Decision No. 24900

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

CALIFORNIA FARM BUREAU FEDERATION, J. J. Deuel, et als.,

Complainants,

VS.

SAN JOAQUIN LIGHT & POWER CORPORA-

Defendant.

In the matter of the Investigation upon the Commission's own motion into the electric rates, rules, regulations, charges, classifications, rentals, practices, contracts and service, or any of them, of SAN JOAQUIN LIGHT & POWER CORPORATION.

Case No. 3008.

Case No. 2992.

In the matter of the Investigation upon the Commission's own motion into the electric rates, rules, regulations, charges, classifications, rentals, practices, contracts and service, or any of them, of MIDLAND COUNTIES PUBLIC SERVICE CORPORATION.

Case No. 3026.

FRESNO TRACTION COMPANY, a corporation,

Complainant,

VS.

Case No. 3061.

SAN JOAQUIN LIGHT & POWER CORPORATION,

Defendant.

J. J. Deuel and L. S. Wing, for California Farm Bureau Federation.

Lester S. Ready, for National Ice and Cold Storage Co., Union Ice Company, Pacific States Cold Storage Warehouseman's Association and California Association of Ice Industries.

L. B. Hayhurst, for Fresno Irrigation District,

L. B. Hayhurst, for Fresno Irrigation District, Alta Irrigation District, Consolidated Irrigation District; also Kings River Water

Association and the following constituent units, members of said Association: Alta Irrigation District, Cuthbert-Burrel Company, Consolidated Irrigation District, Corcoran Irrigation District, Crescent Canal Company, Fresno Irrigation District, Laguna Irrigation District, Lemoore Canal and Irrigation Company, District, Lemoore Canal and Irrigation Company,
Last Chance Water Ditch Company, Riverdale
Irrigation District, Liberty Mill Race Company,
Reed Ditch Company, Liberty Canal Company,
Stinson Canal and Irrigation District, Tranquility Irrigation District, John Heinlen
Company, Foothill Irrigation District.
R. B. Harris, for Consolidated Irrigation District.
Claude L. Rowe, City Attorney, for City of Fresno and the League of South San Joaquin Municipalities. palities. C. P. Cutten and Chaffee E. Hall, for San Joaquin Light and Power Corporation and Midland Counties Public Service Corporation. T. A. Hunter, for Globe Grain and Milling Company.
O. L. Everts, for Fresno Traction Company.
Jay A. Hinman and F. Emerson Hoar, for City of Bakersfield, Kern County Union High Schools, Kern County Rate Association and Bakersfield City Schools, protestants.
G. R. Kenny, for City of Fresno.
Douglas Brookman, for Standard Oil Company of California, General Petroleum Corporation of California, the Shell Oil Company, the Union Oil Company of California, and the Kettleman North Dome Association. B. H. Cory and Louis F. Leurey, for the Building Owners and Managers Association of Fresno. Rush M. Blodget, for Barnsdall Oil Company, George F. Getty, Inc., et al., Los Angeles.
J. C. Kyle, for Richfield Oil Company, Long Beach. CARR and HARRIS, Commissioners: OPINION The Proceedings. On January 22, 1931 California Farm Bureau Federation and others filed their complaint against San Joaquin Light & Power Corporation (herein generally termed the San Joaquin Company), complaining of the rates for agricultural power service. On February 14, 1931 the Commission, on its own motion, ordered an investigation of the rates of this company, thus broadening the issues to include all of the utility's electric rates.

On February 27, 1931 the Commission likewise, on its own motion, ordered an investigation of the electric rates of the Midland Counties Public Service Corporation. Acquisition by the San Joaquin Company of the properties of the Midland Company was authorized by Decision No. 23508, on March 16, 1931, but such authorization was not taken advantage of. This utility is here generally termed the Midland Company.

These three cases were consolidated for hearing. There was an order to show cause why an interim decrease in rates should not be directed and, as the result of hearings upon the order, the Commission, on April 8, 1931, by its Decision No. 23589, required certain emergency or interim reductions in rates pending the final determination of the cases. This order was based upon the conclusion expressed therein that the net earnings of the two companies for 1931 would not be less than \$5,660,000., which, under the circumstances adverted to in said order, was deemed to be excessive and to justify some emergency relief to the consumers.

Thereafter and on May 13, 1931, Fresno Traction Company filed its complaint against the San Joaquin Company complaining of the charges for street railway power, which case was consolidated for hearing with the other three cases.

Numerous public hearings were had at Fresno, oral argument has been had before the Commission in bank, and the cases are now under submission and ready for decision. In all, 47 days were devoted to public hearings; the transcript of testimony

^{1.} Using Mr. Moore's estimate of revenue in 1931 under the 1930 rates and with operating expenses as reported by the utilities, the net earnings available for return would have been \$5,617,444.

numbers 4864 pages; exhibits to the number of 151, many of them extremely voluminous, were admitted in evidence; the annual and monthly reports of the two utilities were stipulated into the record, as well as the record in Re application of Pacific Gas and Electric Company to acquire shares of Great Western Power Company of California, et al., 34 C.R.C. 661.

After the Commission had concluded a reduction in rates was possible and warranted, the parties were advised of the approximate amount thereof and special hearings were had on the questions of cost of service and spread of rates. The cases thus have been very fully presented in all of their various and differing aspects.

Nature and History of Utilities.

Both the San Joaquin and Midland Companies, like most sizable utilities, are the result of the acquisition of various small electrical utilities established in the early days of the industry, plus an extraordinary growth as the demand for electricity has increased. The San Joaquin Company serves an extensive territory in the San Joaquin Valley. In addition to a large farming or agricultural section it serves among others the cities of Fresno, Bakersfield, Merced, Madera, Sanger, Reedley and Dinuba. It has ll hydro plants and 3 steam electric generating stations having a total installed capacity of 176,775 kilowatts, of which 54,050 kilowatts are in steam plants. In addition to its electric business the Company is engaged in certain relatively minor operations, including the serving of gas in certain communities, and through a subsidiary the operation of a street railway in Bakersfield.

^{2.} The history and nature of rate proceedings affecting these two utilities are set forth in the order heretofore made directing emergency decreases in rates.

The Midland Company serves the western portion of Fresno County, the southern part of Monterey County, the entire County of San Luis Obispo, and the northern portion of Santa Barbara County. Among the principal cities in its territory are San Luis Obispo, Santa Maria, Arroyo Grande, Coalinga, San Miguel and Paso Robles. Its power is purchased at wholesale rates from the San Joaquin Company.

During 1924 and 1925 Western Power Corporation acquired stock control of the Great Western Power Company of California, the San Joaquin Company and the Midland Company, and the electric systems of the three companies have been interconnected. Even prior to this date, the San Joaquin and Midland Companies, because of a common control, were operated as affiliated corporations, the 1930 Pacific Gas and Electric Company was authorized to acquire stock control of Great Western Power Company of California and the San Joaquin and Midland Companies. In the application to the Commission for such authorization it was alleged that with the interconnection of the systems of the Great Western, San Joaquin and Midland Companies with that of the Pacific Gas and Electric Company "better use would be made of water available for the generation of electric energy, and the steam plants and transmission systems would be more effectively operated, all of which would result in the reduction of the present cost of production and distribution, and a greater insurance of continuous and uninterrupted service to the consumers of the several corporations concerned."

Since the authorization of the acquisition of stock control of these utilities by the Pacific Gas and Electric Company further interconnection between the various systems has been effected

and the several systems have been operated as a consolidated system.

Past Earnings.

Historically, the earnings of these utilities have been good. Table I shows the earnings of the San Joaquin Company from 1916 to 1931, inclusive, the figures used being taken almost exclusively from the corporation's books. The rate bases are built up from previous decisions of the Commission and the cost records of the Company, with working cash and materials and supplies on the basis usually computed.

TABLE I.

Year	: Rate Base	: Gross : Revenue	: Operating Expense	: Net for : Return	: Percent : Return
1916 1917 1918 1919 1920 1921 1923 1924 1925 1926 1927 1928 1929 1930	\$ 9,982,377. 11,237,302. 12,860,436. 14,572,779. 19,312,628. 28,589,086. 33,658,723. 36,953,931. 40,633,135. 42,911,260. 45,848,681. 53,109,268. 56,308,430. 59,755,285. 63,645,447. 66,749,657.	\$ 1,560,951. 1,776,262. 2,326,928. 2,965,244. 3,993,242. 5,187,457. 5,892,578. 6,413,420. 6,975,785. 7,254,613. 8,239,291. 8,575,963. 9,596,808. 10,454,789. 11,435,913. 11,222,748.	\$ 697,623 850,005 1,462,848 2,174,208 2,097,947 2,519,649 2,938,933 3,232,368 4,613,761 3,718,958 4,384,482 4,305,367 4,790,482 5,246,332 6,022,378 6,526,311	\$ 863,328 926,257 864,080 791,036 1,895,295 2,667,808 2,953,645 3,131,052 2,362,024 3,535,655 3,854,809 4,270,596 4,806,326 5,208,457 5,413,535 4,696,437	8.65 8.24 6.72 5.43 9.81 9.35 8.61 5.81 8.24 8.41 8.54 8.54 8.54 7.04

^{3.} The record shows the earnings of this Company are affected to some extent by water conditions. While a year of heavy rainfall increases its hydro output, it tends to decrease its sales for agricultural pumping. In the absence of peculiar circumstances the Company's return is better in a dry year than in one of normal or above normal precipitation. The 1931 return with 1930 rates would have been approximately 7.70%. As operating expenses for 1931 are those reported, they are in excess of those here found reasonable. On the other hand, 1931 was a dry year, resulting in larger agricultural power sales in the San Joaquin territory than would occur in an average water year.

Table II shows the earnings of the Midland Company from 1928 to date. 4

TABLE II.

Year	: Rate Pase	: Gross : Revenue	: Operating : Expense	: Net for Return	:Percent : Return
1928	\$4,210,084. 4,718,631.	\$1,357,182.	\$1,028,251. 1,238,259.	\$328,951. 437,435.	7.81 9.27
1930 1931	5,222,188. 5,665,655.	1,742,271. 1,780,312.	1,293,984. 1,337,553.	448,287. 442,759.	8.58 7.81

Financial Set-up.

Except for an early issue of \$11,000,000. of common stock by San Joaquin Company and an issue of \$1,000,000. of common stock by Midland Company occurring prior to the effective date of the Public Utilities Act, the properties of the two utilities are conservatively financed. As to the San Josquin Company, this \$11,000,000. par value of common stock and an additional \$2,000,000. subsequently issued is claimed by the utilities to be supported by an actual investment of \$7,050,000., due to the realization of \$1,900,000. from the last issue referred to, the cancellation of indebtedness in the amount of \$3,304,376. incident to the acquisition of stock control of this, the Midland and Great Western Companies by Pacific Gas & Electric Company, and \$1,845,957. reinvested surplus. For the Midland Company the utilities claim a common stock investment of \$688,944., said to represent a \$200,000. assessment and the balance surplus reinvested in the properties. While the exact amount of these investments may be subject to some question,

^{4.} A tabulation showing Midland's earnings from early days was not worked out and presented as in the case of the San Joaquin Company. However, an examination of the annual reports of Midlands indicates its earning history is comparable with that of San Joaquin. The 1931 return with 1930 rates would have been approximately 8.45%.

it is clear that there is a substantial investment back of these common stocks.⁵

The cost of the San Joaquin Company's bond, preferred stock, net current indebtedness and depreciation and other reserve money invested in the property does not exceed 6.2 percent. The corresponding figure for the Midland Company is 5.87 percent. If, however, the unamortized discount and expense on bonds retired, and the premium paid on bonds retired 1s added to the discount and expense on the new bonds, the cost of the San Joaquin Company money will not exceed 6.58 percent and of the Midland Company 6.27 percent.

The earned surplus of the San Joaquin Company has been built up from \$960,199.30 as of December 31, 1913 to \$5,142,599.70, of which \$845,000.00 has been appropriated for additions and betterments and \$4,297,599.70 remains a credit to profit and loss. The Midland Company has increased its surplus from \$3,085.70 as of December 31, 1913 to \$735,592.89 as of December 31, 1931. The San Joaquin Company, in addition to paying its preferred stock dividends, has paid upon its \$13,000,000.00 of common stock, dividends at the annual rate of 5 percent for 1928; 8 percent for 1929; 8 percent for 1930; and 6 percent for 1931. The Midland Company paid dividends on its \$1,000,000.00

^{5.} Building up an equity to support its preferred stock was recognized as essential and required by the Commission in Re San Joaquin L. & P. Corp., 24 C.R.C. 377.

^{6.} In Re San Joacuin L. & P. Corp., 28 C.R.C. 864, the Company's request to not be required to charge to profit and loss the debt discount and expense and premiums on bonds retired was granted in somewhat guarded language, the Company not being required to write off "forthwith" these amounts. Mr. Fankhauser of the Commission's staff testified that in his opinion this item "should not be added to the cost of the new bond money."

of common stock at the rate of 5 percent for 1927; 8 percent for each of the years 1928, 1929 and 1930; 6 percent in 1931, and 4 percent in February of 1932.

Economic Condition of Territory.

The territory served by these two utilities has been undergoing a process of economic readjustment. Largely agricultural in character, it has suffered severely from depressed prices for farm products. The extremely low level of these prices has forced agriculture to readjust its basis of production costs. Farm labor has fallen in many instances to 20 cents an hour. Other production costs have been greatly lowered. In some of the counties even taxes have been forced down. What is true of agriculture is likewise true in the cities. Rents have declined. Business has been forced to reduce expenses. Retail prices have Electricity alone has maintained its price level. As to earnings, there was much evidence as to their absence. During the readjustment period nearly all businesses have been glad not These utilities, on the other hand, have not to lose money. suffered severely from the business depression. They have not undergone a process of readjustment comparable with other businesses in the territory. All estimates of the future were made on the assumption there would be no reduction in personnel or salaries or wages.

^{7.} In March, 1931, the utilities, by one of their witnesses, submitted a portfolio of investments in industries in the San Joaquin Valley claimed to offer a less risk than an investment in the San Joaquin Company. In the time elapsing since its submission the securities comprising this portfolio have depreciated greatly in value, actual changes in market quotations having demonstrated that they were in no sense comparable with the securities of the San Joaquin Company, which have suffered a relatively small decline in market quotations, indicating their stability and standing with investors.

Comparison of Rates.

Rather full comparisons between the rates charged by the two utilities and those charged by other major electric utilities in California were made, indicating that their rates for agricultural power are generally lower than those prevailing in the State, while their other rates are on a higher level.

General Considerations Affecting Future.

Were the operations of these utilities during the last few years to be taken as a test or measure of what their operating results would be in the future and with the reasonableness of the rate level tested by the basis usually followed by this Commission the conclusion would naturally follow that their rates could and should be reduced. The problem before the Commission, however, is not so simple as this. Water conditions affect not only the volume of agricultural power sales but the source and cost of power generated and purchased. General business conditions have their influence on sales. And so in addition to the usual comflicting claims and evidence as to rate base and value, depreciation and operating expense, the record contains varying and divergent estimates of the future dependent upon water conditions and, in lesser degree, business conditions, as well as to the treatment of the basis of intercompany charges for power produced by the Pacific Gas & Electric and Great Western Power Companies on their systems and furnished to the San Joaquin and Midland Companies.

These views as to the future are shown in the following Tables III and IV, Table III dealing with the San Joaquin Company, and Table IV with the Midland Company. The figures in columns 1, 2, 3, 6 and 7 of Table III (except as to rate base) were prepared in advance of the oral argument and at the argument were

accepted as correctly indicating the operating results upon the theory or basis upon which severally predicated. Columns 4 and 5 and the rate base figures therein and the rate base figures in columns 1, 2 and 3 were developed at the argument. Column 5 of Table III represents a setup, certain items of which were not consistent with each other, the deduction of accrued depreciation in arriving at a rate base requiring the use of a different and substantially higher figure for depreciation expense than used in the other columns where the sinking fund basis is employed. Table IV is self explanatory.

^{8.} Under the sinking fund basis of allowing for depreciation expense accumulations in the reserve augment the annual amount drawn from current revenue by interest thereon. As the accumulations are invested in the property a return is allowed on this, which negatives the idea of deducting accrued depreciation from the cost of the property in arriving at a rate base. Where deduction of accrued depreciation is made a straight line basis of computing depreciation expense is usually followed. Using the lives suggested by Mr. Kenny, the City's engineering witness, the resultant straight line depreciation expense comparable with the figure of \$951,550. used in column 4 is such that the rate of return shown in the City's set-up would be reduced from 8.6% to between 7% and 7½%.

SAN JOAQUIN LIGHT AND FORER CORPORATION ESTIMATES OF RESULTS OF OPERATIONS

1	S.J.L.&P.Cor	p. IS	J.L.&P.Cor	p. (S.J.)	L.&P.Cor	p.:	City of	:Calif	· Farm:	Mott	1	Mott
1	Du rfey	ŧ	Moore	: 1	ero ob	3	Fresno	: Bu	reau ;	Ex. No.111	: Aver	age Year
	1932 Year	1	Wet Year	IAVen		r t	Average Year	Avera	ge Year:	Average Year	150-50	Tie Line
A TARANTA	(1)	2	(2)	:	(3)	1	(4)	: (5) ;	(6)	1	(7)
SEAFAIRE	_									• •		• •
Lighting,	\$ 3,131,5	00 •	\$ 3,131,50	30. \$	3,131,5	00.	\$ 3,135,000	. \$ 3,	119,000.	\$ 3,119,000	. :	3,119,000
Heating and Cooking,	950,0	00.	950,00	00.	950,0	00.			949,200,			949,200
Agricultural Power,	3,169,8	85.	3,169,88	35.	3,681,6	00.			190,000.			3,894,58
Other Power,	3,301,1	89.	3,301,18		3,303,5				314,200.			3,314,20
Total Electric Revenue,	\$10,552,5	74.	\$10,552,57							\$11,276,980		1,276,98
Miscellaneous Operating Revenue,	42,0		42,00		42,0	00.	40,000		43,600			
Total Operating Revenue,	\$10,594,5		\$10,594,57							\$11,320,580		43,600 1,320,580
PERATING KOPENSE:											•	•
Production Expense:												
Production Expense,	\$ 464,0	ω.	\$ 464,00	νn. δ	473,00	∞	å 440 000			A 103 500		
Tie-Line Purchase,	1,000,50		1,090,50						-	\$ 431,300	•	431,300
Other Purchased Power,	1,005,0		1,005,00		1,122,76				•	604,650		870,60
Total Production,	\$ 2,559,6				857,00		760,000		~	872,000		872,00
Transmission Expense	144,00		\$ 2,559,50 144,00	/U≱ apr	244 00	00 \$	# T'80A'000			\$ 1,907,950		3,173,900
Distribution Expense, (13210		144,00	∨ •	144,00	<i>N</i> •	135,000		147,000.	147,000		147,000
Utilization Expense,	625,00	ю.	607,50	0.	607,50	00.	623,000		559,800.	, .		559,800
Commercial Expense.	326,00		326,00		•		•		69,200,	69,200		69,200
New Pusiness Expense,	190,16		190,16		326,00		330,000,		326,800.	326,800		326,800
General and Miscellaneous Expense,	497,65	-	•		190,16		175,000		170,850.	170,650		170,650
Uncollectible Revenue,	42,00		497,65		497,65		458,000		349,124	349,124		349,124
Sub-total.			42,00		42,00		42,000		22,600.	22,600		22,600
out-totals	\$ 4,384,3	101	\$ 4,366,81	o, ş	4,260,07	/b.	\$ 3,572,500	\$ 3,6	330,764.	\$ 3,553,124	\$ 3	,819,074
Net Before Depreciation and Taxes,	6,210,28	9.	6,227,75	9.	6,848,59	0.	7,672,500	7,8	85,236.	7,767,456	. 7	,501,506
Depreciation Annuity,	1,112,00	0.	1,264,94	9.	1,264,94	a.	951,550		77,399.	•		•
Taxes,	983,00		967,00		1,033,82		1,019,500			977,399,		977,399
Sub-total,	\$ 2,095,00		\$ 2,231,94						24, 983	\$ 2,079,352		070,039
NET AVAILABLE FOR RETURN,	\$ 4,115,25	9.	\$ 3,995,81	-						\$ 5,688,104	_	454 060
RATE BASE,	\$79,263,90	1.	\$79,263,90							\$69,000,000		,454,068
RATE OF RETURN - PER CENT,	5.19		5.04	- #	5.74	-•	8,60		.49	8.24	* \$08	7,90

TABLE IV. MIDLAND COUNTIES PUBLIC SERVICE CORPORATION. ESTIMATES OF RESULTS OF OPERATION.

	Moore Exh.83	: Mott Exh. 111
	Average Year (1)	: Average Year. (2)
REVENUES		
Lighting,	\$673,500	\$684,900
Heating and Cooking,	244,000	246,500
Agricultural Power,	274,000	298,200
Other Power,	650,200	662,850
Total Electric Revenue,	\$1,841,700	\$1,892,450
Misc. Operating Revenue,	3,000	3.000
Total Operating Revenue,	\$1,844,700	\$1,895,450
OPFRATING EXPENSES		
Purchased Power,	800,000	802,000
Transmission Expense.	20,000	20,000
Distribution Expense)	•	91,650
Utilization Expense)	103,000	14,775
Commercial Expense,	63,000	64,500
New Business Expense.	50,580	43,800
General & Misc. Expense.	70,236	55,838
Uncollectible Revenue	6,000	2,850
Sub-total	\$1,112,816	\$1,095,413
Net before Depreciation		
and Taxes,	\$731,884	\$800,087
Depreciation Annuity,	145,223	139,507
Taxes,	149.000	161,709
Sub-total	\$294,223	\$301,216
NET AVAILABLE FOR RETURN,	\$437,661	\$498,821
Ma.k. 1		
Rate base -	\$7,102,368	\$6,200,000
Rate of return - per cent,	6.16	8.05
•		

Basis of Testing Rates.

It is appropriate at this point to refer to the basis heretofore usually followed by the Commission in testing rates of utilities of the general character of these. This basis, together with the results of its use, were reviewed in Re Los Angeles Gas & Electric Co., 35 C.R.C. 443, where it was said:

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

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

The utilities, the California Farm Bureau Federation, the City of Bakersfield, and the staff of the Commission all urge adherence to this basis, each apparently recognizing its greater simplicity, stability and definiteness as contrasted with the so-called fair value basis. In the position thus assumed

by the parties runs the thought that as to those utilities which have accepted and operated under this basis over a period when the "fair value" basis might have resulted in higher rates and greater earnings it would be unfair to change from one to another now that price levels have dropped and are dropping.

The evidence in these cases excellently illustrates the greater stability and simplicity of the basis heretofore generally followed as contrasted with the "fair value" basis.

There is before the Commission here the recorded costs of the property as to which there is little or no controversy because the records of the utilities have been kept for 20 years under prescribed accounting rules, and nearly all of the property has been installed during this time. On the other hand, there are estimates of what it might or should have cost to install the structural property, being somewhat higher than the corresponding recorded costs; there are estimates of present day land values, of cost to reproduce the rights of ways, of what it would cost to reproduce the structural property under assumed construction programs and under average prices of the period of 5 years prior to Jume 30, 1931, the current prices of Jume 30, 1931, the current

down, switch now to reproduction cost if the result would be a further depression of rates."

Mr. Jay A. Hinman, appearing for the City of Bakersfield, in the course of his oral argument before the Commission in bank, said: "I certainly wish the Commission would entertain a motion to throw out the Power Company's appraisal and also the one made by the Commission and take the books of the Power Company." The Farm Bureau Federation, in the oral argument by Mr. J. J. Deuel, submitted a proposed set-up, incorporated in column 5 of Table III, using a rate base of \$69,000,000., which is identical with that submitted by Mr. Mott built up on the recorded cost basis. The only divergence among those arguing the case before the Commission was in the case of the City of Fresno which submitted a rate base for the San Joaquin Company constructed on the theory that the cost to reproduce the property new would not exceed the recorded cost with lands at present day values, that there should be deducted from the recorded cost the amount of the depreciation reserve, and that there should then be added an amount of from \$4,000,000. to \$6,000,000. for going concern.

prices of December 31, 1931, as well as other <u>estimates</u> on still other hypotheses, all differing widely under the varying assumptions upon which based. There were, too, <u>estimates</u> of working cash capital and materials and supplies and <u>estimates</u> of going concern value.

The following table lists the recorded costs and the various <u>estimates</u> of cost, all as of June 30, 1931 unless otherwise indicated:

TABLE V.

TABULATION OF VARIOUS FIGURES AND ESTIMATES BEARING ON RATE BASE AND VALUE.

Item		San Joaquin Light & Power Corporation	
ı.	clusive of land, rights of way and materials and supplies, (a) Recorded cost -	\$65,413,065.	•
	(b) Historical cost, an <u>estimate</u> (Ryan) -	68,114,362.	5,823,547.
2.	Cost of reproduction new, Item 1, (a) at average prices of preceding 5 years, an		
	estimate (Ryan) - (b) book cost (Kenny) * (c) at prices as of June 30,	70,783,401. 65,413,065.	5,960,278. -
	1931, an <u>estimate</u> (Dufour (d) at prices as of December 31,1931, an <u>estimate</u>) 61,361,023.	4,815,365.
	(Dufour) -	60,381,357.	4,703,223.
3.	Cost of Item 1 on assumption prices as of June 30, 1931 pre- vailed throughout the time property was actually construct	ed,	
4.	an estimate (Durour) -	61,192,923.	5,079,703.
•	(a) Recorded cost (McAuliffe) (b) Market value	428,331.	23,100.
	<u>Estimate</u> (Brown) - <u>Estimate</u> (McAuliffe)-	611,878. 523,127.	33,509. 30,737.
5.	Rights of Way, (a) Recorded cost - (b) Cost to reproduce	286,091.	9,770.
	<u>Estimate</u> (Brown) - <u>Estimate</u> (McAuliffe) -	645,258. 490,460.	106,157. 84,622.
6.	Working Cash Capital, 1932, (a) <u>Estimate</u> (Durfey) (b) <u>Estimate</u> (Brown)	1,457,000. 278,917.	241,612. 83,113.
7.	Materials & Supplies, 1932, (a) Estimate (Company)** (b) Estimate (Brown)	487,200. 255,000.	77,450. 50,000.
8.	Going Concern Value, (a) <u>Estimate</u> (Jacobs)	7,500,000.	600,000.

^{*} Mr. Kenny estimated that the reproduction cost would not exceed the book cost.

^{**} Includes entire revolving stock of meters and transformers.

No one can consider these various estimates without being impressed with the unsatisfactory nature of many of them and their fallibility in determining a base upon which the utilities should be permitted to earn a given return. Values at this time are unstable and sometimes evanescent. They are changing from year to year and from month to month. Estimates such as some of those made are of little assistance in arriving at a reasonable figure as to value. It is a matter of common knowledge, and was referred to frequently at the hearings, that commodity prices have been declining rapidly. Labor costs, either through wage changes or higher efficiency, are not what they were a short time ago. So called intangible values under the encounter with actuality no longer enjoy the status or good name they did in the Under these circumstances it is not strange that as the hearings proceeded and the various estimates were submitted to scrutiny that so many of the parties turned to the tangible and definite items of cost and urged that these, with certain varying additions, be made the bases upon which return should be measured.

The reasonableness of present rates and of the rates herein prescribed will be tested under the basis usually followed, but at the same time this Commission will be solicitous to see that such rates are not confiscatory or unreasonable when tested by the "fair value" standard or basis.

Before expressing the findings and conclusions of the Commission some of the more important issues presented by the testimony should be considered. To discuss all of the differences in estimates would unduly and unnecessarily prolong this opinion.

Revenue.

There was general agreement by all witnesses that

rates should be fixed upon normal or average year conditions.

Some, but surprisingly small, differences as to probable future revenue in such a year developed. Most of this is found in the estimates of agricultural power revenue for the San Joaquin Company. As to that the differences range from Mr. Moore's figure of \$3,681,600. for the San Joaquin Company to the Farm Bureau's \$4,190,000. The Commission's staff estimated \$3,894,580. and the City of Fresno, apparently rounding out this figure, urged \$3,900,000.

These differences are attributable largely to a somewhat varying concept of a normal or average year. Mr. Moore took the year 1927 as representing his idea of a normal water year and translated 1927 usage to 1932 estimated load. The Irrigation Districts, speaking largely through Mr. George L. Swendsen, Chief Engineer and Manager of Fresno Irrigation District, emphasized the idea of usable water in the irrigation canals, urged that 1927 was a year substantially above normal as to precipitation and that the character of the rumoff was such as to provide a greater than normal amount of usable gravity water, thus lessening the amount

^{10.} The utilities through Mr. Moore, their executive engineer, presented an estimate for the San Joaquin for 1932 based upon the assumption water conditions would be like those of 1922, a year of heavy rainfall, which estimate is reflected in columns 1 and 2 of Table III. However, Mr. Moore was of the opinion that permanent rates "should be based upon normal conditions for the future." That normal conditions furnish the proper basis was the holding of the Commission in Re Los Angeles Gas & Electric Co., 35 C.R.C. 443. A three judge statutory Federal court on April 8, 1931 upheld the Commission's order and sustained the use of a normal year for establishing rates for the future.

ll. Excluding agricultural revenue, the estimates of Mr. Moore of revenue for the San Joaquin Company was \$7,427,065., being about \$1000. higher than that of Mr. Crenshaw of the Commission's staff and of the Farm Brueau Federation, which adopted Mr. Crenshaw's estimate, their estimates being \$7,426,000. The City of Fresno offered the lower figure of \$7,345,000.

^{12.} This figure offered by the Farm Bureau does not appear in the record but was developed at the argument by taking Mr. Wehe's estimate of connected load, the highest one made, and applying to that the estimate of usage made by Mr. Wing, the Farm Bureau's engineer, that too being the highest one presented.

of pumping necessary. There were sharp differences as to the period to be used in determining an average year, Mr. Swendsen and Mr. Kaupke, Kings River water master, questioning the accuracy and reliability of some of the earlier records as a basis of computation. Mr. Wehe, an engineer on the Commission's staff, made a very thorough study of the water conditions affecting agricultural load. In some districts rainfall and in others river runoff were, according to his testimony, the most important factors. While in reaching his final result he gave some weight to improved agricultural conditions, it is apparent from his cross-examination that this factor had but little influence on his final conclusion.

In resolving the issue presented by these estimates of agricultural revenue the estimates of K.W.H. agricultural power sales are important. The three figures best substantiated are those of Mr. Moore, 262,325,000 K.W.H.; Mr. Swendsen, 300,712,000 K.W.H.; and Mr. Wehe, 284,622,000 K.W.H. Mr. Moore's estimate is subject to the criticism that 1927, as clearly shown by the record, was a year reflecting better than normal or average water conditions. Mr. Swendsen's estimates on districts outside of the Kings River area are not as persuasive as those of Mr. Wehe. On the other hand, Mr. Swendsen's intimate knowledge of the Kings River area lends great weight to his conclusions respecting that section. A careful consideration of the record justifies the use of the figure for agri-

^{15.} References are made from time to time in this opinion to individual engineers on the Commission's technical staff who testified on a particular issue. It should perhaps be said that the engineers in the Gas and Electric Division, in quite an unusual degree, worked together under the direction of Mr. Claude C. Brown, head of that Division, and that estimates and opinions given by them individually in large measure reflect the matured judgment of all.

^{14.} On a 36 year average total flow of Kings River, 1927 was 115%, and on a 59 year average (taking the questionable figures for the earlier years) 1927 was 109%. As to Kern River, 1927 was 111% of the average. As to precipitation, 1927 was 115% of normal, as disclosed by records of 11 valley stations, and as to Crane Valley, a mountain station, was 109%.

cultural sales by the San Joaquin Company for an average year of 290,000,000 K.W.H. with correspondingly increased revenue.

Production Expense.

After Western Power Corporation acquired stock control of the Great Western, San Joaquin and Midland Companies the three systems were interconnected. While some power was sent to the north the main and constantly increasing movement was to the south. The inter-company basis of settling for power furnished was expressed in an exchange of letters and memoranda by the engineers and while altered in minor particulars, until April 5, 1930, just after the Pacific Gas & Electric contracted to acquire stock control of the three companies, was substantially as follows: northern and southern companies each bore one-balf of the fixed charges of the tie line connecting the two systems. The receiving company bore the out-of-pocket costs of the sending company. There was then calculated the theoretical saving to the receiving company as between this arrangement and the cost the receiving company would have had to incur had it installed its own facilities of sufficient capacity to meet its requirements. This saving was split equally between the two.

On April 5, 1930, only a week after the Pacific Gas & Electric Company had entered into the contract to acquire stock control of the Great Western, San Joaquin and Midland Companies, the engineers of the Great Western and San Joaquin Companies by memorandum modified the tie line arrangement so as to "share the fixed charges and operating expense of the tie line on a fifty-fifty basis, but to give to the producing company two-thirds of the savings for the power in question, and one-third of the savings to the receiving company." In the memorandum it was said a continua-

tion of the charges on the fifty-fifty basis "will work as a handicap to the receiving company's normal construction program * * *."

It was under the arrangement as thus modified that tie line expense for the future was estimated by Mr. Moore.

Mr. Mess, an engineer on the Commission's staff, after a thorough study of the operations of the consolidated system recommended that the inter-company charge should be calculated on a demand and energy basis, the San Joaquin Company in addition to paying \$120,000. a year for its share of tie line expense to pay a demand charge of 75 cents per K.W. per month up to 75,000 K.W., and 85 cents per K.W. for all over 75,000 K.W., with a monthly minimum demand charge of \$34,000. The energy charge recommended was \$.00150 per K.W.H. for the first 29,000,000 K.W.H., and \$.00195 per K.W.H. for all over 29,000,000 K.W.H. This basis of computing the cost of tie line power almost halved Mr. Moore's estimated cost.

While Mr. Mess's recommendations and the reasons therefor are most persuasive, the effect of their adoption would be to shift from San Joaquin and Midland consumers to Pacific Gas & Electric and Great Western consumers a charge of between five hundred and six hundred thousand dollars in an average year. This Commission is not prepared to go this far in the absence of any hearing for the real parties in interest, to-wit: the consumers of the northern companies. However, the northern consumers will have no just cause for complaint if tie line charges are computed and allowed for

^{15.} Mr. Moore, the utilities' executive engineer, testified the change had been under consideration for several months and that its consummation at this particular time was a mere coincidence.

^{16.} There are now on the Commission's calendar proceedings involving the electric rates of the Pacific Gas & Electric and Great Western Companies. Any reduction in cost of tie-line power to the San Joaquin Company would work a corresponding reduction in the revenue of the northern companies.

on the basis prevailing prior to the time Pacific Gas & Electric Company contracted to secure stock control; and this is the basis here adopted and used in estimating reasonable production expense for an average year, appropriate adjustments being made to correspond with the increased agricultural sales found reasonable herein. San Joaquin and Midland consumers, on the other hand, could justly complain at being made to suffer the disadvantage to them of the April 5, 1930 change in the tie line arrangement occurring coincidentally with a consolidation which was represented to be beneficial to all the companies and their consumers.

Under the Federal Water Power Act, the San Joaquin Company is apparently subject to a headwater charge in favor of Southern California Edison Company. The amount to be charged is in controversy. The Commission's staff in estimating for the future included the sum of \$54,000., being substantially the amount set aside by the Company in 1931 for this item. There is no basis upon which this requirement may be accurately estimated but the utility is currently setting aside \$6,000. a month, which sum will be allowed in the present proceeding.

Other Operating Expenses.

A great many differences developed in the various estimates of operating expense, many of a minor nature, a few more important. These utilities clearly passed all reasonable bounds in their donations and contributions. Eliminations are made here. A service charge to the Pacific Gas & Electric Company, first established by a letter of May 4, 1931 and made retroactive to January 1st of the same year, has not been justified under the rule of Smith v. Illinois Bell Telephone Co.. 282 U.S. 133.

A slightly larger allowance on account of uncollectible bills is made than was recommended by the Commission's staff.

Cost of inventories and valuations which the Company urged should be spread over a five or ten year period, and which was eliminated by Mr. Mott in his estimate, must be allowed. The cost, however, should be spread on a ten year basis. 17 This item is included with great reluctance and solely upon the ground that this expense has been allowed in the past by this Commission without question. The management of these utilities was called upon to meet a complaint by the Farm Bureau Federation and proceedings instituted by the Commission on its own motion affecting their whole rate structure and had a reasonable discretion in determin-The one they did take in prosecuting ing the steps to be taken. an inventory and valuation was not out of the ordinary as rate proceedings go and although it may have proved to have been illadvised it cannot here be said to have been in excess of a reason-From now on, utilities, when considerable managerial discretion. ing the incurring of expenses of this character, should take notice that the amount and necessity therefor will be most carefully scrutinized.

Depreciation Expense.

The sum reasonably required to be provided annually to care for the accruing depreciation in these properties received careful and exhaustive study upon the part of Company and Commission engineers. As to the basis, all groups agreed that the six percent sinking fund method should be used and the annuities so determined applied to the cost of the depreciable property to find

^{17.} The Company in its estimates spread the cost of the rate cases as distinct from the cost of the inventory and valuation over a five year period. Mr. Mott in his exhibit spread this over a three year period, on the theory that rate proceedings generally develop oftener than once in five years.

the amount to be included in annual operating expense. Some differences of opinion developed with respect to the service lives to be used, the major differences appearing in the accounts for sub-station switchboards and poles and fixtures. Aside from questions of amortization, the total difference between Company and Commission engineers is measured by the sum of approximately \$167,500.

Mr. J. S. Moulton, for the Company, presented an elaborate and painstakingly prepared exhibit devoted largely to an explanation and application of the methods currently used by life insurance actuaries in computing mortality tables for human beings to such classes of San Joaquin property as he believed lent themselves to such methods of analysis. It was in those accounts where Mr. Moulton applied the mortality method of analysis that the principal differences developed between his conclusions and the conclusions of Mr. John Cooper of the Commission's staff. Mr. Cooper's conclusions were based principally upon an extensive inspection of the property coupled with an analysis of the depreciation records of the Company, which are unusually complete and informative, and the experience of other California utilities operating comparable properties.

With respect to the use of the mortality method, while its validity is not questioned in certain instances, the following observation seems pertinent in viewing the property under consideration:

"In view of these natural changes in character of equipment and conditions of service, mortality curves based upon the past records of equipment may not give accurate pictures of what may be expected in the way of service of newer equipment — equipment used to replace old items as they are retired. However, these records should indicate the general trends, and when intelligently interpreted, offer an exceedingly valuable guide for the estimation of the service which may be expected from physical equipment.

published mortality curves and tables cannot take the place of expert judgment. Each individual item must

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be considered in the light of its present condition, character of service, and relation to present and probable future art of manufacture. P. 6.18

Mr. Cooper's conclusions were subjected to extensive cross-examination, covering the better part of a day, by able counsel, yet his results were not shown to be unreasonable and from a careful study of the record this Commission is of the opinion that the service lives which he recommended are appropriate for use on the San Joaquin and Midland systems. However, with respect to the Betteravia steam plant, which has not been used since 1924, and there being no prospect of its future use, the San Joaquin Company should be permitted to include in operating expenses spread over a five-year period the difference between the cost of the plant less salvage, and the balance in the depreciation reserve applicable thereto.

Rate Base.

In determining upon a rate base for use here the questions of real importance lie in the utilities' claims (1) that recorded cost figures should be augmented by approximately \$1,158,465.00 for the San Joaquin Company, and \$145,564.00 for the Midland Company on account of interest during construction, (2) that working cash capital as usually computed should be increased to allow for all energy furnished but not paid for, and (3) that meters and transformers in stock should all be included in fixed capital instead of being carried partially in materials and supplies and the remainder as construction stores upon which interest during construction is added. These three claims deserve special mention. The other differences are relatively unimportant.

^{18.} Life Characteristics of Physical Property, Winfrey and Kurtz, 1931, Bulletin 103, Iowa Engineering Experiment Station.

Interest During Construction.

The utilities' claim is based on the contention that money had to be available on the average for three months in advance of construction and that this fact was not taken into account These utilities in computing interest charges over the years. have always included interest in construction cost. charges and allocations the accounting officers were guided by an accounting committee which, according to the testimony, considered each question of accounting as it arose and decided it upon the merits, not favoring any account or class of accounts. The management never over-rode the recommendations of the committee. The rate of interest was changed from time to time as the cost of the money employed varied. The attention of responsible officials was clearly directed to these charges. In contrast with these determinations made at the time there was the testimony of Mr. Ryan that in his opinion a sufficient sum for interest had not been charged. 19 Furthermore, the rate of interest charged was based upon the cost of bond and preferred stock money only. No account was taken of money from the reserves and from short time borrowings having a lower cost; and it was only for a relatively short time that the utilities had funds on hand in advance of construction, the evidence indicating that prior to about 1922 they were usually short of current funds for construction purposes. From 1925 they were supplied with funds as needed by the holding The weight of the evidence is strongly in favor of the company.

^{19.} Mr. Ryan's theory as to interest apparently did not impress itself greatly upon the officials of the utilities as Mr. Moore, executive engineer, in presenting his estimate of 1932 additions and betterments when asked if their estimated cost reflected Mr. Ryan's idea as to interest during construction or was in harmony with the basis of charging interest theretofore employed answered "So far as I know, it is according to the method we have heretofore followed."

correctness of the charges made from time to time by the responsible accounting officers.

Working Cash Capital.

The differences as to the amount of working cash capital to be added to the rate base are attributable rather to varying theories than to differences in opinion as to the actual, practical needs of the utilities in the conduct of their operations.

Mr. Brown, the Commission's gas and electric engineer, estimated that \$278,917.00 for the San Joaquin and \$83,113.00 for the Midland would be adequate. These figures were arrived at by taking one-twelfth of the cost of fuel, water and purchased power and one-sixth of the remaining operating expenses (taxes, depreciation and uncollectibles excluded) less one-quarter of the state taxes.

Mr. Durfey, Vice-President and Assistant Secretary and Treasurer of the utilities, estimated prepaid expenses for the San Joaquin Company to be, on the average, \$14,500. and static cash between \$75,000. and \$100,000. As these utilities handle taxes it would seem that the prepaid expense must average higher. than this. In view of Mr. Durfey's testimony and making allowances for taxes, Mr. Brown's estimate would seem to provide all of the working cash capital necessary to carry on the utilities' operations. No inclusion in the rate base for this item is made on the basis of energy sold but not yet paid for. The amount so computed and claimed for this item represents much more than mere cost, including as it does return and other items for which the investors did not advance funds. If a utility is permitted to earn on a working cash allowance sufficient to meet its ordinary requirements under its customary plan of operation it has no just cause for complaint.

Materials and Supplies.

Materials and supplies are allowed for in Mr. Brown's estimate on the basis stocks on hand are now allocated as between construction and operation; and sufficient grounds are not here presented for departing from the existing practice.

Going Concern Value.

The utilities claimed a going concern value for the San Joaquin Company of \$7,500,000., and for the Midland Company of \$600,000. The evidence in support of these claims was weak and failed to substantiate any such values. Were some moderate amount added to the rate base or included in fair value because of this intangible it is clear there would have to be modifications in the operating expenses allowed which would leave the overall result substantially unchanged. The witness who testified to going concern value very frankly admitted that if this intangible value were recognized and reflected in the capital accounts it would increase year by year because of certain costs treated as operating expense, being principally new business expense 20 and that it would be appropriate and logical to eliminate these costs from operation and treat them as capital accounts. By allowing these costs as operating expense, the allowance of an increased land value, the non-elimination in rate base and fair value of property over built, costs of surveys, and investigations of projects abandoned and in the return allowed, any going con-

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^{20.} The historical cost of developing the DUSINESS Of the San John Company was \$2,175,496.46 and of the Midland Company \$384,474.72.

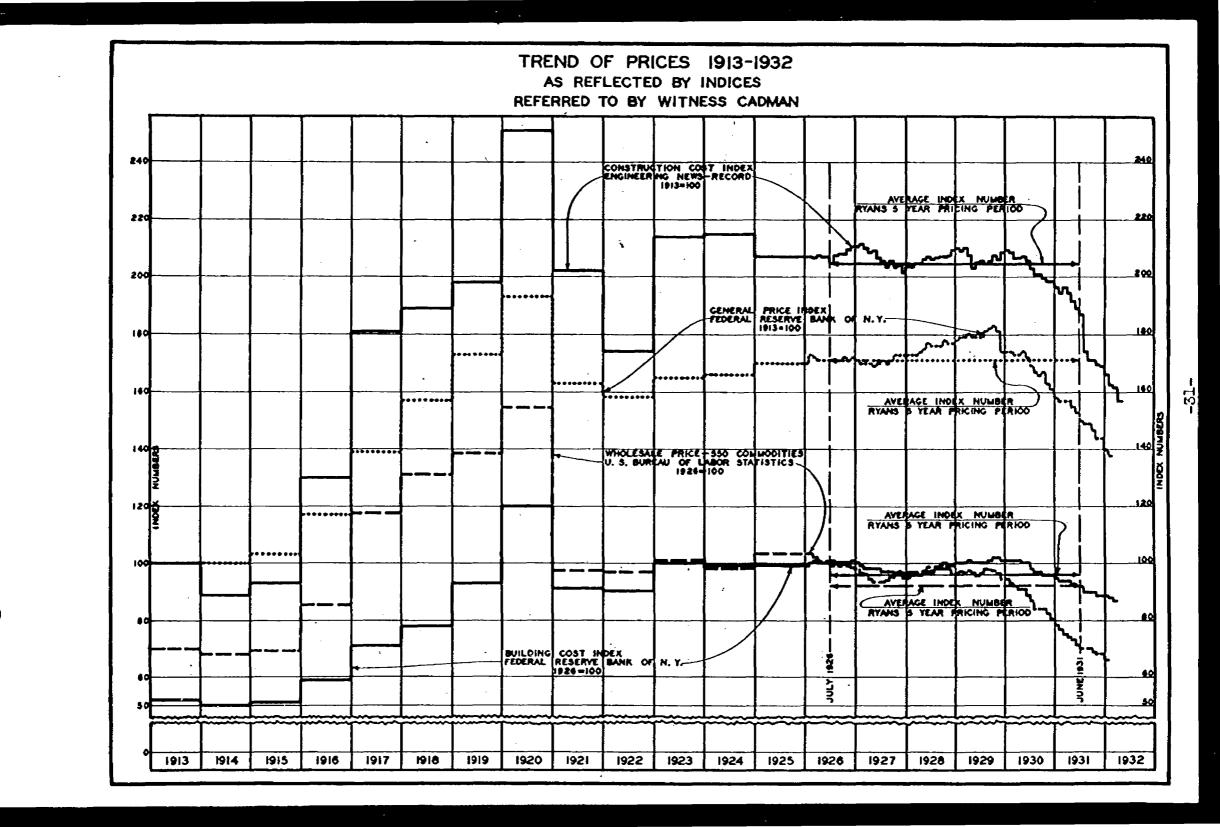
^{21.} It should be noted that the recorded cost of these properties includes all items which the utilities throughout their history believed should be added to capital. Certain of these expenditures were of the nature of development costs such as surveys and engineering studies which did not culminate in the construction of property, expenditures made far in advance of existing construction, such as roads above Balch, construction in excess of presently existing needs or use, such as the Balch tunnel, the entire cost of structures now only used to a limited degree, and property not now performing any useful service.

cern value in the property is fully recognized and cared for.

Fair Value.

In December, 1930, an inventory and valuation of the utilities' properties was authorized by their management and Mr. Ryan, valuation engineer of the Pacific Gas & Electric Company, was placed in charge of the work. What was thus authorized involved an expense of approximately \$230,000.00, greatly extended the duration of the hearings and resulted in and occasioned most of the various estimates listed in Table V, which were presented only at the close of 1931 and the first part of 1932. During the continuance of this work and since, the economic structure of the nation has undergone such changes as to have made many of the results obtained through the employment of methods prevalent in a more settled era entirely out of harmony with conditions as they exist at present. Mr. Ryan, using a time average of prices prevailing from July 1, 1926 to June 30, 1931, estimated the replacement cost of the structural. property, 85% of which has been installed since 1915 and much of it when price levels were at their highest, to be substantially. in excess of its actual cost. 22 The following chart showing commodity and construction price fluctuations over a period of years as reflected in recognized indices fully described and authenticated as to reliability by the utilities' witness, Dr. Paul Cadman, emphasizes the danger of reaching an absurd result by attaching much weight to estimates of this character.

^{22.} Had he used copper prices as of June 30, 1931 as developed by him, his reproduction new valuation would have been some \$2,000,000.00 less.



No estimates were presented by the utilities as to the amount of accrued depreciation in their properties. The depreciation reserves on December 31, 1931 were, for the San Joaquin Company \$9,762,970.00, and for the Midland Company \$974,375.00. These are the smallest figures which may be assumed as representing accrued depreciation.

Under the record there is no reasonable ground for concluding the fair value of the property to be in excess of the rate bases here found, less the amounts of the depreciation reserves. This being so, it cannot be said that rates fixed upon the basis usually followed would involve any element of confiscation or trench upon any rights of the utilities under the Federal constitution.

These Utilities for many years have in practice handled depreciation on a sinking fund basis. Annual operating expense charges have been thus figured on their books, in their annual and monthly reports to the Commission, in their reports to stock-holders and in their setups for financing. Moneys accumulated in excess of annual retirements have been credited to the depreciation reserve and invested in the property. Interest at 6% on the reserve has been credited and has thus augmented the annual expense allowance or charge. This has been possible because a return has been allowed upon reserve moneys thus invested. There was no serious contention that the long established practice of handling depreciation in its various aspects should be altered either in practice or for the purpose of testing rates. If the base upon which a return is calculated is, for instance, found to be the cost of replacement of the property less accrued depreciation, the annual expense of depreciation must be allowed for on a basis different from that followed by the utilities in practice. The amount necessary for return would be less while the amount for annual depreciation expense would be greater. However, by allowing a return on "fair value" plus accrued depreciation and by allowing the annual expense of depreciation on a sinking fund basis it is possible to compare with accuracy the earning position of the utilities on the basis usually followed by the Commission in testing the reasonableness of rates with their earning position on the so-called "fair value" basis generally employed by the Federal courts in passing upon the question of confiscation. deed, under the record here this is the only practical way in which such a comparison may fairly be made.

Rates for Future.

While rates are here fixed for the future calculated to yield under normal or average conditions a reasonable return on the rate base, as well as upon the fair value of the property, the Commission has given careful consideration to the earning position of the utilities in severe and abnormal years, such as it is claimed 1932 may be, particularly for the San Joaquin During recent years, when the agricultural load has been unusually large because of dry years, these companies have enjoyed a high return, and when the severe year comes they should not expect to realize as large a return. Otherwise, it would result that rates must be fixed upon the most severe conditions.24 Under the rates prescribed, even if 1932 is as severe a year as claimed it may be, these companies should earn their fixed charges and preferred stock dividends as well as a moderate amount on the equity behind their common stock. Earnings on a level such as contended for by the utilities seem almost grotesque when viewed against the background of economic distress prevalent in the territory they serve.

^{24.} The establishment of reserves to protect revenues against undue fluctuations because of climatic changes has long been looked upon with approval. (Re So. Calif. Edison, 19 C.R.C. 595, 922; Re Los Anceles Gas & Elect. Co., 32 C.R.C. 379; Re Los Anceles Gas & Elect. Co., 35 C.R.C. 443. In a way the building up of a substantial surplus as has been done by the San Joaquin Company accomplishes a similar purpose. It is obviously impracticable to fix rates for each year depending upon estimates of anticipated water conditions. By assuming 1932 to be a year of normal water conditions and with business conditions slightly but not substantially better than they were in 1931, a rate level may be obtained for a reasonable period in the future just alike to the utilities and the consumers. It is unlikely any individual year will exactly conform to such an assumed year, but over a period in the future losses in one year should be recouped in another. The utilities will not be static. Increases in investments, however, may be expected to be accompanied by commensurate increases in business and net earnings.

Cost of Service and Spread of Rates.

Three days of public hearings were had on the question of cost of service and spread of rates, after the Commission had indicated a proposed reduction in revenue for a normal water year In these hearings various groups of of approximately \$650,000. consumers participated actively. Some, like the oil companies, appeared then for the first time. No group went so far as to claim for itself the benefit of the entire reduction deemed proper. Very exhaustive and able studies on cost of service on the San Joaquin system were presented, segregated mainly between the cost of agricultural power and the balance of the load. 25 economic distress of the various classes of consumers was dis-Competitive sources of power were outlined. most important and persuasive presentation along this line was that of the City of Fresno, tending to show that by the establishment of a municipal electric enterprise it could effect rates substantially below those now existing and below those which would prevail if the rates here urged by it were ordered.

^{25.} Nearly all of the evidence had to do with the San Joaquin Company. Indeed, in all the protracted hearings in these cases surprisingly little attention was paid to Midland Company, its operations and rates, except for the basic studies presented by the Utilities and the Commission's staff.

^{26.} Much of this type of evidence has been helpful, for ability Of consumers to pay is one of many factors to be considered in determining a proper rate level. However, these cases are not being decided on the basis referred to by Mr. DeLew, appearing for one of the oil companies, who testified that "last night Mr. Ready said the man that shed the most tears was the one that got the most" and asked that the record indicate he (the witness) "shed tears abundantly." That the idea thus suggested was prevalent during the hearings was evidenced by the showings made by the various groups. Even the utilities painted a most lugubrious picture of their future.

The position of the various parties may be summarized briefly as follows:

- The Utilities: There should be no reduction at all, but if one is made no part of the reduction should go to agricultural power. Rates for agricultural power, they asserted, are already too low. Reductions should be in other classes and should take the form of bringing the schedules as nearly as possible into line with the Pacific Gas & Electric Company rates. Rates on the Midland Company should not necessarily be the same as those on the San Joaquin.
- Farm Bureaut Agricultural power rates on the San Joaquin should be reduced by \$390,000., or about 9.9%. The reduction should take the form of a lower energy rate on the first 1000 K.W.H. block, as well as succeeding blocks. Rates should not be the same on the San Joaquin and Midland. The demand charges should not be changed.
- City of Freshe: The aggregate reduction in agricultural power should not exceed \$128,000. on the San Joaquin and \$4,200. on the Midland, and this reduction should go to higher load factor users. Other rates should be reduced from the 1930 level (or increased) about as follows: Domestic lighting \$267,500., or a 13½% decrease; commercial lighting \$112,000., or a 7% decrease; public outdoor lighting \$42,000., or a 17.4% decrease; general power \$97,500., or a 4.3% decrease. Heating and cooking should be increased about \$5,300., the increase being in the Midland territory. There should be a differential in rates within and without in-

corporated territory. San Joaquin and Midland rates should be brought as closely together as possible but should not be identical. L. S. Ready (Representing certain large power users): General power schedules should be reduced, mostly for higher load factor users. The over-all reduction should be about 4%. Commercial lighting rates should be reduced about 10%. In the general lighting schedules rates should be lower within incorporated territory. About the same percentage reduction should be made in agricultural power as in general power. L. F. Leurey (Representing Bldg. Owners & Mngrs. Assn. of Fresno: Present schedules fail to give sufficient consideration to large high load factor users. Rates should tend towards Pacific Gas & Electric schedules. Fresno Traction Co.: Railway power schedules should conform to those of Pacific Gas & Electroc, or a flat rate producing a similar charge should be established. Oil Companies: Consideration should be given to good load factors. Oil companies are improving their power factors. City of Bakersfield: Public outdoor lighting rates should be reduced. As to cost of service on the San Joaquin, there were two estimates, that of Mr. Moulton for the utilities and that of Mr. Wing for the Farm Bureau. These, reduced as nearly as may to a comparable basis, employing the revenue, expense and rate base figures upon which the decision is predicated and using 1930 rates, show yields as follows: -36-

	Moulton	Wing
Agric. Power	4.5%	6.4%
All other	11.1%	8.7%
Total Rural (excl. of whole-sale)		6.6%
Total Urban (excl. of whole-sale)		13.4%
Total System	7.8%	7.8%

Thus, both engineers, each using different methods of allocation, arrived at the conclusion that agricultural power is contributing less by way of return than are other classes. They differed only as to the extent of the disparity. However, what disparity there is between agricultural power and other uses or as between rural and urban uses is of the utility's own making. Historically, the agricultural load was promoted by the company to supplement its other business. When reductions in rates were voluntarily made they have gone mainly to agricultural power users.

Cost of service is, of course, but one element to be taken into account in the fixation of rates. That it has not been considered by the utilities as a controlling factor is evidenced by the differential voluntarily created by them as between rural and urban users. Mr. Kenny, engineer for the City of Fresno, recognized this by conceding some reduction to agricultural power users, elthough insisting that if the entire reduction were spread over urban uses rural users would still have an advantage. The same may be said of Mr. Ready, appearing for certain large power users. Mr. Wing, of the Farm Bureau, insisted cost of service was the least important factor to be considered.

While the Commission is fully cognizant of the depressed condition of agriculture, as well as the predominant place it occupies in the economic structure of the territory served by these

two utilities, the record before it does not justify increasing further the present disparity between rural and urban earnings as urged by the Farm Bureau. On the other hand, the history of the creation of this differential offers persuasive ground against withholding all relief from agricultural consumers as urged by the utilities. A result lying somewhere between these two extremes must be sought.

The agricultural power schedule on the San Joaquin Company received the most attention and is the schedule in which rural consumers seemed to be the most interested. After very careful consideration it has been concluded that a 12% discount on energy used in excess of 1000 K.W.H. per horsepower per annum should be directed. Thus, the reduction in charges will go to those consumers who are not merely short time users of power. With this change in the basis of charges, the over-all yield of the agricultural load will be approximately 6% on the basis of allocations of property and costs advocated and used by Mr. Wing, engineer for the Farm Bureau. Reductions in amount further than this are not warranted but to this extent may be justified. the Midland system, certain reductions in the first 1000 K.W.H. block are directed in order to bring its schedule more nearly into harmony with that on the San Joaquin. The discount will be applicable to the schedule as so modified. Reductions in schedules other than for agricultural power and applicable to rural consumers will advantage such consumers to an additional extent.

^{27.} The evidence indicates that under existing rates low load factor consumers are not contributing relatively as much by way of return as the higher load factor users and that from the standpoint of cost of service or yield the reduction should go to the latter class. There is also a strong equity in favor of those consumers who because of falling water table, lack of gravity supply of water, or for other reasons, are obliged to use power for pumping for a longer time and to a greater extent than are those who use it merely for a short time during the peak of the irrigation season to supplement a gravity supply of water.

As to rates for other than agricultural power, schedules are brought into general alignment with those on the Pacific Gas & Electric system. A differential between San Joaquin and Midland rates is, however, continued. In developing the rate structures here prescribed as reasonable, the Commission has given consideration to the cost of service studies, the history of the present rates, the comparisons with rate structures of other utilities, the equities as between classes and groups of consumers, the effect of rate levels and spreads on future earnings of the utilities, and the ability of consumers to pay, together with the availability and cost of power from other sources. We recommend the following findings and order: FINDINGS AND ORDER Public hearings having been had in the above entitled cases and the cases having been submitted for decision, the Railroad Commission of the State of California, after giving full and careful consideration to the record before it and the arguments of the parties, concludes and finds as follows, to-wit: 1. A reasonable rate base for the year 1932, including therein all elements of cost for both tangible and intangible property not charged to operating expense or in the form of consumers' advances, land at present day fair market value, an allowance for working cash capital and materials and supplies sufficient to meet the ordinary operating requirements, work in progress and estimated average net additions and betterments for the year and with no deduction for accrued depreciation, is For the San Josquin Company\$69,200,000.00 For the Midland Company 6,200,000.00 -392. The reasonably to be anticipated gross operating revenue under 1930 rates for the year 1932, considered as a year of normal or average water conditions and with business conditions slightly but not substantially better than in 1931, is

3. The reasonable requirement for the year 1932 to meet operating expenses, depreciation, and taxes commensurate with the volume of business and revenue expressed in Finding 2, is

4. The reasonably to be anticipated net revenue available for return in 1952 under 1950 rates considered as a normal or average water year and with business conditions slightly but not substantially better than in 1951 and with efficient and economical management, is

For the San Joaquin Company\$5,350,600.00 For Midland Company 500,450.00

5. The cost of money derived from bonds, preferred stock, reserves and short term borrowings is

For the San Joaquin Company, not in excess of 6.58%. For the Midland Company, " " " 6.27%.

6. The financial requirements for the year 1932 for bond and other interest, debt discount and expense and preferred stock dividends less income from other utility departments and non-operating income

For the San Joaquin Company does not exceed \$4,103,000.00. For the Midland Company " " 319,000.00.

If the respective depreciation reserves of the 7. two utilities be taken to represent the approximate amounts of accrued depreciation in the respective properties (which are the lowest figures in the record for this item) the fair value for the year 1932 of the electric properties Of the San Joaquin Company does not exceed \$59,400,000.00. Of the Midland Company 5,225,000.00. and the fair value of such properties plus the amount of the said accrued depreciation does not exceed in amount the respective rate bases found to be reasonable in Finding 1. Since all of the parties have urged the use of the sinking fund basis of depreciation expense which contemplates the annual augmentation of the current allowance by interest on the reserve, (which basis is followed in Finding 3) it is necessary, therefore, in testing rates on the fair value basis, if depreciation expense is as included in Finding 3, to add to the fair value figures above shown the amounts of such reserves and to permit an earning thereupon. S. Any intangible element of going concern value in the properties is adequately recognized and allowed for by the inclusion in the rate base of costs for property over-built, not useful, and of surveys and investigations of projects abandoned and of increased land values, and by the non-elimination of property represented by those costs in arriving at fair value. in the rate of return and in allowances in operating expenses of items which would otherwise be eliminated. 9. Under the rates here prescribed the reasonably to be anticipated net revenue available for return in 1932, considered as a normal or average water year, and with business conditions -41-

slightly but not substantially better than in 1931 and with efficient and economical management is 10. Under the rates herein ordered the utilities should in a normal or average water year and with business conditions slightly but not substantially better than in 1931 earn a fair and reasonable return on the rate base herein found reasonable and on the fair value of their property and a return as high as capital in the vicinity can obtain in other investments equivalent as to security and risk, and will be able to pay their fixed charges, preferred stock dividends, reasonable dividends on the common stock investment and attract new capital as needed for the improvement and extension of their systems; and in 1932, even though the year is as severe as indicated to be possible by the testimony, the utilities will under the rates which will prevail over the year earn a return on the rate base and on the fair value of their property sufficient to cover their fixed charges and preferred stock dividends (other income being credited) and pay moderate dividends on the common stock investment. 11. The present rates of the utilities are unreasonable to the extent they differ from the rates herein ordered, which are hereby found to be just and reasonable rates for the future. Based upon the findings contained herein and in the opinion preceding, IT IS HEREBY ORDERED, that effective on all meter readings taken on and after July 1, 1932, -42-

- (a) San Joaquin Light and Power Corporation charge and collect the rates specified in Exhibit "A" attached hereto, and
- (b) Midland Counties Public Service Corporation charge and collect the rates specified in Exhibit "B" attached hereto.

The effective date of this order, except as otherwise provided therein, is twenty (20) days from the date hereof.

The foregoing opinion and findings and order are hereby adopted as the opinion and findings and order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 24 day of May, 1932.

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EXHIBIT "A"

SCHEDULE S-L-2

GENERAL LIGHTING SERVICE:

Applicable to general domestic and commercial lighting service, including household appliances and small power service.

TERRITORY:

Applicable to service within all incorporated limits served by the company.

RATE:

Service Charge per meter per month..... 50¢

Emergy Charge (To be added to Service Charge):

First	200	K.W.H.	per	meter	per	mont)	h	4.5¢	per	K.W.H.
Next	800	Tt .	_ 11	17	~ tt	Ħ	• • •	3.7€	_ 1%	, 17
Next	2,000	**	Ħ	TT .	17	**	• • •	2.9¢	tT.	17
Next	12,000	**	**	17	Ħ			2.4¢		¥t
All Ove	r15.000	77	17	Ħ	17	**	• • •	2.0€	17	₩.

MINIMUM CHARGE:

The Service Charge above constitutes the minimum charge.

SPECIAL CONDITIONS:

Single phase motors of an aggregate capacity of 3 H.P. or less may receive service or may be combined with general lighting service under this schedule at the option of the consumer, provided, in case of combination service, the total energy is supplied through one meter. The minimum charge applicable to this combination service shall be the same as that set forth above.

SCHEDULE S-L-3

CENTRAL LICHTING SERVICE:

Applicable to general domestic and commercial lighting Service, including household appliances and small power service.

TERRITORY:

GF

Applicable to service in entire territory served, outside of incorporated limits.

RATE:

Service Charge per meter per month..... 60¢

Energy Charge (To be added to Service Charge):

First	200	K.W.H.	per	meter	per	mont	h	5.0€	per	K.W.H.
Next	800		~ #f				••••			**
Next	2.000	TŤ.	Ħ				••••			17
Next	12,000	12	19		~		••••			117
All Over		**	Ħ	17	***					17

MINIMUM CHARGE:

(1) General:

The service charge set forth above constitutes the minimum charge for no consumption of energy.

(2) Special:

When separate transformers are required to be installed on distribution lines in excess of 5,000 volts in rural territory, the minimum charge will be as follows:

Minimum Charge	Number of Consumers Served				
Month Per Consumer	From Single Transformers				
\$3.00	1				
2.00	2				
1.50	3				
1.25	4				
Service Charge	5				
1.25	4				

SPECIAL CONDITIONS:

Single phase motors of an aggregate capacity of 3 H.P. or less may receive service or may be combined with general lighting service under this schedule at the option of the consumer, provided, in case of combination service, the total energy is supplied through one meter. The minimum charge applicable to this combination service shall be the same as that set forth above.

CAO SCHEDULE S-L-4 STREET AND HIGHWAY LIGHTING Applicable to service to street, highway and other public outdoor lighting installations, using bracket, mest arm, or center suspension construction, and supplied from overhead lines, where the company owns and maintains the entire equipment. TERRITORY: Applicable to the entire territory. RATES: Monthly Charge per Lamp Reduction per hour where standard operating schedule is less than full All Night Lamp All Night Rating Service Service 25 watts 1¢ 2¢ Multiple Lemps: \$0.95 1.25 40 watts 3¢ 50 watts 1.45 3¢ 4¢ 5¢ 7¢ 1.70 60 watts 75 watts 1.95* 100 watts 2.15* 150 watts 2.60* 3.00* 200 watts 9¢ 11¢ 17¢ 24¢ 3.65* 300 watts 4.70* 500 watts 6.15* 750 watts 60 cp. 100 cp. 250 cp. \$1.30 1.70 Series Lamps: 2¢ 4¢ 2.70* 3.30* 400 cp. 10¢ 600 cp. 3.95* 13¢ 1000 cp. 5.10* 19¢ 1500 cp. 6.35* 26¢ Includes a refractor. A diffusing globe, special highway reflector, or equivalent special reflector will be supplied on request. SPECIAL CONDITIONS: (a) For the purpose of calculating rates for less than all-night service, it will be assumed that the average hour of turning off all-night service is 5:30 A.M. and the average hours of nightly service are: All-night Service (4000 hours per year) 11 hours per night. Midnight Service (2000 hours per year) 5-1/2 hours per might. -3-

CAO SCHEDULE S-L-4 (Continued) SPECIAL CONDITIONS (Continued): (b) The foregoing rates apply to installations of ten lamps or more. When service is supplied for less than ten lamps, the above rates increased by 10 per cent will apply. Such increase in rate will be based upon the total number of lemps in the circuit and not upon the number of lamps billed to a separate consumer. (c) For sizes of 400 cp. or larger, where the average spacing between lamps on the same burning schedule does not exceed 200 feet, as measured along the center line of the street, counting lemps on both sides, the company's standard ornamental bracket and lighting unit will be furnished, if desired, without extra charge, or for greater spacing, at an extra charge of 25 cents per lamp per month. (d) Under the above schedule the company bears the installation, maintenance and operating expenses and provides all necessary lemp renewals. -4-

CAO SCHEDULE S-L-8 ELECTROLIER FLAT RATE SERVICE Applicable to service to electrolier lighting systems where consumer owns the lighting fixtures and interconnecting circuits and the company furnishes energy at one or more central points. TERRITORY: Applicable to entire territory. RATES: Rate per Lamp per Month Class A Company supplies energy and Company supplies switching serenergy and vice and main-Company supplies switching sertains entire energy and vice and mainsystem includswitching sertains lamps and ing lamps and glassware glassware vice only Mad-All All All Mid-Mid-Burning Schedule..Night Night Night Night Night Night Series Systems: 60 cp..... \$0.30 \$0.24 \$0.79 \$0.57 \$0.96 \$0.74 .36 .29 .62 80 cp..... -85 1.02 .79 100 cp..... .42 .34 .91 •66 1.08 .83 .93 250 m.... .73 1.40 1.05 1.58 1.23 400 cp..... 1.33 1.03 1.36 1.80 1.97 1.53 600 cp..... 1.90 1.83 1.46 2.45 2.63 2.00 1000 cp..... 3.00 2.28 3.66 2.71 3.85 2.90 1500 cp..... 4.25 3.20 5.03 3.73 5.25 3.95 2500 cp..... 6.50 4.84 7.57 5.55 7.82 5.80 Multiple Systems: 25 watt.... .17 •67 .49 .14 .80 .62 .76 .56 40 watt.... .26 .21 -89 •69 50 watt.... .95 .6I .32 .26 .32 .74 -38 60 watt.... .31 .65 .78 -88 1.01 75 watt..... .37 -46 -99 .73 1.12 .86 100 watt.... .60 .48 1.03 .79 1.17 .93 .87 .99 150 watt.... **.**68 1.30 1.43 1.12 200 watt..... 1.12 .87 1.56 1.19 1.70 1.33 300 watt..... 1.62 1.25 2.14 1.61 2.27 1.74 500 watt.... 2.65 2.03 3.28 2.45 3.41 2.58 750 watt..... 3.90 4.89 2.98 4.77 3.50 3.62 1000 watt..... 5.13 3.88 5.96 6.08 4.53 4.41 SPECIAL CONDITIONS: (a) This schedule is applicable to series street light-ing systems where the company furnishes the constant current regulating transformers, and to multiple street lighting systems where the -5-

LV SCHEDULE S-L-9 ELECTROLIER METER SERVICE (Optional with Schedule S-L-8, Class A): Applicable to service to electrolier lighting systems where the consumer owns the lighting fixtures and interconnecting circuits, and the Company furnishes energy at one or more central points. TERRITORY: Applicable to entire territory. RATES: Energy Charge: For the first 20 kw. or less of connected load:- 3.5¢ per kwh. for first 150 kwh. per month per kw. connected, .75¢ per kwh. for all in excess. For all connected load in excess of the first 20 km:-2.6¢ per kwh. for first 150 kwh. per month per kw. connected, .75¢ per kwh. for all in excess. Service Charge (to be added to energy charge): \$3.00 per month for each service connection to a separate circuit of the consumer. SPECIAL CONDITIONS: (a) <u>Series System:</u> This schedule is applicable to alternating current series street lighting service delivered to the consumer's system but metered on the primary side of constant current transformers. Unless otherwise agreed, 6.6 ampere current will be supplied. Constant current transformers will be located at the nearest convenient points back from the points of delivery, or, at the option of the Company, in the Company's substation. Two or more circuits may be combined on a single transformer. Meters will be located at the nearest convenient point back of constant current transformers. In case of more than one transformer, the service may be metered at more than one point, or, at the option of the Company, any two or more transformers may be served through a single meter located at the nearest convenient point back on the line or at the substation. (b) Multiple System: This schedule is applicable to alternating current multiple street lighting service delivered to the consumer's -7-

SCHEDULE S-L-9(Continued).

system at 115-230 volts and metered at delivery voltage at nearest convenient points back from points of delivery. In case of more than one point of delivery, the service may be metered at more than one point, or, at the option of the Company, two or more deliveries may be combined on one meter located at the nearest convenient point back on the line.

(c) General:

The connected load will be determined by taking the rated wattage of all lamps connected to the metered system after dividing each by the rated efficiency of its individual transformer if one is used. Delivery will be made at a point or points mutually agreeable to both parties, the Company connecting to the consumer's system at the base of first electrolier in each group. All currents and voltages stated herein are nominal, reasonable variations being permitted.

(d) Switching:

This schedule contemplates switching by the Company (on the Company side of points of delivery) in accordance with a standard burning schedule. In case switching by the Company is not desired, the service charge will be \$1.00 per month per point of delivery instead of \$3.00.

SCHEDULE S-C-1 COMMERCIAL HEATING AND COOKING SERVICE: Applicable to commercial heating, cooking and/or water heating service. TERRITORY: Entire territory served. RATE: Energy Charge: 150 KWH per meter per month.... 35 per KWH r 150 " " " " " 125 " " All Over 150 " " " MINIMUM CHARGE: \$.50 per kilowatt of active connected heating, cooking and/or water heating load per month but not less than \$2.50 per month. SPECIAL CONDITIONS: (a) Connected load is taken as the name plate rating of all heating and cooking apparatus permanently connected and which may be connected at any time, computed to 1/10 of a kw. The lighting load including lamp socket devices such as flatirons, toasters, etc. will not be considered as part of the connected load when determining the minimum charges. (b) Single phasemotors aggregating 5 HP or less may be combined under this schedule, in which case each horsepower of connected load shall be considered equivalent to 1 KW when determining the minimum charge. (c) "Space" heating appliances shall not be considered actively connected during the months of May to October inclusive. The minimum charge specified in the rate shall, therefore, be modified accordingly in bills for the corresponding months. -9-

CAO SCHEDULE S-D-2 DOMESTIC HEATING, COOKING AND COMBINATION SERVICE. Applicable to domestic combination lighting, heating, cooking and/or water heating service. TERRITORY: Applicable to service within all incorporated limits served by the company. RATE: Service Charge: Per meter per month\$0.50 (To be added to Service Charge) Energy Charge: 30 Kw-h. per meter per month* 4.5¢ per Kw-h. First Next 140 Kw-h. " " " " " All over 170 Kw-h. " " " " 3.5¢ 1.5¢ 17 * For residences, flats, or individual apartments of more than 8 rooms, 5 Kw-h. for each additional room will be added to the first block of 30 Kw-h. Minimum Charge: 15 Kw. (or less) of connected load. \$2.50 per month First month. In the first 15 Kw. above, not more than 4 Kw. of connected load other than cooking and water heating equipment will be considered. SPECIAL CONDITIONS: (a) This rate applies only where domestic consumer installs and uses cooking, heating and/or water heating appliances other than lamp socket devices of at least 2 Kw. capacity. (b) Connected load is taken as the name plate rating of all heating and cooking apparatus permanently connected and which may be connected at any time, computed to 1/10 of a Kw. The lighting load, including lamp socket devices such as flatirons, toesters, etc., will not be considered as part of the connected load when determining the minimum charges. (c) Single phase motors aggregating 5 H.P. or less may be combined under this schedule, in which case each horsepower of connected load shall be considered equivalent to 1 Kw. of connected load when determining the minimum charge. (d) "Space" Heating appliances shall not be considered actively connected during the months of May to October, inclusive. The minimum charge specified in the rate shall, therefore, be modified accordingly in the bills for the corresponding months. -10-

CAO SCHEDULE S-D-2 (Continued) SPECIAL CONDITIONS: (Continued) (e) When applied to apartment houses or groups of apartments receiving service through one (master) meter, this schedule shall take the following form: Per apartment per month.....\$0.50 Service Charge: Energy Charge: 30 Kw-h. per apartment at Lighting Rate. First Next 140 Kw-h. 3.5¢ per Kw-h. All excess Kw-h. 1.5¢ " " The service charge and first energy block shall be determined by applying a multiplier thereto equivalent to 75 per cent of the number of apartments concerned. This provision shall be available only to apartment houses or groups of apartments consisting of four or more units, each of which shall be equipped for electric heating, cooking and/or water heating. Minimum Charge \$2.50 per apartment per month. (f) For the purpose of this schedule the number of rooms will be determined upon the customery real estate basis of rating. The tables following are illustrative of rooms to be counted and not to be counted. (a) To be Counted Not to be Counted Hallways Alcove Library Ballroom Attic (un-Laundry Billiard Room Living Room Music Room finished Pantry Bedroom Bathroom Piazza Nursery Conservatory (b) Barn (with-out living Porch Observatory Den Portico Office Dining Room quarters) Reception Room Drawing Room Parlor Dressing Room Reception Room Breakfast (100 sq. ft. or less) Servant's Room Nook Gymnasium Butler's Sleeping Porch Kitchen Studio Storage Room Pantry Serving Room Kitchenette Cellar Toilet Closet (b) Coal Shed Dressing Closet (b) Garage (without living quarters) (a) Rooms listed are to be counted whether they are wired or not. Each 200 watts connected load of yard, barn or other outhouse lighting will be counted as one room Empty lamp sockets will be rated at 50 watts each. -11

SCHEDULE S-D-3 DOMESTIC HEATING, COOKING AND COMBINATION SERVICE: Applicable to domestic combination lighting, heating, cooking and/or water heating service. TERRITORY: Entire territory served outside of incorporated limits. RATE: Service Charge per meter per month..... 60¢ Energy Charge (To be added to the Service Charge): First 30 K.W.H. per meter per month* ... 5.0¢ per K.W.H. Next 140 " " " " " " 3.5¢ " " Cover 170 " " " " " 1.5¢ " " *For residences, flats or individual apartments of more than 8 rooms, 5 K.W.H. for each additional room will be added to the first block of 30 K.W.H. MINIMUM CHARGE: First 15 KW (Or Less) of connected load.. \$2.50 per month All over 15 KW of connected load..... .50 per KW per In the first 15 KW above, not more than 4 KW of connected load other than cooking and water heating equipment will be considered. SPECIAL CONDITIONS: (a) This rate applies only where domestic consumer installs and uses cooking, heating and/or water heating appliances other than lamp socket devices of at least 2 KW capacity. (b) Connected load is taken as the name plate rating of all heating and cooking apparatus permanently connected and which may be connected at any time, computed to 1/10 of a KW. The lighting load including lamp socket devices such as flatirons, toasters, etc. will not be considered as part of the connected load when determining the minimum charges. (c) Single phase motors aggregating 5 HP or less may be combined under this schedule, in which case each horsepower of connected load shall be considered equivalent to 1 KW of connected load when determining the minimum charge. (d) "Space" heating appliances shall not be considered actively connected during the months of May to October inclusive. The minimum charge specified in the rate shall, therefore, be modified accordingly in the bills for the corresponding months.

SCHEDULE S-D-3 (CONT'D)

SPECIAL CONDITIONS (CONT'D):

(e) When applied to apartment houses or groups of apartments receiving service through one (master) meter, this schedule shall take the following form:

Service Charge per apartment per month.... \$.60

Energy Charge (To be added to the Service Charge):

First 30 K.W.H. per apartment.... Lighting Rate.
Next 140 K.W.H. 3.5¢ per K.W.H.
All excess K.W.H. 1.5¢ "

The service charge and first energy block shall be determined by applying a multiplier thereto equivalent to 75% of the number of apartments concerned. This provision shall be available only to apartment houses or groups of apartments consisting of four or more units, each of which shall be equipped for electric heating, cooking and/or water heating.

Minimum Charge \$2.50 per apartment per month.

(f) For the purpose of this schedule the number of rooms will be determined upon the customary real estate basis of rating. The tables following are illustrative of rooms to be counted and not to be counted:

(a) To be Counted .

Not to be Counted

Library		Alcove ·	Hallways
Living Room		Attic (unfinished)	Laundry
Music Room		Bathroom	Pantry
Mursery	(b)	Barn (without living	Piazza
Observatory	•	quarters)	Porch
Office		Breakfast Nook	Portico
Parlor		Butler's Pantry	Reception Room (100
Reception Room		Coller	sq.ft. or less)
Servent's Room		Closet	Sleeping Porch
Studio	(b)	Coal Shed	Storage Room
Serving Room		Dressing Closet	Toilet '
-	(6)		quarters) '
	Living Room Music Room Nursery Observatory Office Parlor Reception Room Servant's Room Studio	Living Room Music Room Nursery (b) Observatory Office Parlor Reception Room Servant's Room Studio (b) Serving Room	Living Room Music Room Nursery Observatory Office Parlor Reception Room Servant's Room Studio Attic (unfinished) Bethroom Sethroom Suttler's Pantry Cellar Closet Studio Attic (unfinished) Sethroom Sethroom Sethroom Sethroom Characters) Collar Closet Studio

- (a) Rooms listed are to be counted whether they are wired or not.
- (b) Each 200 watts connected load of yard, barn or other outhouse lighting will be counted as one room. Empty lamp sockets will be rated at 50 watts each.

service and to commercial heating and cooking service and rectifier service. Schedule S-P-2 is optional with this schedule. Schedule S-C-1 is optional with this schedule for commercial heating and cooking service.

TERRITORY:

Applicable to entire territory served by the Company.

RATE:

	Rate per K.W.H. for Monthly Consumption of							
H.P. o		First 50 K.W.H. Per H.P.	Next 50 K.W.H. Per H.P.	Next 150 K.W.H. Per H.P.	250 K.W.H. per H.P.			
2-4	H.P	4.04	. 2.2¢	1.2#	-9£			
5-9	H.P.	. 3.9	2.1	1.2	•9			
10-24	H.P.	3.4	2.0	1.1	•9			
25-49	H.P	-	1.9	1.0	•8			
50-99	H.P.		1.7	1.0	•75			
100-249	H.P.		1.5	.9	•7			
250-499	H.P.		1.3	• 8	.65			
500-999	H.P.		1.2	.8	.6			
	H.P.	- · ·	1.1	.8	•6			
	Over		1.0	.8	•6			

MINIMUM CHARGE:

First 50 H.P. of connected load, \$1.00 per H.P. per month, but in no case less than \$2.00 per month.

All over 50 H.P. of connected load, 65# per H.P. per month.

When the primary use of power is seasonal, or intermittent, the minimum charge may at the option of the consumer be made accumulative over a 12-month period.

SPECIAL CONDITIONS:

(a) Voltage: This schedule of rates will apply to service rendered at any standard voltage in accordance with the Rules and Regulations of the Company. All necessary transformers to obtain such voltage will be supplied, owned and maintained by the Company.

MP SCHEDULE S-P-1 (Continued) (b) Measured Maximum Demand: Consumers may have rates and minimum charges based on measured maximum demand, in which case the horsepower of demand upon which rates and minimum charges will be based will not be less than 40 per cent of the connected load and the minimum charge will not be less than. \$40.00 per month. The maximum demand in any month will be the average horsepower input (746 watts equivalent) occurring in the 15-minute interval in which the consumption of electric energy is greater than in any other 15-minute interval in the month for installa-tions of 750 horsepower or less, and a 30-minute interval for installations of larger size; such average input to be measured by indicating or recording instruments supplied and maintained by the Company or by test at the option of the Company. . In the case of hoists, elevators, welding machines, furnaces and other installations where the energy demand is intermittent or subject to violent fluctuations, the Company may base the consumer's maximum demand upon a five minute interval instead of a fifteen or thirty minute interval. considered in computing charges under this schedule.

Demand for installations in excess of 750 H.P. of connected load occurring between the hours of 10:30 P.M. and 5:30 A.M. of the following day and on Sundays and legal holidays will not be

Demends for installations in excess of 400 H.P. of connected load occurring between the hours of 10:30 P.M. and 6:30 A.M. of the following day and on Sundays and legal holidays will not be considered in computing charges under this schedule, provided the consumer supplies the necessary transformer equipment, without cost to the Company, and takes delivery at the available primary voltage.

- (c) Optional Rate for Larger Installations: Any consumer may obtain the rates and conditions of service for a larger installation by guaranteeing the rates and minimum charges applicable to the larger installation.
- (d) Rectifier, Heating and Cooking Service: Mercury arc rectifiers and commercial heating and cooking installations may obtain service under this schedule. For the purpose of determining rates and minimum charges, each kilowatt of connected load will be considered as equivalent to one horsepower. Connected load will be taken as the name plate rating of all heating and cooking apparatus permanently connected and which may be connected at any one time, computed to the nearest one-tenth of a kilowatt, and in no case less than 2 kilowatts. All equipment assumed as operating at 100 per cent power factor.

(e) Power Factor Clause: Where consumers have a total connected load of 500 H.P. or more, bills (except minimum bills) shall be adjusted for weighted monthly average power factor as

If the power factor exceeds 80 per cent, bills shall be reduced by 0.3 per cent for each 1 per cent of such excess up to and including 90 per cent power factor and by 0.2 per cent for each I per cent of such excess over 90 per cent power factor. If the power factor is less than 65 per cent, bills shall be increased by 0.5 per cent for each 1 per cent of such deficiency in power factor, provided that the maximum increase shall not exceed 5 per cent. In no case, however, shall the total charge, after adjustment for power factor, be less than the minimum charge.

For determining the weighted monthly average power factor for the purpose of this schedule a meter to measure the reactive kilovolt-ampere-hours of the load shall be installed in conjunction with the kilowatt-hour meter. The power factor computed from the ratio of the monthly reactive kva-hrs. to the monthly kw-hrs. shall be computed to the nearest whole per cent. In any case, where the power factor is likely to be leading at any time, the reactive component meter may be ratcheted to prevent reversal.

(f) <u>Incidental Lighting</u>: <u>Lighting incidental to power</u> will be permitted under this schedule for industrial plants only where the connected load in power apparatus (exclusive of lighting) is 50 H.P. or over.

Electric energy supplied for incidental lighting will be delivered through the power meter and at the voltage supplied for the power load. The incidental lighting load so supplied shall be balanced (as nearly as is practicable) between phases and in a manner satisfactory to the Company. Incidental lighting loads less than 10 kw. need not be balanced between phases unless the consumer so elects.

In computing the energy blocks and/or minimum charges, twice the connected load in lighting shall be added to the connected load in power in order to determine the basis upon which said computations shall be made. In all cases where service is regularly rendered for power usage through a maximum demand meter, said demand meter shall be so connected as to measure maximum demand of the combined lighting and power loads and to this demand shall be added the connected load in lighting as a basis for computing the energy blocks and/or minimum charges.

Incidental lighting load in excess of 20 per cent of the connected power load will not be permitted under this schedule. Empty lamp sockets will be rated at 100 watts.

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SCHEDULE S-P-2

INTERMITTENT SERVICE:

Optional with Schedule S-P-1 for intermittent or seasonal use of energy.

TERRITORY:

Applicable to entire territory served by the company.

RATE:

Demand Charge:

First 10 H.P. of connected load.... \$5.00 per H.P. per Year All over 10 H.P. of connected load... \$3.50 per H.P. per Year

Energy Charge:

The energy charges are the rates without the minimum charges as set forth under Schedule S-P-1.

SPECIAL CONDITIONS:

(a) Total Charge:

The total charge is the sum of the demand and energy charges stated above.

(b) Payment of Demand Charge:

The demand charge is payable in five equal installments during the first five months after the date service is first rendered. The consumers may select, if satisfactory to the company, other months in which to pay the demand charges.

MP SCHEDULE S-P-3 (Continued) SPECIAL CONDITIONS: (Continued) The demand charge will be based on the largest load that may be connected at any one time. For the purpose of calculating demand charges one kilowatt of lighting or heating load will be rated at one horsepower. (d) Guaranteeing Rates for Larger Size Installation: Any consumer may obtain the rate for a larger installation by guaranteeing the rates and demand charge of that larger installation. (e) Maximum Demand: The above rates and charges may be based on horsepower of measured maximum demand occurring during the months in which the annual demand charges apply instead of horsepower of connected load, provided the total connected load of the installation is 20 horsepower, or over, in which case the maximum demand shall not be taken as less than 75 per cent of the total connected load where the installation consists of one moter, and 50 per cent of the total connected load where the installation consists of two or more motors, and provided further that in no case shall the rates and charges be based on the maximum demand unless that maximum-demand is at least 10 per cent greater or less than the total connected load. The maximum demand shall be the greatest average horse--power demand registered during any fifteen minute interval during the period in which the demand charges apply. (f) Voltage: This rate applies to service rendered at 110,220 or 440 volts at the option of the consumer. All necessary transformers to obtain such service to be installed, owned and maintained by the Company. (g) Change in Connected Load: Consumers permanently increasing or decreasing connected load will have payments adjusted in accordance with the basis outlined under provision (h) following: Service Commenced or Discontinued During the Agricultural (b) Year: The following adjustments apply only in the case of service first begun or permanently discontinued and will not be made when installations shut down for a few months. For a fractional agricultural year the rate will be modified, as follows: The demand charge will apply to service taken between April 1st and September 30th, at the rate of one-sixth of the annual charge per month. The size of the blocks of energy charge will be multiplied by the factor in the following table corresponding to the -19SCHEDULE S-P-3 (Continued)

SPECIAL CONDITIONS: (Continued)
month during which service is begun or discontinued:

MP

•	Factor			
Month in Which Service Commences or is Discontinued	New Service	Discontinued Service		
April (after regular meter	7.0	,		
reading date)	1.0	•1		
May	•3	•1		
June	•8	•2		
July	.7	.3		
August	.6	.4		
September	.5	.5		
	.4	. 6		
October	-	.7		
November	•3			
December	.2	•8		
Jamary	•1	•9		
February	.1	•9		
March	.1	. 9		
	-			
April (prior to regular meter reading date)	• 1	1.0		

⁽i) Consumers who resume service within twelve months after service has been discontinued will be required to pay all charges which would have been billed during the shutdown period.

SCHEDULE S-P-4 OIL FIELD SERVICE: Applicable to all power service supplied to equipment used for pumping oil wells, operating gathering pumps, leased line pumps and dehydrating plants, in connection with the production of oil. TERRITORY: Entire territory served. RATE: 1.4¢ per kilowatt hour. MINIMUM CHARGE: \$1.25 per horsepower of connected load per month, but not less than \$12.50 per month. When dehydrators are used the minimum charge for this load together with any other load will be at the rate of \$1.00 per KW of maximum demand but not less than \$1.00 per KW of necessary transformer capacity required. SPECIAL CONDITIONS: (a) Service under this schedule to be supplied at 110, 220 or 440 volts at the option of the consumer. All necessary transformers to obtain such voltage will be supplied, owned and maintained by the company. -21-

are (SCHEDULE S-P-5 PRIMARY INDUSTRIAL POWER SERVICE Applicable to general power service delivered at a standard voltage of 2200 volts or more. TERRITORY: Entire territory served. RATE: (A) Service at standard distribution voltage of 2200 volts or more. Demand Charge: First 200 Kw. or less of maximum demand. \$230.00 per Mo. Next 300 Kw. of maximum demand...... 1.00 per Kw. All over 500 Kw. of maximum demand...... .90 per Kw. Energy Charge: Oil Field Other Service Service
First 300 Kw-h. per Kw. per Mo. -85¢ per Kw-h..75¢ per Kw-h.
All over 300 Kw-h. per Kw. per Mo. .60¢ per Kw-h..50¢ per Kw-h. RATE: (B) Service from transmission lines at standard transmission voltage. The rate is the same as that set forth under Rate (A) above less 10 per cent. SPECIAL CONDITIONS: (a) The total charge is the sum of the demand and energy charges given above. (b) Service under Schedule (a) will be supplied by the company at a standard distribution voltage of 2200 volts or more depending upon the distribution voltage obtainable. Service under Rate (B) will be supplied by the company from its main transmission line voltage. (c) The maximum demand in any month will be the average kilowatt delivery of the fifteen minute interval in which the consumption of electric energy is greater than in any other fifteen minute interval in the month. The maximum demand on which the demand charge and energy blocks will be based shall not be less than 60 per cent of the demand occurring during the eleven preceding months. (d) Any demand occurring between the hours of 11:00 P.M. and 6:00 A.M. of the following day will not be considered in determining the above demend charge. Power Factor Clause: Where consumers (except Oil Field Service) have a total connected load of 500 H.P. or more, -22-

MP SCHEDULE S-P-6 RESALE POWER SERVICE: Applicable to electric service furnished the Southern California Edison Company at Hanford, the Midland Counties Public Service Corporation and the Modesto Irrigation District, for distribution and resale, as provided in existing contracts and not otherwise. TERRITORY: Entire territory served. RATE (A): Service at standard distribution voltage of 2200 volts or more. DEMAND CHARGE: 200 Km. or less of max. demand..... \$230.00 per month First 1.00 per Kw. 300 Kw. of maximum demand..... Next All over 500 Kw. of maximum demand..... ENERGY CHARGE: .75¢ per Kwh. 300 Kwh. per Kw. per month..... First All over 300 Kwh. per Kw. per month..... RATE (B): Service from transmission lines at standard transmission voltage. The rate is the same as that set forth under Rate (a) above less 10 per cent. SPECIAL CONDITIONS: (a) The total charge is the sum of the demand and energy charges given above. (b) Service under Schedule (a) will be supplied by the Company at a standard distribution voltage of 2200 volts or more, depending upon the distribution voltage obtainable. Service under Rate (B) will be supplied by the Company from its main transmission line voltage. (c) The maximum demand in any month will be the average kilowatt delivery of the fifteen minute interval in which the consumption of electric energy is greater than in any other fifteen minute interval in the month. The maximum demand on which the demand charge and energy blocks will be based shall not be less than 60 per cent of the demand occurring during the eleven preceding months. (d) Any demand occurring between the hours of 11:00 P.M. and 6:00 A.M. of the following day will not be considered in determining the above demand charge. -24-

SCHEDULE S-P-7

WIRELESS TELEGRAPH SERVICE:

Applicable to service to wireless telegraph installations.

TERRITORY:

Entire territory served.

RATE:

Established power rate.

MINIMUM CHARGE:

SPECIAL CONDITIONS:

Installation charge for 2 K.W. transformer or less \$10.00

In the event that service is continued for a period of twelve consecutive months, the installation charge herein provided will be refunded.

SCHEDULE S-P-9

RAILWAY SERVICE:

GF.

Applicable to Fresno Traction Company and Bakersfield and Kern Electric Railway Company.

RATE:

.85¢ per kilowatt hour.

MINIMUM CHARGE:

No minimum charge.

SPECIAL CONDITIONS:

The above rate applies to the service delivered and measured at 2,300 volts.

EXHIBIT "B"

CAO SCHUDULE M-L-2

CENERAL LIGHTING SERVICE.

Applicable to general domestic and commercial lighting service, including household appliances and small power service.

TERRITORY:

Applicable to service within all incorporated limits served by the company.

RATE:

Service Charge - Per Meter per Month - 30.50

Energy Charge: (To be added to Service Charge)

First	200	Kw-h	n er	meter	per	month.	5.5¢	rog	Kw-h
Next	800		~ #r	77	Ĩ 17	₩ .	4.0¢	_ ft	17
Next	2,000	**		Ħ			3.0¢		***
Next	12,000	17	47	††	77	**	2.5¢	Ħ,	*7
All Over	•		**	77	77	**	2.0¢	**	**

Minimum Charge:

The service charge constitutes the minimum charge.

SPECIAL CONDITIONS:

Single phase motors of an aggregate capacity of 5 H.P. or less may receive service or may be combined with general lighting service under this schedule at the option of the consumer, provided in case of combination service the total energy is supplied through one meter. The minimum charge applicable to this combination service shall be the same as that set forth above.

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SCHEDULE M-L-3

GENERAL LIGHTING SERVICE:

Applicable to general domestic and commercial lighting service, including household appliances and small power service.

TERRITORY:

Applicable to service in entire territory served outside of incorporated limits.

RATE:

Service Charge per meter per month...... 60€

Energy Charge (To be added to Service Charge):

First	200	K.W.H.	per	Meter	per	Mon'	th	5.5¢	per	K.W.H.
Next	800	17	¯ #r					4.0€		**
Next	2,000	17	*	#	₩	**	• • •	3.0¢	Ħ	₩.
Next	12,000	11	17	#	**	#	• • •	2.5¢	Ħ	Ħ
All Over	•	77	#	Ħ	17	Ħ		2.04	**	19

MINIMUM_CHARGE:

(1) General:

The service charge set forth above constitutes the minimum charge for no consumption of energy.

(2) Special:

When separate transformers are required to be installed on distribution lines in excess of 5,000 volts in rural territory, the minimum charge will be as follows:

Number of Consumers Served from Single Transformers	Minimum Charge Per Month Per Consumer		
1	\$2.50		
2	1.00		
3	1.00		
4	1.00		
5	Service Charge		

SPECIAL CONDITIONS:

Single phase motors of an aggregate capacity of 3 H.P. or less may receive service or may be combined with general lighting service under this schedule at the option of the consumer, provided, in case of combination service, the total energy is supplied through one meter. The minimum charge applicable to this combination service shall be the same as that set forth above.

STREET AND HIGHWAY LIGHTING

Applicable to service to street, highway and other public outdoor lighting installations, using bracket, mast arm, or center suspension construction, and supplied from overhead lines, where the company owns and maintains the entire equipment.

TERRITORY:

Applicable to the entire territory.

RATES:

Monthly Charge per Lamp
Reduction per hour
where standard
operating schedule is

	Lemp Rating	All Night Service	less than full All Night Service
Multiple Lemps:	25 watts 40 watts 50 watts 60 watts 75 watts 100 watts 150 watts 200 watts 300 watts 500 watts	\$0.95 1.25 1.45 1.70 1.95* 2.15* 2.60* 3.65* 4.70* 6.15*	1¢ ¢¢ \$\$ 4¢ 57¢ 117¢ 174¢
Series Lamps:	60 cp. 100 cp. 250 cp. 400 cp. 600 cp. 1000 cp.	\$1.30 1.70 2.70* 3.30* 3.95* 5.10* 6.35*	2¢ 4¢ 7¢ 10¢ 13¢ 19¢ 26¢

^{*} Includes a refractor. A diffusing globe, special highway reflector, or equivalent special reflector will be supplied on request.

SPECIAL CONDITIONS:

(a) For the purpose of calculating rates for less than all-night service, it will be assumed that the average hour of turning off all-night service is 5:30 A.M. and the average hours of nightly service are:

All-night Service (4000 hours per year) 11 hours per night.
Midnight Service (2000 hours per year) 5-1/2 hours per night.

CAO SCHEDULE M-L-4 (Continued) SPECIAL COMDITIONS (Continued): (b) The foregoing rates apply to installations of ten lamps or more. When service is supplied for less than ten lamps, the above rates increased by 10 per cent will apply. Such increase in rate will be based upon the total number of lamps in the circuit and not upon the number of lamps billed to a separate consumer. (c) For sizes of 400 cp. or larger, where the average spacing between lamps on the same burning schedule does not exceed 200 feet, as measured along the center line of the street, counting lamps on both sides, the company's standard ornamental bracket and lighting unit will be furnished, if desired, without extra charge, or for greater spacing, at an extra charge of 25 cents per lamp per month. (d) Under the above schedule the company bears the installation, maintenance and operating expenses and provides all necessary lamp renewals. -4-

CAO SCHEDULE M-L-8 ELECTROLIER FLAT RATE SERVICE

Applicable to service to electrolier lighting systems where consumer owns the lighting fixtures and interconnecting circuits and the company furnishes energy at one or more central points.

TERRITORY:

Applicable to entire territory.

RATES:		Rate	per Lam	מסת האת ה	ıtb	
Class	<u> </u>		<u>B</u>	-	_ <u>c</u>	supplies
			Company s		switchi	ng ser- d main-
	Company	supplies	switchir		tains	entire
	energy		vice and			includ-
	switchi			ends end	ing lem	ps end
	vice			sware	glass	
Demodern cole 3.3.	A??	Mid-	All	Mid-	All	Mid-
Burning Schedule.	• NIEDT	Night	<u>Night</u>	Night	Night	Night
Series Systems:	~~ ~~	30.04	å0 8 0	A0 5 0	** **	**
60 cp		\$0.24	\$0.79	\$0.57	\$0.96	\$0.74
80 cp 100 cp		.29 .34	.85 .91	.62 .66	1.02 1.08	.79
250 cp	93	.73	1.40	1.05	1.58	.83 1.23
400 cp	1.33	1.03	1.80	1.36	1.97	1.53
600 cp		1.46	2.45	1.83	2.63	2.00
1000 cp		2.33	3.66	2.71	3.85	2.90
1500 cp		3.20	5.03	3.73	5.25	3.95
2500 cp	6.50	4.84	7.57	5.55	7.82	5.80
Multiple Systems	<u>s</u> :					
25 wett	.17	.14	-67	•49	.80	62
40 wett		.21	•76	•56	. 89	. 69
50 watt		25	.82	•6 <u>1</u>	- 95	•74
60 watt		-31	-88	-65	1.01	- 78
75 watt		•37	•99	.73	1.12	.86
100 watt		-48	1.03	. 79	1.17	.93
150 watt 200 watt		•68 •87	1.30 1.56	-99	1.43	1.12
300 watt		1.25	2.14	1.19 1.61	1.70 2.27	1.33 1.74
500 watt		2.03	3.28	2.45	3.41	2.58
750 watt		2.96	4.77	3.50	4.89	3.62
1000 watt		3.88	5.96	4.41	6.08	4.53

SPECIAL CONDITIONS:

(a) This schedule is applicable to series street lighting systems where the company furnishes the constant current regulating transformers, and to multiple street lighting systems where the Applicable to entire territory.

RATES:

Energy Charge:

For the first 20 kw. or less of connected load:3.5¢ per kwh. for first 150 kwh. per month
PCT hw. CONNected,
.75¢ per kwh. for all in excess.

For all connected load in excess of the first 20 kw.:2.6¢ per kwh. for first 150 kwh. per month
per kw. connected,
.75¢ per kwh. for all in excess.

Service Charge (to be added to energy charge):

\$3.00 per month for each service connection to a separate circuit of the consumer.

SPECIAL CONDITIONS:

(a) Series System:

This schedule is applicable to alternating current series street lighting service delivered to the consumer's system but metered on the primary side of constant current transformers. Unless otherwise agreed, 6.6 ampere current will be supplied. Constant current transformers will be located at the nearest convenient points back from the points of delivery, or, at the option of the Company, in the Company's substation. Two or more circuits may be combined on a single transformer. Meters will be located at the nearest convenient point back of constant current transformers. In case of more than one transformer, the service may be metered at more than one point, or, at the option of the Company, any two or more transformers may be served through a single meter located at the nearest convenient point back on the line or at the substation.

(b) Multiple System:

This schedule is applicable to alternating current multiple street lighting service delivered to the consumer's

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SCHEDULE M-L-9 (Continued)

system at 115-230 volts and metered at delivery voltage at nearest convenient points back from points of delivery. In case of more than one point of delivery, the service may be metered at more than one point, or, at the option of the Company, two or more deliveries may be combined on one meter located at the nearest convenient point back on the line.

(c) General:

The connected load will be determined by taking the rated wattage of all lamps connected to the metered system after dividing each by the rated efficiency of its individual transformer if one is used. Delivery will be made at a point or points mutually agreeable to both parties, the Company connecting to the consumer's system at the base of first electrolier in each group. All currents and voltages stated herein are nominal, reasonable variations being permitted.

(d) Switching:

This schedule contemplates switching by the Company (on the Company side of points of delivery) in accordance with a standard burning schedule. In case switching by the Company is not desired, the service charge will be \$1.00 per month per point of delivery instead of \$3.00.

GENERAL HEATING AND COOKING SERVICE:

Applicable to general domestic and commercial heating, cooking, and/or water heating service.

TERRITORY:

Entire territory served by the Company.

RATE:

Heating, Cooking and/or Water Heating Service.

First 150 KWH per meter per month 3.5¢ per KWH All over 150 " " " " " 1.3¢ " "

MINIMUM CHARGE:

\$0.50 per month per KW of connected load, but not less than \$2.50 per month accumulative through the service year.

SPECIAL CONDITION:

(a) Connected load will be taken as the name plate rating of heating and cooking apparatus permanently installed and which may be connected at any one time computed to the nearest one-tenth of a kilowatt.

SCHEDULE M-D-2 (Continued)

SPECIAL CONDITIONS (Continued):

(e) (Continued)

The service charge and energy blocks of the rate shall be determined by applying a multiplier thereto equivalent to 75 per cent of the number of apartments concerned, provided that the apartment house or group of apartments consists of four or more units, each of which shall be equipped for electric heating, cooking and/or water heating.

The minimum charge of the rate shall be determined after applying a factor of 75 per cent to the total active connected load.

GENERAL POWER SERVICE:

Applicable to general commercial and industrial power service and to commercial heating and cooking service and rectifier service. Schedule M-P-2 is optional with this schedule. Schedule M-C-1 is optional with this schedule for commercial heating and cooking service.

TERRITORY:

Applicable to entire territory served by the Company.

HP of First 50 Next 50 Next 150 All over connected kwh. kwh. 250 kwh. Load per hp. per hp. per hp.	
Connected kwh. kwh. 250 kwh	
Tond man his man his	
2-4 hp 4.3¢ 2.2¢ 1.3¢ .9¢ 5-9 hp 4.2 2.1 1.2 .9	
10-24 hp 5.5 2.0 1.1 .9 25-49 hp 3.0 1.9 1.0 .8	
50-99 hp 2.7 1.8 1.0 .75	,
100-249 hp 2.4 l.6 .9 .7 250-499 hp 2.1 l.5 .8 .65	
500-999 hp 2.0 1.4 .8 .6	
1000-2499 hp 1.9 1.3 .8 .6 2500 and over 1.8 1.2 .8 .6	

MINIMUM CHARGE:

First 50 hp. of connected load, \$1.00 per hp. per month, but in no case less than \$2.00 per month.

All over 50 hp. of connected load, 65% per hp. per month.

When the primary use of power is seasonal, or intermittent, the minimum charge may at the option of the consumer be made accumulative over a 12-month period.

SPECIAL CONDITIONS:

- (a) <u>Voltage:</u> This schedule of rates will apply to service rendered at any standard voltage in accordance with the Rules and Regulations of the Company. All necessary transformers to obtain such voltage will be supplied, owned and maintained by the Company.
- (b) Measured Maximum Demand: Consumers may have rates and minimum charges based on measured maximum demand, in which case the horsepower of demand upon which rates and minimum charges will be based will not be less than 40 per cent of the connected load and the minimum charge will not be less than \$50.00 per month.

The maximum demand in any month will be the average horse-

- (c) Optional Rate for Larger Installations: Any consumer may obtain the rates and conditions of service for a larger installation by guaranteeing the rates and minimum charges applicable to the larger installation.
- (d) Rectifier, Heating and Cooking Service: Mercury are rectifiers and commercial heating and cooking installations may obtain service under this schedule. For the purpose of determining rates and minimum charges, each kilowatt of connected load will be considered as equivalent to one horsepower. Connected load will be taken as the name plate rating of all heating and cooking apparatus permanently connected and which may be connected at any one time, computed to the nearest one-tenth of a kilowatt, and in no case less than 2 kilowatts. All equipment assumed as operating at 100% power factor.
- (e) <u>Power Factor Clause</u>: Where consumers have a total connected <u>load</u> of 500 hp. or more, bills (except minimum bills) shall be adjusted for weighted monthly average power factor as follows:

If the power factor exceeds 80%, bills shall be reduced by 0.3% for each 1% of such excess up to and including 90% power factor and by 0.2% for each 1% of such excess over 90% power factor. If the power factor is less than 65%, bills shall be

SCHEDULE M-P-1 (Continued)

SPECIAL CONDITIONS: (Continued)

increased by 0.5% for each 1% of such deficiency in power factor, provided that the maximum increase shall not exceed 5%. In no case, however, shall the total charge, after adjustment for power factor, be less than the minimum charge.

For determining the weighted monthly average power factor for the purpose of this schedule a meter to measure the reactive kilovolt-ampere-hours of the load shall be installed in conjunction with the kilowatt-hour meter. The power factor computed from the ratio of the monthly reactive kva-hrs. to the monthly kw-hrs. shall be computed to the nearest whole per cent. In any case, where the power factor is likely to be leading at any time, the reactive component meter may be ratcheted to prevent reversal.

(f) <u>Incidental Lighting:</u> Lighting incidental to power will be permitted under this schedule for industrial plants only where the connected load in power apparatus (exclusive of lighting) is 50 hp. or over.

Electric energy supplied for incidental lighting will be delivered through the power meter and at the voltage supplied for the power load. The incidental lighting load so supplied shall be balanced (as nearly as is practicable) between phases and in a manner satisfactory to the Company. Incidental lighting loads less than lo kw. need not be balanced between phases unless the consumer so elects.

In computing the energy blocks and/or minimum charges, twice the connected load in lighting shall be added to the connected load in power in order to determine the basis upon which said computations shall be made. In all cases where service is regularly rendered for power usage through a maximum demand meter, said demand meter shall be so connected as to measure maximum demand of the combined lighting and power loads and to this demand shall be added the connected load in lighting as a basis for computing the energy blocks and/or minimum charges.

Incidental lighting load in excess of 20% of the connected power load will not be permitted under this schedule. Empty lamp sockets will be rated at 100 watts.

SCHEDULE M-P-2 INTERMITTENT SERVICE: Optional with Schedule M-P-1 for intermittent or seasonal use of energy. TERRITORY: Applicable to entire territory served by the company. RATE: Demand Charge: First 10 H.P. of connected load.... \$5.00 per H.P. per Year All over 10 H.P. of connected load.. \$3.50 per H.P. per Year Energy Charge: The energy charges are the rates without the minimum charges as set forth under Schedule M-P-1. SPECIAL CONDITIONS: (a) Total Charge: The total charge is the sum of the demand and energy charges stated above. (b) Payment of Demand Charge: The demand charge is payable in five equal installments during the first five months after the date service is first rendered. The consumers may select, if satisfactory to the company, other months in which to pay the demand charges. -15LV SCHEDULE M-P-3 AGRICULTURAL POWER SERVICE: Applicable to general agricultural and reclamation service, including pumping, feed choppers, milking machines, heating for incubators, brooders, poultry house lighting and general farm use, but excluding cooking and general lighting service. TERRITORY: Applicable to entire territory served. RATE: Energy Charge in addition to the Demand Charge Rate per KWH for Consumptions per HP Per Year of All over First 1000 Demand Next 1000 Next 1000 3000 KWH Size of Chg.per HP KWH per HP KWH per HP KWH per HP per HP Installation per year per year per year per year per year 2-4 HP \$7.00 1.7€ .9¢ .7¢ .6¢ 5-14 m .7 6.00 1.6 .9 .6 15-49 HP 5.00 1.5 .7 •9 .6 50-99 EP •9 1.45 4.50 .7 .6 100 HP and over 4.00 1.4 .9 .7 •6 The total charge is the sum of the demand and energy charges. DISCOUNT: All billings based on meter readings taken on and after July 1, 1932, will show on the fact of the bill, a discount of 122% applied to the charges for that portion of the current monthly consumption of energy in excess of an accumulation to date of 1,000 kilowatt-hours per horsepower during the agricultural year. SPECIAL CONDITIONS: (a) Agricultural Year: Under this schedule the agricultural or service year shall commence with the regular meter reading taken in March and end with the regular meter reading taken in March of the succeeding year. (b) Payment: The demand charge is payable in six equal monthly installments during the months of May to October, inclusive. The energy charge is payable monthly as the energy is used. -16-

When the service is first begun or permanently discontinued during the service year the demand charge will be prorated according to the proportion of the six months season from April 1 to September 30 during which service is taken.

Adjustment for permanent increase or decrease in load will be made upon the same basis, considering the old load as discontinuing and the new load as beginning service.

Such adjustment applies only to the permanent discontinuance of service or to the beginning of new service and will not be made when installations shut down only for a few months or for the balance of a season.

(d) Connected Load:

The above rates and annual charges will be based on the total horsepower rating of all equipment that may be connected to the line at any one time.

(e) Guaranteeing Rates for Larger Installations:

Any consumer may obtain the rates for a larger size installation by guaranteeing the rates applicable to the larger installation.

(f) Maximum Demand:

The above rates may be based upon the horsepower of measured maximum demand instead of horsepower of connected load, provided that the total connected load of the installation is 20 H.P. or over, in which case the maximum demand will not be taken as less than 75% of the connected load where the installation consists of one motor and 50% where the installation consists of two or more motors, and provided further that in no case shall the rates and charges be based on the maximum demand unless the maximum demand is at least 10% greater or less than the total connected load.

The maximum demand shall be the greatest average horsepower demand registered during any fifteen minute interval of the service year.

(g) Voltage:

This schedule applies to service rendered at 110, 220 or 440 volts at the option of the consumer. All necessary transformers to obtain such voltage will be supplied and maintained by the Company.

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SCHEDULE M-P-3 (Continued)

SPECIAL CONDITIONS (Continued):

(h) Consumers who resume service within twelve months after service has been discontinued will be required to pay all charges which would have been billed during the shut down period.

OIL FIELD SERVICE:

Applicable to all power service supplied to equipment used for pumping oil wells, operating gathering pumps, leased line pumps and dehydrating plants, in connection with the production of oil.

TERRITORY:

Entire territory served by the Company.

RATE:

1.4 cents per kilowatt hour.

MINIMUM CHARGE:

\$1.25 per horsepower of connected load per month, but not less than \$12.50 per month.

When dehydrators are used the minimum charge for this load together with any additional load will be at the rate of \$1.00 per kilowatt of maximum demand but not less than \$1.00 per kilowatt of necessary transformer capacity required.

SPECIAL CONDITIONS:

(a) Service under this schedule to be supplied at 110, 220 or 440 volts at the option of the consumer. All necessary transformers to obtain such voltage will be supplied, owned and maintained by the Company.

WHOLESALE POWER SERVICE:

Applicable to general power service delivered at a standard voltage of 2,200 volts or more.

TERRITORY:

Entire territory served by the Company.

RATE A

Applicable to General Power and Oil Field Service at standard distribution voltage of 2,200 volts or over, where established monthly maximum demand is 750 KW or less.

Demand Charge	Energy Charge
KW of Maximum Demand per month	KWH per KW of Maximum Demand
	per month
lst 200 KW or less \$300.00	1st 300 KWH per KW .9¢ Over 300 " " " .75¢
Next 300 " \$1.30 per KW	Over 300 " " " .75¢
Over 500 " \$1.15 " "	

RATE B

Applicable to Oil Field Service where established monthly maximum demand is more than 750 KW.

Demand Charge	Energy Charge			
KW of Maximum Demand per month	KWH per KW of Maximum Demand per month			
1st 200 KW or less \$230.00 Next 300 " \$1.00 per KW Over 500 " \$.90 " "	lst 300 KWH-per KW .85¢ Over 300 " " .70¢			

RATE C

Applicable to General Power Service where established monthly maximum demand is more than $750~{\rm KW}_{\bullet}$

Demand Charge	Energy Charge				
KW of Maximum Demand per month	KWH per KW of Maximum Demand per month				
1st 200 KW or less \$230.00 Next 300 " \$1.00 per KW Over 500 " \$.90 " "	lst 300 KWH per KW .75¢ Over 300 " " .50¢				

Where delivery is made at Standard Transmission Voltage the rate shall be as stated under Rate A, Rate B and Rate C, respectively, less 10%.

SCHEDULE M-P-5 (Continued)

SPECIAL CONDITIONS:

- (a) The total charge is the sum of the demand and energy charges given in the respective rates stated above.
- (b) The maximum demand in any month will be the average kilowatt delivery of the fifteen-minute interval in which the consumption of electric energy is greater than in any other fifteen-minute interval in the month. The maximum demand on which the demand charge and energy block will be based shall not be less than 60% of the demand occurring during the eleven preceding months.
- (c) Any demand occurring between the hours of ll:00 p.m. and 6:00 a.m. of the following day will not be considered in determining the above charges.
- (d) POWER FACTOR CLAUSE: Where consumers (except Oil Field Service) have a total connected load of 500 HP or more, demand and energy charges shall be adjusted for weighted monthly average power factor as follows:

If the power factor exceeds 80%, bills shall be reduced by 0.3% for each 1% of such excess up to and including 90% power factor and by 0.2% for each 1% of such excess over 90% power factor. If the power factor is less than 65%, bills shall be increased by 0.5% for each 1% of such deficiency in power factor, provided that the maximum increase shall not exceed 5%. In no case, however, shall the total charge, after adjustment for power factor, be less than the minimum charge.

For determining the weighted monthly average power factor for the purpose of this schedule a meter to measure the reactive kilovolt-ampere-hours of the load shall be installed in conjunction with the kilowatt-hour meter. The power factor computed from the ratio of the monthly reactive kva-hrs. to the monthly kw-hrs. shall be computed to the nearest whole per cent. In any case, where the power factor is likely to be leading at any time, the reactive component meter may be ratcheted to prevent reversal.

This clause shall not apply to Oil Field Service.

RESALE POWER SERVICE:

applicable to service to other electric utilities and to municipalities for distribution and resale.

TERRITORY:

Entire territory served by the Company.

RATE:

Service at standard distribution voltage of 2,200 volts or over.

Demand Charge	Energy Charge				
KW of Maximum Demand per Month	KWH per KW of Maximum Demand Per Month				
lst 200 kW or less \$300.00 Next 300 kW \$1.30 per kW Over 500 kW \$1.15 " "	lst 300 kWH per kW .9€ Over 300 " " " .75€				

SPECIAL CONDITIONS:

- (a) The total charge is the sum of the demand and energy charges given in the respective rates stated above.
- (b) The maximum demand in any month will be the average kilowatt delivery of the fifteen-minute interval in which the consumption of electric energy is greater than in any other fifteen-minute interval in the month. The maximum demand on which the demand charge and energy block will be based shall not be less than 60% of the demand occurring during the eleven preceding months.
- (c) Any demand occurring between the hours of 11:00 p.m. and 6:00 a.m. of the following day will not be considered in determining the above charges.

SERVICE TO X-RAY APPARATUS:

TERRITORY:

Applicable to entire territory served by the Company.

RATE:

Where X-ray or Radio apparatus is separately served it shall be classed as power equipment and service will be rendered in accordance with the rates for general power service; except that the horsepower minimum provision of any such rate shall be modified as provided below.

At the consumer's option, service to X-ray or Radio apparatus may be rendered at the lighting rate, in which case it may be combined (where physically practicable) on the same meter with regular lighting service; provided that the millim provisions specified below will apply in all cases.

MINIMUM CHARGE:

When the company finds it necessary to install any special equipment, other than the customary meter and service, in order to render service to X-ray or Radio apparatus, the minimum monthly charge shall be \$0.50 per kilowatt of X-ray or Radio apparatus capacity, or \$0.50 per kilowatt of special transformer capacity required to serve same, but in no case less than \$1.00 per month.

Where service to an X-ray or Radio apparatus does not require the installation of any special equipment, no horsepower (or kilowatt) minimum shall apply, and only the meter minimum specified in the rate used need be considered.

RAILWAY SERVICE:

Applicable to Pacific Coast Railway Company.

RATE:

2 cents per K.W.H.

SPECIAL CONDITIONS:

The above rate applies to service delivered and measured at 2,300 volts.