.

For the next 10,000 m.c.f. each day from November 15th to April 14th inclusive .... 20 cents per m.c.f.

plus 1 cent per m.c.f. for each 10 cents that the market price of fuel oil exceeds $1.00 per barrel, but not more than 25 cents per m.c.f.

For all over 50,000 m.c.f. each day from November 15thto April 14th inclusive ....25 cents per m.c.f.

Minimum.

Minimum daily bill $4,200. for 30,000 m.c.f.

Conditions of service.

1. The foregoing rate will apply to the combined deliveries of gas by Midway Gas Company and Southern California Gas Company to Los Angeles Gas and Electric Corporation.

2. As far as possible gas shall be delivered and taken at a reasonably uniform rate throughout the twenty-four hours of each day.

3. When the average heating value of gas delivered under this rate cannot be maintained approximately equal to the average heating value of all gas delivered at Los Angeles by the Midway Gas Company, this rate shall be adjusted on a heating value basis.

4. When Midway Gas Company does not have available sufficient gas to meet the demands of Southern California Gas Company and Los Angeles Gas and Electric Corporation, gas available shall be divided to satisfy their requirements in the following order:

First. Domestic requirements of consumers in Southern California Gas Company's present natural gas territory.

Second. In case of mixed gas service, mixing requirements at Southern California Gas Company and Los Angeles Gas and Electric Corporation gas works, in proportion to send out.

In case of natural gas service, domestic and commercial requirements on present mixed gas systems of Southern California Gas Company and Los Angeles Gas and Electric Corporation, in proportion to send out.

Third. Requirements of essential industrial natural gas consumers of Los Angeles Gas and Electric Corporation and Southern California Gas Company in proportion to corresponding sales of the two systems for the preceding August, September and October.

EXHIBIT "A". (Continued)

Fourth. If mixed gas service is continued, gas for reforming at the plants of Southern California Gas Company and Los Angeles Gas and Electric Corporation in proportion to mixed gas sendout. This classification includes gas used in generators on make runs, but does not include fuel used in generators on heat runs.

Fifth. Requirements of surplus industrial natural gas consumers of Los Angeles Gas and Electric Corporation and Southern California Gas Company in proportion to corresponding sales for the preceding August, September and October.

Sixth. Fuel requirements at plants of Southern California Gas Company and Los Angeles Gas and Electric Corporation in proportion to sendout, to present mixed gas system. This classification includes boiler fuel, etc. and also fuel used in generators on heat runs.

Seventh. Fuel requirements of Los Angeles Gas and Electric Corporation, Alameda Street and Seal Beach electric plants.

General. In applying the foregoing priorities there shall be considered as included in gas available to Los Angeles Gas and Electric Corporation, gas being delivered to it at Los Angeles by Southern Counties Gas Company of California, and any gas being burned at its Seal Beach electric plant which might otherwise be transported to Los Angeles.

EXHIBIT "B".

Rates for Delivery of Natural Gas to Los Angeles Gas and Electric Corporation by Southern Counties Gas Company of California, applying to combined delivery at Montebello and from Ventura line.

Rate.

For the first 12,000 m.c.f. each day from November 15th to April 14th inclusive and for all gas from April 15th to November 14th inclusive .... 14.0 per m.c.f.

For the next 3,000 m.c.f. each day from November 15th to April 14th inclusive .... 20 cents per m.c.f.

plus 1 cent per m.c.f. for each 10 cents per barrel that the market price of fuel oil exceeds $1.00 per barrel but not more than 25 cents per m.c.f.

For all over 15,000 m.c.f. each day from November 15th to April 14th inclusive .... 25 cents per m.c.f.

Minimum.

Minimum daily bill $1,260 for 9,000 m.c.f.

EXHIBIT "C".

Rates to be charged by Los Angeles Gas and Electric Corporation for Natural Gas, Domestic and Commercial Service.

Schedule No. 1.

General Service.

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

Natural Gas.

Territory.

Within the City limits of Los Angeles as they existed May 30, 1926, except -

1. That portion of West Coast Addition west of a southerly continuation of the westerly boundary of Buckler Addition.

2. Territory south of Manchester Avenue.
Also including unincorporated territory in the vicinity of Sherman contiguous to Laurel Canyon, Melrose and Fairfax Addition.

Rate.

First 4,000	cu.	ft.	per	meter	per	month,	92	cts.	per	M.	cu.	ft.
Next 11,000	"	"	"	"	"	"	85	"	"	"	"	"
Next 25,000	"	"	"	"	"	"	78	"	"	"	"	"
All over 40,000	"	"	"	"	"	"	72	"	"	"	"	"

Minimum Charge.

For four or more meters at one location and on one service - 70 cts. per meter per month.

Under all other conditions - 80 " " " " "

The above schedule cancels Schedule 1 previously in effect.

Schedule No. 2.

General Service.

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

Natural Gas.

Territory.

Within City limits of Pasadena, South Pasadena, Alhambra, Huntington Park, Los Angeles south of Manchester Avenue, and unincorporated territory west of Alameda Street and north of an easterly continuation of the southerly boundary of Watts.

Rate.

First	4,000	cubic feet per meter per month	- 98¢ per M cu.ft.
Next	11,000	" " " " " "	- 85¢ " " "
Next	25,000	" " " " " "	- 78¢ " " "
All over	40,000	" " " " " "	- 72¢ " " "

Minimum Charge.

For four or more meters at one location and on one service - 70¢ per meter per month.
Under all other conditions - 80¢ " " " "

The above schedule cancells Schedules 2 and 3 previously in effect.

Schedule No. 3.

General Service.

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

Average heating quality of gas 850 B.T.U. per cubic foot.

Territory.

All districts not included under Schedules Nos. 1 and 2, namely - (1) San Marino; (2) San Gabriel; (3) unincorporated territory north, east and south of Pasadena and Alhambra, including portion of Bell Annex; (4) territory served east of City limits of Huntington Park including portions of Maywood and of Bell Annex to Los Angeles; (5) unincorporated territory south of southerly limits of Watts; (6) territory south and west of the City of Los Angeles including Inglewood, Hawthorne and that portion of West Coast Addition west of a southerly continuation of the west boundary of Buckler Addition.

Rate.

First	4,000	cubic	feet	per	meter	per	month	-	$1.12	per	M	Cu.Ft.
Next	11,000	"	"	"	"	"	"	-	.98	"	"	"
Next	25,000	"	"	"	"	"	"	-	.85	"	"	"
All over	40,000	"	"	"	"	"	"	-	.72	"	"	"

Minimum Charge.

For four or more meters at one location and on one service -	70¢ per meter per month
Under all other conditions -	80¢ " " " "

The above schedule cancels Schedule No. 4 previously in effect.

EXHIBIT "D"

Rates to be charged by Southern California Gas Company for Domestic and Commercial Natural Gas Service.

Schedule No. A-1.

Los Angeles Division.

General Service.

Applicable to the service of Natural Gas for Domestic and Commercial lighting, heating and cooking.

Territory.

Within the City of Los Angeles except Laurel Canyon, Beverly Glen and West Gate Addition.

Rate.

First	4,000	cubic	feet	per	meter	per	month	- 92¢	per	M.	Cu.Ft.
Next	11,000	"	"	"	"	"	"	- 85¢	"	"	"
Next	25,000	"	"	"	"	"	"	- 78¢	"	"	"
All over	40,000	"	"	"	"	"	"	- 72¢	"	"	"

Minimum Charge.

For four or more meters at one location and on one service -	70¢ per meter per month
Under all other conditions -	80¢ " " " "

The above schedule cancels Schedule No. A-1 previously in effect.

Schedule No. A-5.

Los Angeles Division.

General Service.

Applicable to the service of Natural Gas for Domestic and Commercial lighting, heating and cooking.

Territory.

Within the City of Beverly Hills and Laurel Canyon, Beverly Glen and Westgate Additions to the City of Los Angeles.

Rate.

First	4,000	cubic	feet	per	meter	per	month	- 98¢	per	M	Cu.Ft.
Next	11,000	"	"	"	"	"	"	- 85¢	"	"	"
Next	25,000	"	"	"	"	"	"	- 78¢	"	"	"
All over	40,000	"	"	"	"	"	"	- 72¢	"	"	"

Minimum Charge.

For four or more meters at one location and
on one service - 70¢ per meter per month

Under all other conditions - 80¢ " " " "

The above schedule cancels Schedule No. A-5 previously in effect.

EXHIBIT "E"

Rates to be charged by Southern California Gas Company for industrial mixed gas service.

Schedule A - 2.

Mixed Gas.

Service.

Applicable to industrial and commercial service except air heating and other uses dependent on atmospheric temperature. Mixed Gas of an average quality of 850 B.T.U. per Cu. Ft.

Territory.

Applicable to all territory served in Los Angeles County.

Rate.

Readiness to Serve Charge - $10. per meter per month

Consumption Charge-(To be added to Readiness to Serve Charge)

For the first	100,000	Cu.Ft.per	meter	per	month	50¢	per	M.C.F.				
" " next	200,000	"	"	"	"	"	45¢	"	"	"	"	
" all over	300,000	"	"	"	"	"	40¢	"	"	"	"	

The above schedule cancels schedules A-2, A-3 & A-10 previously in effect.

EXHIBIT "F".

Rates to be charged by Midway
Gas Company for Domestic and
Commercial Service from Taft-
Glendale Transmission Line.

Schedule A-2.

Service.

Applicable to Domestic and Commercial service of Natural
Gas for lighting, heating and cooking.

Territory.

Applicable in District No. 1.

Rate.

First	600	cu.ft. or less per meter per month					-	$1.00				
Next	2,400	"	"	per meter per month			-	1.00	per	M	Cu.Ft.	
Next	7,000	"	"	"	"	"	"	-	.75	"	"	"	"
Next	10,000	"	"	"	"	"	"	-	.60	"	"	"	"
All over	20,000	"	"	"	"	"	"	-	.50	"	"	"	"

The above schedule cancels Schedule A-2 now in effect.