

Decision No. 499

BEFORE THE RAILROAD COMMISSION
OF THE STATE OF CALIFORNIA.

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.....
CITY OF PALO ALTO, a Municipal
Corporation,

Complainant,

- vs. -

PALO ALTO GAS COMPANY, a Cor-
poration,

Defendant.
.....

CASE NO. 282.

Norman E. Malcolm, City Attorney for complainant.
Chickering & Gregory for Defendant.

TABLEN, Commissioner.

O P I N I O N

This is a complaint by the City of Palo Alto, a municipal corporation, against the Palo Alto Gas Company, a corporation, complaining that the present rate for gas supplied to the inhabitants of Palo Alto is unjust and unreasonable, and requesting this Commission to establish a just and reasonable rate. The present rate is \$1.50 per thousand cubic feet with a minimum charge of 50¢ per month. There is no deduction for prompt payment.

On May 22nd, 1912, the City of Palo Alto, at an election called for that purpose in accordance with the provisions of Chapter 40 of the laws of the Special Session of the Legislature of 1911, transferred to the Railroad Commission all the city's powers over public utilities, including gas corporations. Thereafter on July 23rd, 1912, the City of Palo Alto filed with this Commission the complaint in the present proceeding. On August 22nd, 1912, the defendant company filed with the Commission an offer to satisfy the complaint by establishing a sliding scale for gas running from \$1.50 to \$1.25 per thousand cubic feet with a minimum monthly charge of 50¢, or a flat rate to all consumers of \$1.40 per thousand.

cubic feet with a minimum monthly charge of 50¢. The City of Palo Alto thereafter on August 26th, 1912, passed a resolution refusing to accept the defendant's offer of satisfaction. Thereafter on or about September 5th, 1912, the Palo Alto Gas Company filed with the Superior Court of this State in and for the County of Santa Clara, a complaint against the members of this Commission in which complaint the petitioner asked that a ~~xxxxxxxxxxxx~~ writ of prohibition issue to this Commission commanding the Commission and its members to desist and refrain from further proceedings on the complaint filed by the City of Palo Alto, and to show cause why such writ should not become absolute. The Superior Court thereupon issued a temporary restraining order directed against this Commission. The Commission filed a general demurrer, whereupon the matter came on for hearing on the argument on the demurrer. On December 13th, 1912, the Superior Court rendered its decision sustaining the demurrer without leave to amend and denying the petition for a writ of prohibition. Thereafter on December 21st, 1912, the defendant filed its answer denying the material allegations of the complaint. The Commission thereupon set the case for hearing for January 22nd, 1913. The hearing was held on said day and on other days subsequent thereto, and the case was thereupon submitted and is now ready for decision.

The franchise under which gas is now being distributed in the City of Palo Alto was granted by the Board of Trustees of the Town of Palo Alto to D. O. Druffel by Ordinance No. 105, on September 17th, 1904. The franchise is for a period of fifty years and grants to Druffel, his heirs and assigns, the right to construct, equip, operate and maintain a gas plant in the Town of Palo Alto, and to lay gas pipes for the purpose of carrying gas for light, heat and power in and along the public streets and thoroughfares of the Town of Palo Alto, and to manufacture, distribute and sell gas to the inhabitants of the Town. The Town retains the right at any time after the expiration of ten years from the granting of the franchise to purchase the gas manufacturing plant and distributing

system at a price to be ascertained by arbitration, as provided in the ordinance.

Druffel thereafter organized the Palo Alto Gas Company, the defendant in this case, (hereinafter referred to as the Gas Company), for the purpose of exercising the rights granted to him by the franchise. Thereafter on the 31st day of January, 1905, the Gas Company entered into a contract with L. P. Lowe for the installation of a gas distributing system and the building up of the business of such a system. It was provided that Lowe should construct such system and thereafter operate the same up to July 1st, 1907, on which date he was to sell and deliver to the Gas Company said system together with all materials on hand. Lowe agreed that he would secure at least 600 consumers by July 1st, 1907. Lowe was to receive payment according to a sliding scale, depending upon the number of meters in actual use on July 1st, 1907, as follows:

\$ 80.00 per meter up to and including 649 meters;
\$ 90.00 per meter from 650 to 749 meters inclusive;
\$100.00 per meter from 750 to 999 meters inclusive; and
\$110.00 per meter for 1000 meters and over.

The contract further provided that Lowe should secure an assignment to the Gas Company of Druffel's franchise, and also in the name of the Gas Company a contract with the United Gas and Electric Company for supplying gas for distribution in the Town of Palo Alto in the Gas Company's distributing system. Under this contract, Lowe built the distributing system and operated the same until July 1st, 1907, on which date the system was conveyed to the Gas Company, in accordance with the terms of the contract. 799 meters had been secured.

Although Druffel's franchise provided for the construction within the Town of Palo Alto of a gas manufacturing plant and distributing system, no plant for the manufacture or production of gas has been constructed within the Town. The Gas Company's property within the Town consists of a distributing system only. The gas which the Gas Company distributes is secured by it from the Pacific Gas and Electric Company under contract dated March 18, 1905, between

Palo Alto Gas Company and United Gas and Electric Company (the predecessor in interest of the Pacific Gas and Electric Company). This contract is for a period of ten years, and provides that the United Gas and Electric Company shall deliver to the Palo Alto Gas Company at the latter's storage tanks at Palo Alto all the gas required by the Gas Company. This gas is to be of a quality specified in the contract and is to be delivered at a pressure of between thirty and eighty pounds. The Gas Company agrees to pay to the United Gas and Electric Company "a sum equal to 50% of the gross income derived from the sale of the said gas in the territory aforesaid" (being the Town of Palo Alto and vicinity). The companies are still operating under this contract. It will be noted that the Gas Company pays for its gas an amount equal to 50% of the gross income derived from the sale of the amount of gas recorded on the Gas Company's meters.

The Gas Company has been unusually active in soliciting customers, with the result that in December, 1912, it claimed to have 1353 meters in use. It claims to have sold during the year 1912, 28,952,900 cubic feet of gas. As the result of the Gas Company's activity in soliciting business, the proportion of consumers to the population is unusually large. Mr. L. P. Lowe, half owner of the company, testified that Palo Alto is one of the best gas towns in the world.

The gas distributed by the Gas Company is manufactured by the Pacific Gas and Electric Company at its Protrero plant in the City of San Francisco. It is there conveyed through a twelve (12) inch main to Martin Station, where it is compressed. It is then conveyed through a transmission line in a general southerly direction down what is known as the Peninsula to Redwood City and thence by a branch transmission line to the City of Palo Alto where the gas is delivered to the Gas Company for distribution. The transmission line down the Peninsula also delivers gas to South San Francisco, Burlingame, San Mateo, Hillsborough and Redwood City.

The length of the transmission main to Redwood City is 23.73 miles and from Redwood City to Palo Alto 6.156 miles. According to the estimate of Assistant Engineer Arthur R. Kelley of this Commission, there were as of September 14, 1912, 53,160 feet of two inch mains, 39,285 feet of one and one-quarter inch mains and 9,280 feet of one inch mains in the Gas Company's distributing system, and 1,095 services. The distributing plant has been carefully constructed and is in a comparatively good state of preservation.

I shall now consider the question of the proper value to be assigned for the purpose of this case to the Gas Company's property used and useful in the public service. Every effort has been made to ascertain all the material facts bearing on this question. Under the Commission's direction, one of its engineers and one of its accountants made a careful investigation into the Gas Company's plant and books of account. After a preliminary refusal to permit an inspection of the books of the Palo Alto Gas Appliance Company, of which company I shall have more to say hereafter, the defendant co-operated fully with the Commission in presenting all the facts in its possession. The fullest opportunity was given to the Gas Company to present any evidence it considered material and the company availed itself freely of this right. I shall attempt to consider the material facts bearing on the proper value, giving to each the weight to which I consider it from the evidence to be entitled.

The authorized capital stock of the Gas Company has a par value of \$200,000. The stock has all been issued and is held in equal shares by L. P. Lowe and D. O. Druffel. It was at first desired by the Company to have an authorized bonded indebtedness of \$200,000. Under the law of this State as it then stood, it was necessary to have an authorized capital stock of an equivalent amount. Nothing at all was paid for this stock. While the contract between Lowe and the Gas Company, dated January 31st, 1905, and hereinbefore

referred to, provided that 1995 shares of the Gas Company's capital stock should be issued to Lowe upon securing the agreement with the United Gas and Electric Company, Lowe testified that the United Gas and Electric Company had approached him to see whether it could not sell him the gas and Druffel testified very frankly that his stock had cost him nothing. The plan to have an authorized bonded indebtedness of \$200,000 was later changed so that the bonds actually authorized amount to \$150,000, face value. Of the bonds so authorized 86 bonds, having a face value of \$86,000, were issued to L. P. Lowe as of January 1st, 1908, in payment for the Gas Company's distributing system for which, under the contract, Mr. Lowe was entitled to receive \$100 per meter in bonds, and for supplies estimated at \$7,604.30. Thereafter additional bonds of the face value of \$10,000 were delivered as of January 1st, 1910, in exchange for promissory notes of the Gas Company given to its stockholders in lieu of a cash dividend of \$10,000 declared out of surplus in February, 1910. There are at present outstanding 96 bonds having a face value of \$96,000. The bonds bear interest at the rate of 6% per annum.

There is no satisfactory evidence as to the original cost of the distributing plant which on July 1st, 1907, was conveyed by Lowe to the Gas Company in return for bonds of the face value of \$86,000. The original records which would show the amount of money expended in the construction of the plant were destroyed in the San Francisco fire of April, 1906. As bearing on this question, I desire to refer to the statement filed by the Gas Company with the Town of Palo Alto as of December 31st, 1908. This statement gives the value of the physical property as \$60,769.30, and adds thereto a value for business development in the amount of \$20,925. Mr. Lowe testified that the company thereafter spent in additions to the plant up to December 31st, 1912, the sum of \$17,555.40. As I have already said, I consider the evidence on the point of original cost to be unsatisfactory.

The cost of reproducing the property new was the subject of a large amount of evidence. I shall consider this matter under three heads, as follows:

- (1) Manufacturing plant;
- (2) Transmission system;
- (3) Distributing system.

(1) Manufacturing Plant.

As I have already stated, the gas distributed by the Gas Company is manufactured in the Protrero plant of the Pacific Gas and Electric Company located in the City of San Francisco. Mr. John A. Britton, vice president and general manager of the Pacific Gas and Electric Company, and a witness for the defendant in this case, presented to the Commission a schedule showing the value of the Protrero plant and of the transmission mains between that plant and the City of Palo Alto, and also other data showing the earnings and expenses connected therewith. The valuation presented by Mr. Britton was prepared by J. G. White & Company and represents the cost of reproducing the property new. This cost amounts to \$2,630,411 for the manufacturing plant. This cost includes a total of 26% for overhead charges. On the facts of this case I am of the opinion that this percentage should be reduced to 15%. The Pacific Gas and Electric Company, in addition to claiming that it was entitled to interest at the rate of 8½% annually on the value of the plant reproduced new, claimed the right to include in manufacturing cost an additional item for depreciation. Whether this is proper will depend largely on the use to which the amounts annually set aside for depreciation are devoted. In considering this matter, it should be borne in mind that the valuation prepared by J. G. White & Company estimates the cost to reproduce new, whereas Mr. Britton testified that there was considerable depreciation in the plant amounting to as high as 10% annually for certain items, and that the plant had been constructed several years ago.

To the theory expressed by Mr. Britton, that as long as a plant can do its work, it should be regarded for rate fixing purposes as having 100% value, this Commission cannot give adherence.

(2) Transmission System.

The valuation claimed by the Pacific Gas and Electric Company for its transmission system for the Protrero plant to Palo Alto properly chargeable to the Redwood District, is \$127,483. The remarks made in the preceding paragraph with reference to percentage of overhead charges and proper basis for rate fixing apply equally to this item. Mr. Britton testified that in his opinion the life of this main was between fifteen and twenty years. It was constructed in the years 1905 and 1907.

(3) Distributing System.

Two complete estimates of the cost of reproducing the Gas Company's distributing system, together with considerable additional fragmentary evidence on this question, were presented to the Commission.

Mr. C. L. Cory, a witness for the defendant, presented a complete estimate of the cost of reproducing the plant today under the conditions that were existent at the time the plant was constructed, in so far as possible. A summary of Mr. Cory's estimate of the cost of reproducing the physical portions of the plant on this basis is as follows:

Compression storage tanks, fittings, piping	\$ 5,352.00
Street mains.....	39,997.99
Gas services and regulators or governors...	12,563.74
Gas meters and connections.....	14,302.90
Teams, wagons and tools.....	745.33
Furniture and fixtures.....	1,874.80
Stores and supplies.....	835.20
Working capital (nil).....	
Total.....	\$ 75,672.96

In this estimate, Mr. Cory includes for engineering, supervision, tools, casualty insurance, administration during construction and interest and taxes during construction 12% for street mains and services and for meters an item of 11% for testing, store expenses, tools and breakage, supervision, administration, interest during construction and carrying charges. Mr. Cory includes no allowance for paving or re-paving for the reason, as stated by him, that "it would seem that the amount of cutting of pavements of any kind at the time your distribution system was installed was of no considerable moment, although since the laying of your distribution system considerable paving has been put over them."

Mr. Arthur R. Kelley, one of the assistant engineers of the Commission, presented a revised complete estimate of the cost of reproducing new, as of September 14th, 1912, the physical portions of the plant of the Gas Company, as follows:

(1)	Distributing mains (including \$4800 for pressure tanks).....	\$ 26,735.00
(2)	Services.....	6,982.00
(3)	Pressure regulators.....	4,911.00
(4)	Meters.....	10,182.00
(5)	Furniture and Fixtures.....	900.00
(6)	Teams and Vehicles.....	325.00
(7)	Tools, implements and testing apparatus.....	412.00
		<u>\$ 50,447.00</u>
(8)	Engineering, superintendence and organization 10% of items (1) to (7) inclusive.....	5,045.00
(9)	Contingencies, 5% of items (1) to (8) inclusive.	2,775.00
(10)	Interest during construction, 3% of items (1) to (9) inclusive.....	1,749.00
(11)	Stores and supplies.....	<u>827.00</u>
	Total cost of reproduction.....	\$ 60,845.00
(12)	Paving to be torn up and re-laid.....	<u>38,856.00</u>
	Total cost of reproduction including paving.....	\$ 99,699.00

Mr. Kelley testified with reference to the item for paving that the item had been calculated so that if the Commission saw fit

to include it as a part of the cost of reproducing the plant as it is today the Commission might have the facts before it. If the cost of reproducing the plant new were the sole fact to be ascertained in determining the proper basis on which to fix rates, it might be logical to include the entire amount for tearing up and relaying pavement as estimated by Mr. Kelley. In view of the fact, however, that other elements, including original cost, must be considered, and that the amount actually expended by the Gas Company for this purpose was only \$1,198.24, it would seem more proper in determining the basis for fixing rates to follow the course pursued by Mr. Cory and not to include an amount for tearing up and relaying pavement in excess of the amount actually expended therefor.

It will be noted that Mr. Cory's estimate is \$14,829.96 higher than Mr. Kelley's. Of this amount, after making due allowance for the varying percentages for overhead charges, over \$14,000.00 difference is found in the items of compression storage tanks and the street mains. It will be noted that Mr. Cory estimates the compression storage tanks at \$5,352.00, while Mr. Kelley estimates them at \$4,800.00. In its report to the Town of Palo Alto, dated December 31st, 1908, the Gas Company showed the following item: "4 underground gas storage tanks with fittings, regulators, etc., at \$1200 each, \$4800".

The greatest divergence is in the matter of street mains. Without considering overhead expenditures, the estimates of Mr. Cory and Mr. Kelley are as follows:

		Cory	Kelley
1	inch pipe	30¢	16¢
1½	" "	33.5¢	18¢
2	" "	36¢	22¢

Mr. Cory seems to have relied largely on a job of laying two inch mains performed by the Gas Company for Stanford University, and on a large amount of work performed by the Los Angeles Gas and Electric Corporation in adobe streets in and about Los Angeles with comparatively little paving, where the original costs were all

available, and where a record was kept of the work as it progressed, as testified to by him on page 398 of the transcript.

With reference to the Stanford job, the cost as claimed by the Gas Company was \$1,614.63 for laying 5,134 feet of two inch main, or 31.5¢ per linear foot, which price included superintendence and depreciation of tools. The job was admittedly a detached one, and at least a portion of the laying was done in macadamized or gravelled streets.

With reference to the work in and about Los Angeles, Mr. Cory's appraisal of the Los Angeles Gas and Electric Corporation's property was filed with the Board of Public Utilities of the City of Los Angeles. A detail of this report in so far as it affects the cost per foot of wrought iron street mains exclusive of paving, has been filed with the Commission, and was introduced as an exhibit in this case. It shows that the total cost, exclusive of paving, and not including overhead expenses, of laying two inch mains, including materials and labor was only 21.408¢. This item, it will be noted, is within a fraction of a cent of Mr. Kelley's estimate. The item does not include the cost of replacing street surface. This cost was estimated to vary from 1.4¢ per foot for unimproved streets to 41.75¢ per foot for asphalt streets. The evidence also shows that an appraisal prepared by J. G. White & Company for the San Joaquin Light and Power Company estimates the cost of laying two inch high pressure gas mains in the City of Bakersfield at 23.6¢ per foot, in the City of Selma at 22.9¢ per foot and in the City of Merced at 22.6¢ per foot. I am equally convinced from the evidence in this case that Mr. Kelley's estimate on two inch pipe may be slightly low and that Mr. Cory's estimate is much too high, and I am using the two inch main as illustrative and for one and will not pause to analyze the cost for one and one-quarter inch mains, as to which the same general results will follow.

Mr. Kelley confined his estimate to a valuation of the physical elements of the Gas Company's plant, and did not undertake to place an estimate on the item which is variously called "going

value", "going cost", "development value", "development cost", "cost to get the business", and by other names. Mr. Cory included amounts for the expense of organization, cost of advertising and other direct development expenses, the interest on a physical valuation of about \$60,000 for 1½ years after gas was first served by the Gas Company's system, and the difference between the receipts and operating expenses for this 1½ year period as estimated by a curve of the growth of the company's business. Mr. Cory's estimate is as follows:

Organization expense.....	\$ 2,500.00
6% for 1½ years on \$60,000.....	5,400.00
Deficit or margin between operating expenses and revenue, average for 1½ years.....	6,000.00
Expense, advertising, etc. in developing business.	<u>2,000.00</u>
Total.....	\$ 15,900.00

I would say in passing that the item of organization expense seems to duplicate the item of administration during construction already estimated by Mr. Cory in his physical appraisal.

In this connection I desire to quote from the decision of the Wisconsin Railroad Commission in the case of State Journal Printing Company vs. Madison Gas and Electric Company (Vol. IV Wisconsin Railroad Commission Reports, 501, 577) as follows:

"Investigation of the facts involved makes it quite obvious that justice between the investors on the one hand and the consumers on the other requires that in valuing public utilities consideration should be given to the amounts expended by the former in building up the business of such plants. This is especially true when the earnings of a utility have not been sufficient to meet reasonable expenditures for development of the business and besides this cover operating expenses, depreciation, and reasonable return on the investment. No public utility can be a paying concern until it has obtained a paying business. To secure enough takers so that the revenues obtained from them will adequately meet all reasonable outlays, is a matter that usually requires both expenditures and time. Comparatively few plants are therefore paying at first. Several years are often required to obtain customers enough for a paying business. In the meantime the plants have to be kept in operation and the losses from such operation made up by investors. When these losses are due to such delays in securing the required amount of business, which cannot be reasonably avoided, and have not been covered by subsequent surplus earnings, it is difficult to avoid the conclusion that they must also be regarded as one of the elements that should be considered in appraising the plant and fixing their rates. If investors are not compensated for such losses either by being allowed reasonable returns thereon or through surplus earnings, they will not continue to invest their money in plants of this kind. Again, the investors would seem to be entitled to such compensation on the ground of equity alone; for these losses enter into the cost of the

service, and, under normal conditions, it is only fair that the rates charged for the services rendered are fixed at a level that is high enough to cover all reasonable costs."

That there are certain actual costs incurred in developing the business during its early stages, for which costs the utility is entitled to be re-imbursed, just as clearly as it is entitled to a return on the physical portions of its plant, seems to be too obvious for argument. The investor must go into his pocket to meet one kind of cost just as clearly as the other. There are two schools of thought with reference to the manner in which the so-called "going concern" value or "development cost" should be met. The supporters of one school are of the view that these items should be added to capital account, while those of the other school believe that they should be taken care of by rates higher than would otherwise be in effect, during the first years of the utility's existence. The difficulty with the first view is that its adoption will result in the increase of the permanent capital account and the consequent payment of higher rates for all time to come. The difficulty with the latter view is that it casts upon the patrons during the first years the duty of paying rates even higher than the usual relatively high rates which are paid at the outset of a utility's history. I am of the opinion that such costs, legitimately and wisely incurred, should be taken care of in some way, but the exact method to be pursued, and the extent to which consideration should be given to such items will depend upon the facts of each particular case. It might well be, for instance, that if the utility is unwisely conceived or struggles against unusual difficulties, the cost of developing the business including the early losses may run up to almost the entire value of the physical plant, if not in excess thereof. It may happen also that while in one case the addition of these costs to capital account might be perfectly fair, in another case justice will require that these costs be re-imbursed out of higher rates during the first few years, or that some combination of these theories be adopted. In the present case in giving con-

sideration to Mr. Cory's estimate, it should also be borne in mind that on January 1st, 1910, being some 2½ years after the Gas Company took over the plant, a dividend of \$10,000 out of surplus earnings was declared and that the amounts which have been charged off to depreciation have admittedly been larger than necessary. In finding the value to be used as a basis for fixing rates in this case I shall give due consideration to the element of going concern value.

With reference to the value of the plant in its present condition, or the cost of reproduction less depreciation, Mr. Cory presented no estimate. Mr. Kelley reached the conclusion that the ratio of the present condition of the distributing system to the cost of reproduction new is approximately 77%. The fact that the property is not new will have material bearing in determining the proper basis for fixing the rate in this case.

Before leaving these engineering questions, I deem it pertinent to comment on the very important and responsible position of engineers and other experts who testify before this Commission in matters of valuation and in other matters affecting public utilities. On the accuracy of their testimony will depend to a large extent the just solution of many of the problems presented to the Commission. In order that the Commission may be fair in its decisions, it must know the absolute truth. I desire to express the hope that all engineers testifying before the Commission will realize their high function and will consider themselves in so far as possible as witnesses not for the party who calls them, but for the people of the State of California sworn to tell the Commission the truth to the best of their knowledge and ability. The Commission will from time to time have occasion to check over the testimony of the various engineers appearing before it, and the weight which the Commission will give to the testimony of these various engineers and other experts will depend very largely on how closely the estimates and other testimony given by them check up

with what the Commission after due consideration believes to be the truth. I am hopeful that before long the engineer who seeks at all times to speak the absolute truth will be the one most in demand by public utilities in cases pending before this Commission.

This Commission will scrutinize the testimony of its own engineers with the same care with which it examines the testimony of other engineers testifying before it. The fact that one of the Commission's engineers reaches a certain result or uses a certain percentage or adopts a certain theory is by no means conclusive on the Commission. For instance, in the present case Mr. Kelley out of an apparent desire to be at least fair, has allowed 5% for contingencies to take care of items which might have been overlooked. I have very serious doubts as to whether in estimating the cost of reproducing a property new, when all the items which went into the property are clearly ascertainable, any allowance whatsoever should be made for this class of contingencies. Such items as taxes and insurance, however, should be taken care of. There may be reason for some allowance for contingencies in addition to taxes and insurance when an engineer is estimating the cost of a plant which is to be constructed, but very little when the plant has actually been constructed and the sole question is what it would cost to reproduce the existing plant new. It should also be borne in mind that percentage adopted by the Commission as fair in one case may be found not to be fair in another. Each case must be judged on its own merits.

I have now considered the principal evidence in this case bearing on the question of the value to be assigned to the plant for the purpose of establishing the rate of return. The elements to be considered in establishing the rates of compensation to be collected by transportation companies are laid down in the case of *Synth vs. Ames*, (169 U.S. 466), in which case the court at page 546 uses the following language:

"We hold, however, that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public. And, in order to ascertain that value, the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stock, the present as compared with the original cost of construction, the probable earning capacity of the property under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value of the property. What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience. On the other hand, what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth."

These same tests may be considered in ascertaining the basis on which to establish the rate to be charged by other classes of utilities until the Supreme Court lays down another rule. In finding the value in this case I have considered all the elements referred to by the Supreme Court, in so far as they have been presented in the evidence in this case, giving each such weight as it seemed to merit, with a desire to find a value which should be just and equitable. After a careful consideration of all the facts I find as a fact that the fair value of the property of the defendant used and useful for the public service, as disclosed by the evidence in this case is not in excess of the sum of \$69,250.00.

I shall now consider additional elements in the problem, namely, maintenance, operation, depreciation, interest and taxes. I shall follow the general plan which I pursued in connection with ascertaining the value of the different portions of the plant or system used in the manufacture, distribution and transmission of the gas.

(1) Manufacture or Production Cost.

The Pacific Gas and Electric Company gives the annual cost of maintenance and operation of its Potrero plant as \$924,231. There is no data in the evidence on which this item may be questioned. The company also claims an item of \$63,722 for depreciation. The

company cannot consistently ask for a return on its property as if it were new and also expect to set aside a depreciation fund. The company also claims an item of \$223,585 for interest. This is interest at the rate of $8\frac{1}{2}\%$ on the cost of reproducing the property new, as reported by J. G. White & Company. In reply to the Commission's inquiry as to how the percentage was arrived at, Mr. Britton testified that the company sold its 5% bonds at 85, and that while this amounted only to paying interest at the rate of 5.88% there was a provision in the Company's bond mortgage to the effect that no additional bonds may issue until the company has earned $1\frac{1}{2}$ times the amount of the bond interest. The discount on the bonds amortized over the life of the bonds brings the annual cost to 6.1%, and adding thereto one-half of the 5% makes the total of 8.6%. I am not at all impressed with this line of reasoning. It amounts in effect to asking the public to pay additional rates so as to bring the earnings up to one and a half times the bond interest, which earnings are then to be capitalized to serve as the basis of future rates. Mr. Hockenbeamer, Auditor of the Pacific Gas and Electric Company, testified that on first-class mortgages in San Francisco on large projects bonds are being issued bearing $5\frac{1}{2}\%$ interest, while smaller loans cost 7 or 8%. I am convinced that the item of interest as claimed by the Pacific Gas and Electric Company is in excess of the amount which should be allowed. Considering these various items, including taxes, and bearing in mind a loss of at least 14% in transmission from the Potrero plant to the meters in Palo Alto, I find that the cost of producing the gas which is thereafter delivered in Palo Alto, including a fair return on the investment, is not to exceed 30.694% per thousand cubic feet. In making this finding the Pacific Gas and Electric Company's estimate of the cost of reproducing its property new is taken without question except as to the item of percentage for overhead expenses.

Dr.

Cr.

GAS:

Gas Sales		43 429 35	
Gas Purchases	21 714 68		
Gas Sales Wages	4 615 40		
Gas Sales Expense	1 224 39		
Rent	260 00		
General Expense	770 03		
Insurance	109 20		
Property Rental	528 67		
Property Repairs	81 30		
Franchise Privilege	774 81		
Legal Expense	765 05		
Advertising	2 25		
Interest	1 20		
Officer's Salaries	2 400 00		
Meter & Governor			
Repairs	123 75		
Development	203 23	33 574 45	9 254 89

MISCELLANEOUS CRS:-

Service	261 10		
Discount	2 21		
Previous Year	356 67		
Incidental Receipts	4 48		624 46

MISCELLANEOUS DRS:-

Depreciation	4 240 08		
Incidental Dis-			
bursment	44 05		
Bad Debts	190 20	4 474 33	

TAXES, FIXED ETC.:

Taxes	1 478 36		
Bond Interest	5 760 00	7 238 36	
E.&E. Loss & Gain			1 233 34
Total		11 712 69	11 712 69

The item of gas sales wages includes the entire salary of the general manager, a portion of which should properly be chargeable to the Palo Alto Gas Appliance Company, a subsidiary corporation of the Gas Company formed for the purpose of handling gas appliances and of installing the service connections inside of the property line, and the meters. The defendant insists that it is not intended that this company shall make a profit, but that the company was organized as a matter of convenience to perform services which the Gas Company would otherwise have to perform. The annual report of the Appliance

(2) Transmission Cost.

The Pacific Gas and Electric Company claims an item of \$12,800 for maintenance and operation in connection with the transmission of the gas from the Potrero plant to Palo Alto. This item is undoubtedly much higher than it should be by reason of the fact that an undue proportion of the maintenance and operation expenses at Martin Station has been segregated to the Peninsula high pressure transmission mains. The actual cost of maintenance and operation of the Martin Station and the transmission line, properly chargeable to the Redwood District, should not be in excess of \$6,000.00. To be very liberal, I am considering it as \$2,000.00. These items in common with all the other items presented by the Pacific Gas and Electric Company, are subject to revision, if they should become relevant in any future proceedings before this Commission. The remarks hereinbefore made under the head of production cost with reference to interest and depreciation apply equally to this heading. The Pacific Gas and Electric Company claims an annual item of \$8,734.00 for depreciation. This is almost 7% and is undoubtedly too high.

I find from the evidence in this case that on a very liberal estimate the transmission cost of the gas manufactured in the Potrero plant and thereafter delivered to the consumers of the Gas Company, including a fair return on the investment, is not in excess of 22.76%. The cost of production and transmission is consequently not in excess of 53.454% per thousand cubic feet.

(3) Distribution Costs.

The trial balance of the gas company for the year 1912, taken in the month of December, is reported by the company as follows:

Company for the year 1912 shows a profit of \$1,100.31, on the assumption that the appliances on hand, which are of comparatively small value, are worth what they cost, and that the outstanding accounts of the company are good. As the general manager of the Gas Company devotes a considerable portion of his time to the Appliance Company, of which company he is also general manager, an equitable portion of his salary should be charged to the Appliance Company, thereby decreasing to that extent the operating expenses of the Gas Company. The same is true of the item of rent. The testimony shows that the front portion of the store is devoted to the Appliance Company, and that a large portion of the floor space is devoted to that company. The same observation applies to other items in the expense account including the item of officers' salaries amounting to \$2400. It may be said in passing that the total of items which should be charged to the Appliance Company in case that company made a profit to that extent would be in excess of the Appliance Company's net profit for the year ending December 31st, 1912. The item of \$765.05 for legal expense consists mostly of expense in connection with two suits instituted by the Gas Company, one against the City of Palo Alto and one against the Railroad Commission, to prevent the public authorities from fixing the defendant's rates. A utility has, of course, the right to assert its rights in court in case a public authority has treated it unjustly. I understand that in the suit against the City of Palo Alto the City has practically confessed judgment. In the suit against the Railroad Commission, however, to prevent the Railroad Commission from exercising its authority under the law, the Commission was sustained in court. I am disinclined under these circumstances to allow any amount for the legal expenses incurred in the suit against this Commission. Otherwise a public utility could pay expensive legal fees in seeking to prevent its lawful regulation by public authority and then make the public pay the bill.

The item of depreciation amounting to \$4,240.08 is frankly admitted by Mr. Lowe to be too high. Whether or not a utility makes a profit very often depends on the amount of the item charged to depreciation. I am convinced from the evidence in this case that the amount properly chargeable for depreciation is not in excess of \$2,748.00.

This brings me to a consideration of the final question in the case, namely, the amount of return to be allowed the Gas Company on its plant. No fixed percentage applicable to all cases and all classes of utilities can be established by this Commission. Each case must be judged on its own merits. It may well be that a utility in one community would be entitled to one rate of return while a similar concern in another community would be entitled to a different rate. It may be that a large and solidly established utility will not be entitled to as high a return as a smaller utility which is struggling against adverse circumstances. The most that can be said by way of general principles is that the return should be at least the average return which is earned by other classes of business of the same degree of hazard in the same community. The Commission in fixing a rate of return must be liberal, lest too strict a policy result in turning capital to other fields of enterprise. California needs development by public utilities, and this Commission's policy should be a broad and liberal one, so as to encourage capital to develop the State by legitimate public utility enterprises where needed. The Commission should be careful not to permit an inflation of prices in ascertaining the value of the property of a public utility used and useful for the public purpose, but should be liberal in establishing the rate of return on that value. Bearing in mind all the facts of this case as shown by the evidence, I find that a rate of return of 3% on

the value of the property of the Palo Alto Gas Company used and useful for the public purpose, as fixed herein, is at least a fair and equitable rate of return. If anything, the rate is too high by reason of the fact that the Commission has been more than liberal in establishing the basis of value.

The contract between the Gas Company and the United Gas and Electric Company can not stand as against the power of this Commission, under the Constitution and the Public Utilities Act, to fix just and reasonable rates. Otherwise, a utility, by entering into contracts with third parties for the supply of its commodity or otherwise could effectually nullify the power of the state, under the police power, to supervise and regulate its public utilities. I assume that as a result of this decision the parties to the contract will make the necessary modifications therein.

During the year 1912, the Gas Company sold 28,952,900 cubic feet of gas. I find that the cost of distributing gas by the Gas Company, taking into consideration all material elements, including a fair return on the investment and taxes, is not reasonably in excess of 65.83% per thousand cubic feet. Adding this amount to the total of 53.454% for manufacture and transmission gives a total of \$1.19284 as a liberal outside cost including a fair return on the investment, per thousand cubic feet of gas sold in Palo Alto and the adjacent territory by the Gas Company. I have tried throughout to be at least fair to the Gas Company. It may be that the rate herein established will hereafter be found to be in excess of a reasonable rate, but I think it wiser to err, if at all, on the side of justice to the utility, particularly in view of the fact that the reduction herein ordered will be a substantial one, amounting to approximately 20% in the Gas Company's revenue on the improbable

assumption that the consumption will not increase. It should be borne in mind also that the Gas Company does not manufacture its own gas, but secures it through a transmission line from a point 23 miles distant. It should be remembered also that the rate herein established is based on the facts applicable to this case, and that this rate cannot be taken as expressing this Commission's view as to what may be the fair and reasonable rate for artificial gas to be charged and collected in any other community when the facts may be different.

There is no complaint in this case with reference to the minimum of 50¢ per month per meter, and this minimum will not be disturbed. I find that there is not enough difference in the amount of gas used by the different customers of the gas company to make necessary a graduated scale of rates. After a careful review of all the facts of the case I find that the existing rate of \$1.50 per thousand cubic feet of gas now charged by the defendant in this case is an unjust and unreasonable rate, and that a just and reasonable rate would be \$1.20 per thousand cubic feet, and I hereby recommend that such rate be established.

I submit herewith the following form of order:

ORDER.

THE CITY OF PALO ALTO having filed with this Commission its complaint against the Palo Alto Gas Company alleging that said company's existing rates for artificial gas are unjust and unreasonable, and requesting this Commission to establish rates which shall be just and reasonable, hereafter to be charged and collected by said Palo Alto Gas Company, and the parties having stipulated that all the rates for the entire territory served by the Palo Alto Gas Company both within and without the City of Palo Alto may be considered to be at issue in this case, and a public hearing having been held and evidence having been introduced by both parties, and the Commission being fully advised in the premises

WE HEREBY FIND AS A FACT:

(1) That the existing rate of \$1.50 per thousand cubic feet of gas charged and collected by the Palo Alto Gas Company in the City of Palo Alto and in the territory adjacent thereto served by said Company is an unjust and unreasonable rate.

(2) That the just and reasonable rate for gas to be charged and collected by said Palo Alto Gas Company in the City of Palo Alto and in the territory adjacent thereto, served by said Company, is not to exceed the sum of \$1.20 per thousand cubic feet of gas delivered, with a minimum charge of 50¢ per month per meter.

Basing our conclusions on the foregoing findings of fact and on the further findings of fact contained in the opinion which precedes this order

IT IS HEREBY ORDERED that Palo Alto Gas Company within twenty (20) days from the date of service on it of a copy of this Opinion and Order, publish and file with this Commission, and thereafter charge and collect from its customers in the City of Palo Alto and the territory adjacent thereto served by said company, the sum of \$1.20 per thousand cubic feet of gas delivered, with a minimum charge of 50¢ per meter per month.

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 12th day of March, 1913.

John M. Eashleman
H. L. Smith
W. E. Gordon
Mar. Thelton
E. O. Edgerton
Commissioners.