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ORIGINAL

Decis. No. 10348

BEFORE THE RAILROAD COMMISSION
OF THE STATE OF CALIFORNIA

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In the Matter of the Application of SAN JOAQUIN LIGHT AND POWER CORPORATION for a revision and adjustment of rates.	)	Application No. 6651
In the Matter of the Investigation of the electric rates, service and operations of SAN JOAQUIN LIGHT AND POWER CORPORATION, on the Commission's own motion.	)	Case No. 1544

Edwin O. Edgerton, Jared How, Murray Bourne, for San Joaquin Light and Power Corporation.

Frank S. Brittain, for California Farm Bureau Federation, C. A. Melcher and E. Easton.

H. M. Johnston, City Attorney, for City of Fresno.

Edson Abel and J. J. Deuel, for Kern County Farm Bureau.

Walter Rothschild, for Rosenberg Bros. & Co.

G. G. Washington, for Merced County Farm Bureau.

F. A. Cleveland, for City of Corcoran.

O. M. Davis, for Fairmead Farm Bureau.

Wesley P. Grijalva and J. A. Hinman, for City of Bakersfield, Merchants Protective Association of Bakersfield, City of Taft and City of Delano.

Alex. Gordon, for certain consumers of Fresno.

E. H. Marxen, City Attorney, for City of Bakersfield.

H. T. Miller, for Civic Commercial Association of Bakersfield.

Irving H. Althouse, for Alpaugh Irrigation District.

Fee & Ring, by W. C. Ring, for Madera County Public Utilities Association.

ROWELL, Commissioner:

O P I N I O N

Case No. 1544 is a proceeding instituted on the Commission's own motion to investigate the rates and operations of the San Joaquin Light and Power Corporation with a view to establishing just rules and practices and to fixing reasonable rates to be charged for electric service by that utility to its consumers. This proceeding was instituted March 3rd, 1921 and hearings held during that month for special consideration of the agricultural rates to be made effective for 1921. The proceeding, in so far as it referred to the agricultural rates, was submitted and the Commission by Decision No. 8820, dated April 7th, 1921, (Opinions and Orders of the Railroad Commission of the State of California, Vol. 19, page 636), fixed rates for agricultural service for 1921.

Application No. 6651 was filed by San Joaquin Light and Power Corporation, hereafter referred to as San Joaquin Company, Company or applicant, on March 18th, 1921. In this petition San Joaquin Company requests a full and complete valuation of its operating properties and a full and complete revision and adjustment of its rates for electric service to the end that each class of service rendered by it shall pay its just proportion of applicant's expense of operation and of the reasonable return to which applicant may be entitled, and that applicant may receive a net return which shall be adequate, just and reasonable.

Following Decision No. 8820 this Commission directed its engineering and accounting staffs to make an investigation of San Joaquin Company's operations in connection with the further hearing in Case No. 1544. San Joaquin Company carried on investigations in connection with its Application No. 6651 and Case No. 1544.

Case No. 1544 was set for further hearing, with Application No. 6651, on December 13th, 1921, at which time the two proceedings were consolidated for hearing as they involve the same matters. Extended hearings were held in Fresno in December, 1921, January and February, 1922, in Bakersfield in February, 1922, and in San Francisco in March, 1922, at which evidence was introduced by the Commission's staff, by San Joaquin Light and Power Corporation and by certain consumers, and on March 10th, 1922 the proceeding was submitted subject to the filing of briefs. Briefs were filed by attorneys for San Joaquin Company, by [redacted]. F. S. Brittain, Attorney for California Farm Bureau Federation et al., on March 23rd, 1922, and on March 1st, 1922 by W. P. Grijalva and J. A. Hinman, and the matter is now ready for decision.

The matters before the Commission in this proceeding involve a complete reconsideration and determination of the value for rate-making purposes of the electric properties of the San Joaquin Company and of reasonable rates for electric service.

The electric rates of the San Joaquin Company have already been the subject of several proceedings before this Commission. In 1916, after an exhaustive investigation into the capital, operations and rates, this Commission rendered its Decision No. 3241 (Opinions and Orders of the Railroad Commission of the State of California, Vol. 9, page 542) fixing and reducing the rates of the San Joaquin Company effective April 20th of that year. A review of the effect of the application of these rates was made in Case No. 1042, Decision No. 4289, dated May

2nd, 1917, (Opinions and Orders of the Railroad Commission of the State of California, Vol. 13, page 142), and certain slight modifications made. During the war and post-war period of high prices application was made to the Commission for authority to increase rates and the Commission in connection with Application No. 3531, in its Decision No. 5449, (Opinions and Orders of the Railroad Commission of the State of California, Vol. 15, page 788), authorized a 10% surcharge, and in Decision No. 6095 in Application No. 4064 (Opinions and Orders of the Railroad Commission of the State of California, Vol. 16, page 440), increased the surcharge to 15%. In 1920, in Decision No. 7305 (Opinions and Orders of the Railroad Commission of the State of California, Vol. 17, page 940), the rates of San Joaquin Company were modified and further increased approximately 15%. In Decision No. 8820 in Case 1544 the agricultural rates of San Joaquin Company were reduced an average of approximately 5%.

The proceedings following the exhaustive investigation in connection with Decision No. 3241 have been in general of an emergency nature, the basis for rates being the findings in connection with Decision No. 3241 as to capital plus additions and betterments. These present proceedings are in general of a nature similar to that of 1916 and involve a complete reconsideration of all the rates and practices of the Company.

In these proceedings extensive evidence was introduced by San Joaquin Company through testimony of its engineers and executives and in documentary form by the presentation of fifty exhibits, some of which were introduced at the request of the Commission and parties represented in these proceedings. Eighteen exhibits were submitted by the Commission's staff of engi-

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neers and accountants in connection with the testimony of its special accountant, Mr. Thos. Hughes, and its engineers, Messrs. R. M. Vaughan and W. J. Dodge. Evidence was also introduced on behalf of consumers, one exhibit by the California Farm Bureau Federation, one by Mr. Alex. Gordon, one by Merced County Farm Bureau, one by Jay A. Hinman, one by Rosenberg Bros. and Company, and three by individual consumers. In addition several consumers appeared before the Commission and testified regarding application of rates and individual complaints.

Besides the exhibits filed in these proceedings it was agreed by stipulation that certain of the monthly statements of the Company to the Railroad Commission might be considered in evidence as well as the Annual Reports to this Commission; also, in view of the fact that the estimates submitted by Mr. F. Emerson Hoar, Consulting Engineer for San Joaquin Light and Power Corporation, relative to the value of water rights were based largely upon a report prepared by him in a proceeding (Application No. 5567) of Pacific Gas and Electric Company before this Commission, it was stipulated that his report in that proceeding together with evidence relative thereto in so far as it was relevant might be considered in evidence and referred to in these proceedings.

In these proceedings there is presented for consideration and decision by this Commission the matter of the fair valuation of the electric properties of San Joaquin Company used and useful in the public service, the reasonable rate of return thereon, the fixing of fair rates and establishment of just and equitable rules and practices.

San Joaquin Light and Power Corporation serves electricity for domestic and commercial lighting and heating and for industrial and agricultural power purposes in the counties of Fresno, Merced, Madera, Mariposa, Kings, Tulare and Kern, and wholesales power for redistribution by Midland Counties Public Service Corporation to San Luis Obispo and Santa Barbara Counties, and also wholesales power under temporary agreements to the Pacific Gas and Electric Company and Southern California Edison Company. Applicant operates at the present time ten hydro-electric plants with a total rated capacity of 82,500 K.V.A. and four steam plants with a rated capacity of 42,250 K.V.A., making a total of 124,750 K.V.A. The main steam plants are operated with natural gas as fuel, which is obtained from the oil fields in western Kern County. Table No. 1 sets forth the number of consumers served, connected load, sales and revenue for the year 1921 as reported by San Joaquin Company.

TABLE NO. 1

SAN JOAQUIN LIGHT AND POWER CORPORATION

ELECTRIC SERVICE

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Class of Service	No. of Consumers	Connected Load H.P.	K.W.H. Sales	Revenue
General Lighting	36,029	40,700	18,138,605	$1,212,763
Commercial Lighting	361)		6,919,525	228,185
Public Outdoor "	79)	24,900	3,018,618	79,706
Electrolier Systems	6)		1,083,689	22,804
Combination Lighting, Heating & Cooking	248	1,428	878,500	23,005
Agricultural Service	4,385	64,100	66,209,994	1,241,130
General Industrial	2,044	41,225	27,219,910	638,855
Oil Fields Service	172	9,290	15,116,152	213,988
Substation Service	24	18,630	39,308,478	414,464
Transmission Service	1	1,632	5,228,585	48,876
M.C.P.S. Corporation	6	27,190	41,391,444	355,197
Elec. Ry. and Fresno City Water	10	4,140	9,397,974	104,146
X-Ray Apparatus	8	51	2,325	157
Employees Rates	372	--	197,106	7,841
Company Business, Electric Dept.	40	--	523,433	--
Company Business, Other Depts.	20	--	521,992	--
Foreign Sales	2	--	78,635,505	493,664
TOTAL	43,807	233,286	313,791,835	$5,084,781

The growth of business of the San Joaquin Company has been very rapid. Table No. 2 sets forth the operative investment in property as reported in the Company's Exhibit No. 5 from 1916 to 1921, the rated plant capacity at the end of each year, the annual output, sales and revenue for each year, and the number of consumers served.

TABLE NO. 2

SAN JOAQUIN LIGHT AND POWER CORPORATION

ELECTRIC DEPARTMENT

STATISTICAL DATA, YEARS 1916-1921

	1916	1917	1918	1919	1920	1921
Investment, exclusive of Materials and Supplies, as of Dec. 31st,	$ 9,865,313	10,962,351	12,787,813	14,511,670	23,870,895	31,357,86
Revenue,	1,552,961	1,758,666	2,308,631	2,922,611	3,933,411	5,084,78
Rated Plant Capacity - KVA:						
Hydro,	25,850	32,075	32,075	33,500	76,100	82,[illegible]
Steam,	17,475	17,250	17,250	17,250	29,750	42,25
Total,	43,325	49,325	49,325	50,750	108,850	124,75
Kw.H.Production	110,920,894	143,129,588	174,963,951	190,621,410	285,265,010	395,398,09
Kw.H.Sales	80,602,724	110,278,839	144,821,025	183,542,639	235,485,539	313,791,83
Number of Consumers	23,238	26,403	28,604	31,804	36,093	43,80

Data as reported by the San Joaquin Light and Power Corporation.

Owing to the rapid increase in demand for service during the war period and immediately thereafter, San Joaquin Company was forced to the limit in attempting to meet the demands for service in its territory. During the years 1917 and 1918, in common with practically all other utilities, San Joaquin Company was prevented from enlarging its facilities owing to war necessity requirements, although the demand upon its system was greater than during any other period. As a result a shortage in plant capacity existed and it was necessary to refuse to take on consumers to any great extent until the middle of 1920.

Upon the cessation of war activities San Joaquin Company took immediate steps for the installation of additional plant capacity and during the period from the spring of 1919 until the summer of 1920 it carried to completion the installation of its Kerckhoff development at a cost of approximately $6,000,000, making available an additional 35,000 kilowatts of capacity, and a 12,500 kilowatt steam unit in its Bakersfield steam plant at a cost of approximately $1,000,000, and during the year 1921 enlarged the capacity of its Kern Canyon plant by 6,000 kilowatts and built a 12,500 kilowatt steam plant in the Midway gas and oil fields. In addition to building these power plants applicant increased its transmission and distribution systems to meet the demands made upon it. From January 1918 to December 1921 applicant increased its generating capacity 150% and its investment in property practically 200%.

Service Investigation:

Prior to the hearings and in connection with these proceedings a complete survey of the service conditions of San Joaquin Company and investigation of complaints by consumers was carried on by Commission Engineers W. J. Dodge and Albert G. Cage.

Some twenty-one meetings were held in the territory served by the San Joaquin Company, at which some 1400 consumers (representing approximately one-third of the agricultural consumers served) appeared. Special attention was given to agricultural service conditions. The results of this investigation were set forth in the Commission's Exhibit No. 9 introduced by Mr. Dodge.

The object of this investigation was to determine directly the causes of complaint on the part of consumers, the class of the service rendered, and the views and suggestions of the consumers relative to applicant's rates, rules and practices. The complaints as found covered a wide and varying field, and while some were unreasonable many others had good grounds and were the source of valuable information to the Commission. Complaints regarding agricultural service were in general to the effect that the rates were too high and the schedule not of the most favorable form under existing conditions. Many of the complaints regarding the application of schedules, rules and practices appeared to be due to the Company's employees not fully understanding the application of the rules and the lack of a full explanation by the Company's employees to the consumers. Suggestions as to possible modification of the rates will be given careful consideration in the schedules fixed herein. Considerable complaint was received relative to the cost of extensions in rural territory, inefficiency in labor and lack of supervision being alleged.

These matters were given careful consideration by the Commission's engineers and it appears advisable to make certain recommendations in this decision relative to the operations of the Company and modification in its rules, regulations and practices.

There appears to be considerable belief on the part of consumers that the Company has been very inefficient in its construction work and plant operation. Many statements were made to this Commission's engineers regarding inefficiency of construction of distribution lines and also of their larger power plants. Careful study was made by this Commission's engineers of allegations by the consumers of inefficiency of the San Joaquin Company. The results showed that the hydro plants were constructed with good efficiency under the conditions existing in 1919 and 1920 and that complaints relating to this matter were not justified.

It does, however, appear that inefficiency in labor did exist in the construction of distribution lines and equipment and this conclusion is borne out by the testimony in these proceedings. This inefficiency occurred during the year 1919 and 1920, when general conditions of inefficiency existed in all lines of labor, not only with this Company and other power companies but also in practically all other industries. This inefficiency was admitted by the Company, whose General Manager contended that it was impossible to overcome the difficulty until the better labor conditions of the last year occurred. A number of the complaints relative to inefficiency were unfounded when fully investigated. Improvement in the efficiency of the Company can be made and steps along this line have been taken by the Company's management.

Some complaint was received relative to service interruptions and also low voltage. The engineers' report shows, however, that as a whole the service of the San Joaquin Company during the past two or three years has been as good as, and in many instances better, than that on other systems. Unsatisfactory conditions did exist in 1920 due to rapid growth of the Company's business and to the existing power shortage. The evidence shows that the Company has made a special effort to eliminate poor service conditions wherever found and with the exception of more or less isolated districts where the strengthening of the system has not yet been fully carried out, there are generally good service conditions. The Company's service in the Los Banos district has been subject to many interruptions and the Company should take immediate steps to improve conditions in this district.

Complaints were heard regarding "reversal of power" and it appears in one instance considerable damage resulted to a consumer's installation from this cause. Two apparent causes for this trouble have existed: first, failure of one of the phases of a given circuit with the resultant "reversal of power" to certain types of pumps remaining upon the system; second, the incorrect connecting of distribution lines. The latter can be eliminated by more careful supervision of construction by the Company. San Joaquin Company advises that it is making a special study of this trouble and it is important that this be carried on as rapidly as possible in order that similar difficulties may not recur.

It appears from the engineers' investigation that up to the present time the coordination between the head office of the Company and its local district agents has not been conducive to the greatest efficiency or to a proper understanding by the Company's local district managers of the rules, regulations and practices. A more efficient method of supervision of the district offices by the head office of the Company should be carried out and special care taken to see that the Company follows uniform practices and rules. Special attention should be given to educating the local district agents and representatives in the rates and rules of the Company.

San Joaquin Company should establish the practice of holding meetings monthly at which its district managers who carry on the business of the Company with the public will meet and where they may be acquainted and kept in constant touch with the proper application of rules and practices of the Company and the policies affecting public relations.

It appears that practically all extensions to agricultural service in which the revenue to be derived was not sufficient to justify the Company in making free extensions have been made by requiring the applicants for service to guarantee for a period of three years an annual gross revenue equal to one-third of the cost of the extension. Although this was an optional rule which an applicant might select and which might prove advantageous under certain conditions, yet the extension rule proper, in which consumers advance to the Company a certain portion of the cost of the extension to be refunded on the basis of a percentage of the monthly bills for service, was in only a few instances explained or offered to the consumer. As a result many consumers have not received the advantage of the more favorable rule. San Joaquin Company should give each consumer who has guaranteed a definite annual revenue or who has made an advance in order to obtain service the option of advancing an amount equal to the difference between the cost of the extension and three times the estimated annual revenue or guaranteeing in three years a total revenue equal to the cost of the extension, as provided in the present rules.

It also appears that consumers have been required to sign contracts guaranteeing amounts based upon estimated costs and that these guarantees have not been in all cases modified to conform with the actual costs. San Joaquin Company should submit to each such contract holder a statement of the actual cost of the extension and give him the option of adjusting his contract to the basis of the actual cost.

There has been considerable complaint, which appears to be well founded, to the effect that certain consumers have not been supplied with copies of contracts entered into with the Company relative to advances or guarantees for the extension of service, and also, that itemized estimates of cost requested by consumers have not always been supplied. San Joaquin Company should supply each consumer who has not already received one, a copy of his extension contract, and each new consumer should be furnished with a copy whether requested or not, and with each new extension in which any advance or guarantee is necessary to obtain service an itemized statement of the cost of the extension should be submitted to the consumer upon the completion of the work.

In the latter part of July 1921, San Joaquin Company was requested to put in effect an optional low load factor agricultural rate known as Schedule No.16, which was filed and made retroactive to April 1st, 1921. It was understood that the Company should notify each consumer of this new rate and that this schedule could be selected by any agricultural consumer in which case his past bills would be adjusted. Investigation by the Commission's engineers shows that in certain instances the consumers have had difficulty in obtaining this schedule and that the Company has not fully explained its use and application.

The San Joaquin Company should determine those agricultural consumers who have not been operating on Schedule No. 16 and who would have been advantageously affected by this schedule during the past season and refund to those consumers the difference between the amount actually paid and the amount which would have been paid on the basis of Schedule No. 16.

Capital

The investment in operative electric properties of the San Joaquin Company was reported by Mr. G. S. Jacobs, Engineer for the Company, at $31,357,868 as of December 31, 1921. This amount represented the properties exclusive of $590,453 expenditures on future developments. The operative investment was determined, according to the testimony, upon an analysis of the Company's books from December 31,1914 to September 30,1921, bringing the previous audit to date and adding to the total the sum of $150,000 for miscellaneous additions and betterments estimated for the last three months of 1921. In the Company's Exhibit No. 35, filed at the end of the year, the amount as of December 31,1921 is set forth at $31,352,971.14 . This represents the physical or tangible property plus the actual cost of organization and franchises.

Mr. Thos. G. Hughes, Special Accountant for the Railroad Commission, made a careful audit of the Company's books, bringing his previous audit made in connection with Application No. 1666 up to August 31,1921, and found the book investment in the electric properties as follows:

Expenditure in electric properties to Dec. 31,1915 including work in progress.	$9,667,911.25
Less work in progress Dec. 31,1915 . . .	386,806.48
Completed work Dec. 31,1915.	$9,281,104.77
Expenditures from Jan. 1,1916 to Aug. 31,1921.	$21,821,488.42
Total Electric Properties as of Aug. 31,1921.	$31,102,593.19

Adding to Mr. Hughes' total $200,000 for expenditures at the rate of $50,000 per month for the last four months of 1921 brings the total to $31,302,593.19, or an amount of practically $55,000 less than that reported by Mr. Jacobs. Table No. 3 sets forth the capital based upon the rate/base findings in this Commission's Decision No. 3241, dated April 6, 1916, plus additions and betterments by years to December 31, 1921. The result of $31,217,842.74 as of December 31, 1921 is in close comparison with the present investment.

Nearly $12,000,000 of the total of approximately $20,000,000 expended in additions and betterments from 1915 to December 31, 1921, represents major construction units, notably the Kerckhoff development, the Kern Canyon enlargement, the Bakersfield steam plant addition, the Midway steam plant and certain main transmission lines and substations. The expenditure in these major items is listed in applicant's Exhibit No. 18 as follows:

SAN JOAQUIN LIGHT & POWER CORPORATION

MAJOR CONSTRUCTION EXPENDITURES

Power Developments	
Kerckhoff Power Development	$ 5,691,952.69
Kern Canyon Power Development	1,979,895.96
Bakersfield Steam Plant Addition. . . .	982,410.90
Midway Steam Plant	1,559,800.47
	10,214,060.02
Substations	
Sanger 110 KV Substation	137,333.49
Corcoran 110 KV Substation	141,786.19
Semitropic 110 KV Substation	153,356.75
Merced 110 KV Substation	82,283.42
	$ 514,759.85
Transmission Lines	
Kerckhoff-Corcoran 110 KV.	261,831.99
Corcoran-Midway 110 KV	227,251.30
Kerckhoff-Merced 110 KV	361,980.30
Merced-Newman 66 KV.	127,136.70
	$ 978,200.29
	$11,707,020.16

TABLE NO.3

COMMISSION'S DETERMINATION OF VALUATION OF ELECTRIC PROPERTIES
DECEMBER 31,1915
PLUS NET ADDITIONS AND BETTERMENTS TO
DECEMBER 31,1921.

	Original Valuation by C.R. C. as of December 31, 1915.	Additions and Betterments 1916	Valuation as of December 31 1916.	Additions and Betterments 1917.	Valuation as of December 31 1917	Additions and Betterments 1918
Intangible.......	$ 86,071.00	$..........	$ 86,071.00	$	$ 86,071.00	$............
Production.......	4,295,463.00	163,734.56	4,459,197.56	360,506.33	4,819,703.89	431,516.74
Transmission*....	1,490,188.00	34,603.71	1,524,791.71	177,708.18	1,702,499.89	61,149.16
Substation.......	517,410.00	38,293.84	555,703.84	85,789.88	641,493.72	186,305.36
Distribution.....	2,476,095.00	448,644.38	2,924,739.38	968,145.13	3,892,884.51	705,849.10
General..........	287,404.00	37,502.25	324,906.25	16,716.03	341,622.28	16,756.40
Totals..	$9,152,631.00	$722,778.74	$9,875,409.74	$1,608,865.55	$11,484,275.29	$1,401,576.75

* Includes telephone capital chargeable to electric department.

TABLE NO. 3, Continued

	Valuation as of December 31, 1918 CRC Dec. 7305	Additions and Betterments 1919	Valuation as of December 31, 1919	Additions and Betterments 1920	Valuation as of December 31, 1920	Additions and Betterments 1921	Valuation as of December 3[1,] 1921
Intangible........	$ 86,071.00	$	$ 86,071.00	$.........	$...86,071.00	$ 12,527.00	$ 96,5
Lands, Undistributed..	....	24,842.00	24,842.00	37,070.00	61,912.00	24,740.00	86,6
Production......	5,251,220.63	468,711.00	5,719,931.63	6,861,724.59	12,581,656.22	3,308,894.47	15,890,5
Transmission**....	2,591,448.12	32,771.00	2,624,219.12	1,375,643.72	3,999,862.84	772,387.42	4,772,2
Distribution.....	4,598,733.61	1,105,692.00	5,704,425.61	907,648.00	6,612,073.61	2,530,112.50	9,142,1
General.........	358,378.68	91,837.00	450,215.68	177,138.00	627,353.68	600,252.00	1,227,6
Totals...	$12,885,852.04	$1,723,853.00	$14,609,705.04	$9,359,224.31	$23,968,929.35	$7,248,913.39	$31,217,8

**Includes substation capital

Practically half of the additions and betterments are represented in these four power plants and the four transmission lines and substations. A detailed investigation was made in connection with Application No. 1666, Decision No. 3241, wherein the reasonable cost of the property was found to be practically in conformity with or equal to the investment at that time. In view of these facts, it was concluded by the Commission and its engineers that considerable time and a great deal of expense could be saved by checking the reasonableness of these main expenditures and the expenditures in additions and betterments to distribution property, rather than by making a complete inventory.

San Joaquin Company has introduced, by its Engineer, Mr. F. Emerson Hoar, an estimate of the depreciated reproduction cost, or "Present Value," of the electric properties of the San Joaquin Company. This estimate sets forth a total for reproduction cost depreciated or so-called "present value" of $38,357,154 as of December 31,1921. There is included in the total, intangible capital to the amount of $3,973,000. It appears that the valuation of tangible properties is based upon only a general determination. The evidence indicates that the investment by years has been increased or decreased by factor ratios representing the approximate difference in unit costs of construction between any given year and the year 1921. It does not appear that Mr. Hoar has given full consideration, especially in the instance of hydro-electric plants, to the development in the art of construction, quite fully testified to by Mr. Rex C. Starr, who was in charge of the construction of the Kerckhoff development. As regards the earlier hydro-electric plants, the application of a price ratio would result in only a hypothetical figure which would not closely represent the probable reproduction cost as of the later date.

Relative to intangible items, Mr. Hoar has estimated the cost to reproduce the business of the Company on the basis of the estimated deficit which Mr. Jacobs computed in applicant's Exhibit No. 8 below a return equal to the cost of money plus 1½%.

I cannot accept the conclusion that the cost to reproduce a given amount of business can be computed simply by taking the deficit below a full return upon the investment in the past six years of more or less abnormal business, particularly as these six years can not properly be considered as being within the reasonable development period for this Company.

I am also not convinced that the estimate of water right values submitted by Mr. Hoar for the Company is correct, or that any such theory of computing water right values can be applied to a business under sound public regulation, with fairness either to the Company or to the consumers. In general, it is a method of capitalizing the supposed advantages of existing water rights over other actual or hypothetical sources of power assumed to be comparable. The method has the disadvantage that it can produce almost any result, from the values submitted by Mr. Hoar down to a great deal less than nothing, according to the hypotheses assumed. I have failed to find in the entire calculation any constant figure sufficiently fixed to justify computing anything else from it. It is also to be pointed out that in applying his theory to this company, Mr. Hoar has used the average cost and output of all the plants, including certain of the most efficient plants, as to which the Company is precluded by agreement with the federal government from claiming any water right value. So, if any water right value does exist, it would have to be computed from the remaining plants, which are on an average more expensive, and the result, even by Mr. Hoar's method, would be greatly to reduce the assumed water right values.

This Commission, in its Decision No. 3421, went at great length into the question of the water right value of the then existing plants of San Joaquin Company, and came to the final conclusion, as set forth on page 603 (Opinions and Orders of the Railroad Commission of the State of California, Vol. 9) as follows:

> "It is, of course, elemental that if a utility claims a value for water rights, it must sustain the burden of demonstrating such value. For the reason that the San Joaquin Corporation has not proved any value to its water rights in these proceedings, no allowance is being made herein for water right values in excess of the moneys actually expended by the San Joaquin Corporation and its predecessors in connection therewith. All rentals and other payments in connection with the water rights of the San Joaquin Corporation are being allowed as operating expenses."

As already stated, applicant has also introduced, through Mr. Hoar, an estimate of the "present value" or depreciated reproduction cost of its electric properties. It apparently does not, however, request that its rates be now fixed on this value, or upon present value as calculated by any method. It requests, on page 6 of its brief:

> "We hope that the Commission can see its way to include in the present rate base the entire amount of the capital expenditures heretofore made and contemplated to be made during the current year.
>
> "The course which should be pursued, we think, is that followed in Decision No. 5449 and in Decision

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No. 9864, in the Telephone Case."

I can not avoid the conclusion that any attempt to substitute "present value," or reproduction cost new, depreciated, for the methods of fixing the rate base heretofore followed by the Commission, would result finally in disaster to the companies themselves. It would have to be followed in periods of declining as well as of rising costs, and this would be particularly calamitous to a company like the San Joaquin, which has been compelled by its obligations to its consumers to make very large investments during a period of high prices.

A company situated as this one is has no choice as to the making of these investments. A private, unregulated, competitive non-utility could choose not to take the risk of expanding during a period when future shrinkages of investment values might wipe out present profits, but a public utility like the San Joaquin Company, serving under regulation in a territory where it has practically a monopoly, in which the people must be served by it or not at all, has a very different obligation. It must make extensions and improvements, and the San Joaquin Company did make them on a very large scale, even during a period of high prices, when necessary to meet an imperative public need. In a hydro-electric utility the proportion of investment to annual revenue is very large -- in this case, five to one. It is therefore impossible for it to amortize higher costs out of earnings in any brief time. Rates must therefore be reasonably stabilized, and this can not be done if the rate base is to fluctuate with the price levels of every year. At least 75% of the money for such improvements is obtained from bonds, and if the security and earnings behind these bonds were to fluctuate with the market prices of labor and materials comparable to those which have already gone into fixed investment, the result of the application of this "present value" theory on a falling market would be disastrous. This is especially true of the San Joaquin Company, which has expended from $15,000,000 to $20,000,000 during the period of high prices to meet the needs of the public dependent on it. The Company is prevented, by the system of regulation, from earning the speculative profits enjoyed by unregulated private businesses during such times. It ought not to be compelled, by a false theory of valuation applied to its obligatory investments in public service, to take a speculative risk on its investments from which unregulated businesses may exempt themselves. To the extent that its expenditures have been reasonable and wisely made, considering the conditions existing, it is entitled from the public, if reasonable rates for the service permit, to compensation for its expenditure, in the form either of a continuing return or of a chance to amortize a part of the investment during periods of prosperity.

On the other hand, if the "present value" theory can not safely or soundly be applied to high-cost improvements during a subsequent period of declining costs, it can also not be applied in the reverse conditions to properties constructed during low-cost periods and now still in the public service at a time when it would cost more to reproduce them. The consumers are entitled to the advantages of stabilization in the one case, just as the company is entitled to its safety in the other.

It happens that at the moment the "present value" theory would result in a valuation advantageous to the company and unattractive to the consumers. There is therefore a tendency on the part of utility companies to favor and of

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consumers to oppose it. The method of valuation followed by the Commission results at the present time in lower rates. But the time is bound to come, at least in some utilities, when the reverse is the case. I am convinced, and I believe the Commission is justified in continuing it as a fixed policy, that the more stable method of valuation hitherto followed by the Commission is sound and just in both instances, and ought not to be changed, either against the consumers on a rising market or against the companies on a falling market. The sound basis is to take reasonable costs as of the date of construction, regardless of whether the cost to reproduce the same properties now would be higher or lower.

The question which is of special importance, therefore, is whether the investment in plants made by the San Joaquin Company represents reasonable investment or costs under the conditions of construction, and, further, whether the plants were constructed with reasonable foresight and can be classified as operative for the year 1922.

The testimony of both Mr. Rex C. Starr, who was in charge of the construction of the Kerckhoff development, and Assistant Engineer R. M. Vaughan of the Railroad Commission, indicates fully that the investment as reported in this property of $5,691,952.69 is the reasonable cost of the project as it existed on December 31st, 1921. The following table sets forth a segregation of the cost of this plant by general accounts:

TABLE NO. 4

SAN JOAQUIN LIGHT & POWER CORPORATION

Cost of

Kerckhoff Power Development

As of December 31, 1921

Dams and Reservoirs	$ 756,575.52
Water Conduits	2,706,729.05
Penstocks	516,848.47
Power Plant Buildings	367,964.75
Dwellings, Stables, etc.	2,211.22
Pumps for Water Wells	12,899.02
Water Wheels and Turbines	401,411.54
Generators and Exciters-Hydraulic	309,330.04
Switchboards and other Hyd. power Plant Equip.	116,581.40
Roads, Trestles and Bridges	148,721.74
Misc. Production Equipment	87,105.66
Stations Transformers	150,928.91
Switchboards and other Substation Equipment	50,583.33
Poles and Fixtures	12,066.68
Overhead System	16,197.23
Line Transf. and Devices	6,877.33
Subtotal Electric Plant	$5,663,031.89
Lands Devoted to Production Operations	9,812.85
Rights and Franchises	1,995.43
General Shop Equipment and Shop Tools	5,308.58
Telephone Lines	11,426.19
Telephone Instruments and Equipment	377.75
Total	$5,691,952.69

It is urged by F. S. Brittain, counsel for the Farm Bureau Federation, that in view of the testimony of Mr. Starr that an additional unit could be installed in the plant, the plant has therefore been constructed for the future and that approximately one-quarter of the investment should be considered as non-operative.

Analysis of the evidence indicates that the only portion of the development which might be partly unnecessary for existing output is the tunnel and a small portion of the building. It is very apparent from a consideration of the development, however, that the additional unit would not increase the output of the plant except during a period of approximately 100 days in the year and would not be as valuable in proportion as the existing equipment, and, further, that the cost of constructing the tunnel larger than that necessary to transport the water usable in the present units would be but slightly in excess of the cost of a smaller tunnel. The conditions existing in this instance do not appear to justify any reduction in capital on account of the possibility of an additional unit later being installed.

It is further urged by Counsel for the Farm Bureau Federation that the investment in the Kerckhoff plant should be further reduced in view of the fact that it was constructed during a period of high prices and under conditions of relative inefficiency in labor. It is suggested that $350,000 further be deducted.

The evidence indicates, if anything, that the Kerckhoff development was constructed with more than reasonable efficiency, considering the conditions existing. It must be borne in mind that during 1917 and 1918 San Joaquin Company, as well as other electric utilities, was prevented by governmental restrictions from carrying on the necessary development to meet the very rapidly growing demands on its system. It was absolutely essential from the standpoint of public service that construction work be carried on at a rapid rate immediately upon the cessation of war activities. San Joaquin Company is to be commended for the way in which it carried through to completion the construction of the Kerckhoff development and the enlargement of the Bakersfield steam plant, as this action eliminated a probable shortage of power. To insist at this time that it should absorb a considerable portion of the investment which it made to meet the demands of the public, especially in view of the record of the earnings of this Company, I cannot consider as just or reasonable.

The expenditures, as reported for the Kern Canyon enlargement, are $1,979,895.96. This represents the additional expenditures, from which must be deducted the costs of the building and equipment and other structures of the original Kern Canyon plant abandoned upon completion of the present development and enlargement, together with construction equipment sold and estimated to be sold. The final net addition to capital when all credits are made will bring the total to approximately $1,700,000.

The following Table No. 5 sets forth the expenditures on this development which are subject to reduction for write-off of old plant and construction equipment:

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Table No. 5

Kern Canyon Enlargement

Expenditures to December 31, 1921.

Dams & Reservoirs	$ 130,701.25
Water Conduits	997,142.73
Penstocks	127,369.17
Power Plant Building	203,125.88
Waterwheels and Turbines	201,996.97
Generators and Exciters	166,093.85
Switchboards and other hydro-power plant equipment	75,456.63
Poles & Fixtures	1,681.20
Overhead System	319.93
Station Transformers	73,496.12
Switchboards and other station equipment	53.06
Subtotal Electric Plant	1,977,436.79
Telephone Lines	2,459.17
Total Kern Canyon	1,979 895.96

There existed, up to the first part of 1921, a hydro-electric plant known as the Kern Canyon Plant, of 4200 k.v.a. capacity. The above costs covered the enlargement of the tunnel, intake dam, and construction of a new power plant, increasing the capacity to 10,600 k.v.a., with tunnel capacity available for a development of 15,000 kilowatts when such might become advisable. This plant was constructed after the Kerckhoff plant had been completed and an additional unit in the Bakersfield steam plant had been installed, and at the same time that the Midway steam plant was being constructed.

A study of the load characteristics of this plant shows that its output is maximum during the spring months; that on the average the output capacity of the plant has been increased approximately 6,000 kilowatts during the flood season of the year, but that during the period of August, September and October, which are the critical months or periods of greatest steam plant requirement, its output capacity has not been increased more than approximately 2,000 kilowatts, and that during periods of dry years practically no benefit is obtained in either additional kilowatt hours or useful kilowatt capacity during those months. The output of the enlargement of the plant is highest at practically the same time that the output of the Kerckhoff plant and other stream flow plants of the Company is greatest, and it appears from an analysis by the Commission's engineers that during the year 1922, based on average water power conditions, less than 15,000,000 k.w. hrs. additional will be obtained that can be beneficially used by the Company in the service herein considered. Because this enlargement came after the Kerckhoff development, and further, because critical dry year conditions still require a steam plant capacity but very slightly less than would be required had this plant not been built, I must conclude that the total investment in this addition cannot yet be included in the rate base and that only a part of it can be allowed for 1922.

The additional cost of producing from existing steam plants the kilowatt hours which would be useful from this enlargement during 1922, on the basis of an average year, is practically $50,000. It would appear, therefore, that the cost of this additional plant which might be reasonably included for the year 1922 as a part of the rate base is $500,000, or the capitalized cost of this energy.

An analysis of the evidence and testimony would indicate that the reported investment in the Bakersfield steam plant enlargement and the Midway steam plant are reasonable under the conditions of their installation, and that the addition of these plants does not result in an over-installation when consideration is given to the amount of sales to the Pacific Gas and Electric Company and Southern California Edison Company, which will readily cover the operations and fixed charges on a considerable portion of the plants.

San Joaquin Light and Power Corporation supplies power to the Midland Counties Public Service Corporation mainly at Henrietta substation near Coalinga, from which point power is transmitted by Midland Counties Company thru San Luis Obispo and Santa Barbara Counties and distributed in those districts. In 1916 San Joaquin Company installed a steam plant at Betteravia, Santa Barbara County, for the service of Midland Counties Public Service Corporation in order to make the service on that company's system more dependable. This Commission, in its Decision No. 7305 in Application No. 4064, dated March 23rd, 1920, found that it was reasonable to charge Midland Counties Company the total cost of operating the Betteravia steam plant, including interest, depreciation, maintenance and operating expenses except fuel expense in addition to the cost of electric energy delivered to it by San Joaquin Company at Henrietta substation and at Betteravia steam plant, the two points of main delivery. Presiding Commissioner Devlin in discussing this matter (Opinions and Orders of the Railroad Commission of the State of California, Vol. 17, Page 943) stated as follows:

> "I agree in part with protestants relative to the Betteravia steam plant. This plant is largely used for the benefit of the Midland Counties Public Service Corporation service and its consumers, the plant being located at the end of that utility's transmission line. It is partly a standby plant for the San Joaquin Light and Power Corporation. The fixed charges and operating expenses, other than fuel cost at this plant, should be paid by the Midland Counties Public Service Corporation in addition to the cost of power purchased."

Subsequent to this decision and upon supplemental application, the Commission modified its decision to the extent of not requiring the charge and payment to be made pending final determination in this proceeding.

San Joaquin Company urges at this time that the Midland Counties Company, which is the company's largest consumer, is entitled to the same character of service as rendered to other patrons of the company, and that in view of the history surrounding the construction of the Betteravia plant it should be considered as a part of the general system and not specifically charged to the Midland Counties Company.

The plant is located at the end of a transmission line of the Midland Counties Company. It appears that Midland Counties Company receives at Henrietta substation the same quality of service as any other wholesale consumer, and it does not appear that the San Joaquin Company's obligation extends to the installation of a standby plant at the end of the Midland Counties Company's transmission line. It would appear to me as logical for the Southern California Edison Company to construct and maintain the steam plant of the San Diego Consolidated Gas and Electric Company at San Diego, or for the Pacific Gas and Electric Company to install or own, maintain, and operate the standby plants of the Coast Valleys Gas and Electric Company at Monterey, or Western States Gas and Electric Company at Eureka as for the San Joaquin Company to absorb the cost of the Betteravia steam plant. Some benefit will accrue to the San Joaquin Company to the extent that it may be temporarily relieved of a part of the load of the Midland Counties Company in an emergency by the operation of the plant. This plant should not, however, be charged to the general service of the San Joaquin Company. If that Company desires to assist a somewhat related utility thru its development period by paying the operating expenses and fixed charges of this plant out of its own reasonable return, I see no reason for refusing to allow such action. However, in determining the revenue of this company in connection with this rate proceeding, the cost, including interest, depreciation, maintenance and operation, other than fuel, will be considered as a revenue to be obtained.

San Joaquin Company still maintains a steam plant in Fresno, with a capacity of 750 kilowatts. In 1916, Presiding Commissioner Thelen, in Decision No. 3241, dated April 6, 1916, (Opinions and Orders of the Railroad Commission of the State of California, Vol. 9, page 557) stated as follows:

> "In addition to the production plants above referred to, San Joaquin Corporation maintains at Fresno, in the old steam plant building, a 750 horsepower horizontal cross-compound engine, belt connected thru an arrangement of clutches between two motor generator sets. Ample boiler capacity is maintained for this unit and under certain conditions it could be considered as a reserve unit in so far as the local street railway load is concerned, altho I question the reasonableness and necessity of any such standby, considering the large amount of money invested in duplicate and interconnected production and transmission facilities."

This is practically the only small steam plant existing on the larger electric utilities' systems. All other utilities have abandoned such plants under conditions similar to these. The only value which this plant might have at the present time would be a standby either for railway service or the water system of Fresno. I am convinced that it is time that this plant be abandoned or written off as a useful part of the equipment for the general service. If either the Fresno City Water Company or the Fresno Traction Company insists upon it being maintained they may negotiate with the San Joaquin Company to compensate it for such additional standby. The cost of the equipment which is of no use to the general service is approximately $65,000. This amount will be deducted from the operative investment.

Relative to distribution and transmission costs, the evidence indicates that, due to conditions existing during 1919 and 1920, and to the large amount of work which had to be carried on, labor efficiency was considerably below normal, affecting the cost of construction very materially according to the testimony of the company's general manager. These conditions which were especially noticeable in the instance of the line construction, carried on during the years 1918, 1919, and 1920 were common in all classes of business during these years, were everywhere experienced, and may be said to be normal for that period.

The following tables No. 6 and No. 7, set forth the cost of the main transmission lines and substations constructed during the past three years.

TABLE NO. 6

Expenditures on Transmission Lines

San Joaquin Light and Power Corporation

December 31, 1921.

	Kerckhoff Corcoran	Corcoran Midway	Kerckhoff Merced
Rights and Franchises	$ 5,558.24	$ 1,637.52	$ 4,618.97
Poles and Fixtures	103,489.70	64,716.73	128,215.76
Overhead System	152,784.05	164,394.97	214,944.55
Trans. Switchboards	---	--	12,999.60
Roads, Trestles, Bridges	---	--	2,030.00
	$261,831.99	$230,749.22	$352,808.88

TABLE NO. 7

Expenditures on Special Substations

to December 31, 1921.

Account	Sanger	Corcoran	Merced	Semitropic
Land	2,500.00	1,050.00	1,500.00	1,000.00
Poles and Fixtures	-	4,451.25	-	-
Overhead System	-	5,618.50	-	-
Line Switches and Devices	-	329.38	-	-
Cottages	6,764.75	6,667.21	5,852.85	7,604.98
Water Wells	273.38	268.35	231.20	297.98
Pumps for Water Wells	2,244.08	2,180.34	1,878.75	2,515.20
Station Transformers	49,342.01	45,411.68	41,693.73	55,331.51
Transmission Switch-boards	51,861.09	69,863.15	45,117.70	60,694.41
Substation Buildings	12,040.70	12,415.30	10,456.22	13,807.92
Distribution Switch-boards	9,985.90	9,880.94	8,232.41	11,790.13
Telephone lines	-	663.37	-	-
Telephone equipment	477.00	463.75	421.09	539.94
Total	135,488.91	159,263.22	115,383.95	153,582.07

The Kerckhoff-Merced line was rush work to complete the interconnection with the Pacific Gas and Electric Company. Largely, on this account, the cost of this line was considerably in excess of other lines. The excess cost of this line, due to rush work, should be written off as chargeable to the special contract with the Pacific Gas and Electric Company. Ten per cent. of the cost of this line will be deducted from the rate base for 1922 on this account.

It appears from the testimony of Mr. Hughes that applicant has included in its overhead for construction purposes item for damages covering a damage suit estimated at approximately $50,000, representing award for property damaged by failure of a transmission line. Courts and Commissions have generally held that a cost or expense incurred as a result of damages awarded represent payments due to negligence and it would not appear that such a charge should be borne by the consumers either thru a return upon capital or operating expenses.

A reasonable allowance for materials and supplies chargeable to operation as distinguished from construction would appear to be approximately 25% of the average materials and supplies account carried by the company. Testimony shows that the practice of the company is to charge interest upon three-quarters of materials and supplies to interest during construction, this being based upon an analysis of the relative amount of materials and supplies used for construction and for operation and maintenace. A reasonable allowance for this item is $400,000. A reasonable allowance for working cash capital based upon the method of determination followed by this Commissioh would appear to be the sum of $300,000, which is equal to two months' average operation expenses, excluding taxes.

San Joaquin Company urges in its brief that the Commission include the entire expenditures in additional property for the year 1922 as a portion of the rate base, while in its Exhibit No. 14 revised, it estimates a total electric department capital for 1922 equivalent to the investment as of December 31st, 1921, plus one-half the additions and betterments for the year plus materials and supplies and working cash capital allowance. Attorney for Farm Bureau Federation, on the other hand, contends that no allowance should be made for additions and betterments to property during the year 1922, the proper rate base being in his opinion based upon the capital as of the first of the year.

Neither of the above contentions appears to be reasonable. The company is making extensions from day to day as required by applicants for service and is improving its system to better service conditions. During the year, it will expend in normal additions and betterments from $2,000,000 to $3,000,000 at a fairly uniform rate. These expenditures will be operative on the average for practically half of the time. A large portion of the money for capital expenditures of the company comes from bonds or stock and the interest or dividend rate on which commences from the date of issuance, and it seems proper that the company is entitled to a return upon the money reasonably invested as soon as it becomes operative.

Applicant has included in its estimate of additions and betterments the amount of $400,000, representing the estimated cost of an office building. The evidence shows that the building will not be in use during the year 1922 and it does not seem fair to include the cost of it for the year 1922. In excluding this from the rate base for 1922, it is not to be concluded that it should not be constructed. San Joaquin Company has been hampered for several years by insufficient quarters. The present building is not adequate and it is important that the company construct or lease a sufficiently large building adequately to house its employees. Action on this should not be delayed further, and it is without question that upon completion and occupation of the building greater efficiency will result in the company's operating force. To delay the construction of this building would be unfair not only to the company and its employes, but to the company's consumers, for the best service cannot be given under present conditions. Although this building will not materially reduce operating expenses, as the rental of the present building is relatively small, I believe that in view of the growing business of the company and the tendency to reduce costs, earnings will be sufficient to cover the return upon the additional investment when it becomes operative.

It is suggested by Attorney for Farm Bureau Federation that San Joaquin Light & Power Corporation has received during the past an excessive and exorbitant return and that consideration should be given to a possible reduction in the rate base of the company on account of the investments of said exorbitant earnings in the property. An analysis of the records of the San Joaquin Company from 1916 to date covering the period during which the rates of the company have been fixed by the Commission shows quite a wide variation in the annual rate of return received. Table No. 8 sets forth the rate base for each of the years as determined by adding to the fair value of the property for rate making purposes, found in Decision No. 3241, the average additions and betterments for each year. The actual operating revenue is set forth, plus the rental for 1920 and 1921 chargeable to the Midland Counties Public Service Corporation for the Betteravia Steam Plant. Operating expenses are listed as shown by the company's records, and the depreciation allowance found to be reasonable in the Commission's various decisions is included. State and county taxes are included as paid up to December 31, 1918, and as accrued thereafter. Federal income tax has been excluded. It is to be noted that the earnings of the company during this period have varied between wide limits, due largely to the widely varying economic conditions existing. The earnings for the years 1920 and 1921 considered separately are in excess of a fair return, but when the entire period is considered it is to be noted that the average rate of return is 8.29%. I cannot agree with the contention of the Attorney for Farm Bureau Federation that the company has received more than a reasonable return over the entire six year period.

From analysis of the evidence herein, I find that the following represents a reasonable rate base for the electric properties of the San Joaquin Light and Power Corporation for the year 1922:

TABLE NO. 8

EARNING EXPENSES AND RETURNS OF SAN JOAQUIN LIGHT AND POWER CORPORATION FOR 1916 TO 1921.

	1916	1917	1918	1919	1920	1921
RATE BASE	$9,982,377.01	$11,237,302.16	$12,860,435.63	$14,572,778.54	$19,312,628.18	$28,589,086.
REVENUE						
Electric Sales	$1,560,951.07	$ 1,776,261.62	$ 2,326,928.20	$ 2,965,244.47	$3,933,411.16	$ 5 ,102,107.
Interest on Kerckhoff Transmission Line						38,940.
Operation of Betteravia Steam Plant					59,831.00	46,410.
Total......	$1,560,951.07	$ 1,776,261.62	$ 2,326,928.20	$ 2,965,244.47	$ 3,993,242.16	$5 ,187,457.
OPERATING EXPENSES						
Production:						
Fuel oil and gas	$ 21,965.65	$ 63,725.37	$ 418,286.52	$ 447,102.84	$ 399,185.00	$ 301,470.
Purchased energy		64.88	103,174.55	596,000.00	227,290.19	8,265.
Other expenses	57,553.68	77,048.07	115,870.64	177,219.48	230,775.19	320,086.
Total......	$ 79,539.53	$ 140,838.32	$ 637,331.71	$ 1,220,322.32	$ 857,250.38	$ 629,821.
Transmission	34,660.57	33,213.10	33,100.90	36,350.00	42,443.71	64,856.
Distribution	109,273.69	120,808.14	155,964.26	215,725.00	276,937.51	387,193.
Commercial	85,632.91	103,657.56	106,376.31	118,850.00	157,355.52	204,266.
General and Miscellaneous	148,964.07	180,697.55	207,400.52	227,050.00	306,085.10	502,617.
Taxes	88,091.52	99,608.53	125,573.95	135,610.62	163,424.88	302,437.
Uncollectible Bills	4,800.00	4,729.07	4,800.00	4,800.00	10,450.00	5,934.
Total......	$ 550,982.29	$ 683,552.27	$ 1,270,547.65	$ 1,958,207.94	$ 1,813,947.10	$ 2,097,126.
Return for interest and depreciation	1,009,968.78	1,092,709.35	1,056,380.55	1,007,036.53	2,179,295.06	3,090,330.
Depreciation	146,641.00	166,453.00	192,300.00	216,000.00	284,000.00	422,522.
Return for Interest	$ 863,327.78	$ 926,256.35	$ 864,080.55	$ 791,036.53	$ 1,695,295.06	2,667,808.
Percent for Interest	8.65%	8.24%	6.72%	5.43%	9.81%	9.35%

TABLE NO. 9

San Joaquin Light and Power Corporation

Electric Department

Rate Base - 1922.

Total Investment, Aug. 31, 1921,	$31,102,593
Additions and Betterments, Aug. 31, 1921, to average of 1922,	1,617,000
Total,	$32,719,593
Less Deductions-Kern Canyon Enlargement,	1,200,000
Fresno Steam Plant,	65,000
Damage Suits,	50,000
Write-off of Kerckhoff-Merced Line,	36,300
Total Deduction,	$ 1,351,300
Total,	31,368,293
Materials & Supplies and Working Cash Capital,	700,000
1922 Rate Base,	$32,068,293

Fair Rate of Return:

San Joaquin Company urges that a fair annual rate of return on its investment is the cost of borrowed money plus 1½%. In its brief it points out that the cost of borrowed money invested up to August 31st, 1921 was at the rate of 7.329%. On this basis the claimed return to the utility would appear to be 8.829%. San Joaquin Company, however, submitted in the proceedings schedules of rates which, according to its own estimates, would result in a return for the year 1922 of only 7.28% on its estimate of total capital of approximately $34,600,000. Its position apparently is that the rates which it suggested are as high as they reasonably should be at this time and that the Company could not expect to earn the full return it considered reasonable under present conditions of relatively large investment at high prices, present development of the business, and the existing economic depression. Further, that the gross revenue which it estimates should be allowed regardless of the resultant net return which might be computed under any findings of the Commission.

It is urged by the Attorney for Farm Bureau Federation that, under present conditions, a fair return is 7% or the legal rate of interest. Counsel suggests possibly an 8% return, but contends it is more than a fair compensation. The suggestion that a 7% return on the operative investment is a fair return for this utility as compensation for its service is obviously too extreme for serious consideration. This Commission would be subject to very just criticism and condemnation were it to consider seriously such a suggestion. The evidence shows that the borrowed money, representing a greater portion of the amount which this Company has been required to invest to render service to the territory, has cost on the average in excess of this amount, while the remaining portion being unsecured would be at a higher rate.

The general findings promulgated by this Commission prior to the period of war, when the reasonable cost of bond money was approximately 6% per annum, was that a fair return on electric utility property was 8%. This rate of return was determined in the Antioch rate case, the first important electric decision of this Commission, and in practically all cases decided thereafter and prior to the general increase in cost of money occurring after January 1st, 1918. In 1916 the rates of the San Joaquin Company were fixed in Decision No. 3241, Application No. 1666, (Opinions and Orders of the Railroad Commission of the State of California, Vol. 9, page 605). In that decision, Commissioner Thelen, presiding, stated as follows:

> "Exhibit No. 54 of the San Joaquin Corporation shows that the average annual cost of bond money to the San Joaquin Corporation and its predecessors, with amortization on the straight line basis, has been 6.18 per cent, and that with amortization on the sinking fund basis the annual cost of bond money has been 6.01 per cent. While the cost of money to the San Joaquin Corporation and its predecessors through the sale of bonds has thus been only slightly in excess of 6 per cent, I recommend that in these proceedings, in the present state of development of the business of San Joaquin Corporation, the Commission allow a return of 8 per cent on the fair value of the property. This return is being allowed notwithstanding the fact that extensive transmission and distribution lines have been constructed, apparently for the purpose of holding the territory as against a competitor.
>
> "The San Joaquin Corporation is as yet, to a considerable extent, in a development period, and it will be necessary for the corporation to secure large additional sums of money in order to develop the territory served by it. The return herein allowed is, in

view of the cost of bond money, a generous
return and will be sufficient to induce the
necessary additional capital to invest in the
business of the San Joaquin Corporation.
In my opinion, it is far wiser and more straightforward to ask for a generous return than to try
to secure an inflated valuation."

It is to be noted that in that decision a margin of approximately 2% was allowed in excess of the average cost of money from bonds. The evidence in these proceedings indicates that up to August 31, 1921, the moneys obtained by this Company through the issuance of bonds and debentures has cost an average of 7.329%. If the amortization of the discount on certain debentures heretofore refunded is eliminated, the average cost is 7.25%. On the same basis as applied in Decision No. 3241 it would appear that San Joaquin Company would be entitled to a return of over 9%. This Commission, however, has not strictly followed this precedent. During the past two years the rate of return found reasonable for electric utilities has been made with a considerably less margin between the reasonable cost of bond money and the fair return owing to various conditions, one of which was that the Federal income tax was considered as an operating expense. It appears at this time from a careful study of court decisions and the act providing for this tax that this tax is not to be included in operating expenses.

Were financial conditions that existed at the time of the hearings, to continue, there might be some justification for allowing an 8.5% return to this Company which would be about 1.2% more than the cost of bond money. It is however unfair in a decision of this character to recognize the high interest rate paid on bonds, when as a matter of fact, some of these bonds are now being called for redemption and others should be, if interest rates continue to decline.

DEPRECIATION

The depreciation annuity which this Commission found reasonable in 1916 was equal to 1.54% of the rate base excluding materials and supplies and working cash capital. The depreciation annuity which has been allowed by the Commission in the various decisions since then has averaged practically the same amount. The depreciation annuity so determined is based upon a 6% sinking fund and represents the estimated amount which, set aside annually with compound interest at 6%, will be sufficient to cover the original cost of the various units of property at the expiration of their probable life.

Applicant, through its engineer, Mr. G. S. Jacobs, submitted in Exhibit No. 35 a computation of depreciation annuity totaling $529,172 for the year 1922. This annuity is at a somewhat higher rate than heretofore found reasonable by this Commission in this Company's case, considerably shorter lives being used in certain items of equipment. Depreciation allowance should be, in my opinion, as nearly correct as can be estimated. Some consideration must, however, be given to the conditions surrounding the property and the history of the utility, although sound regulation would justify being slightly liberal with depreciation allowance if the same is fully accounted for. It must be remembered in this instance that the San Joaquin Light and Power Corporation has expended approximately $20,000,000 in the past five years and in view of the present economic condition I believe that no increased rate of annuity should be allowed. If this allowance turns out to be insufficient it may be enlarged when the business is more completely developed. Where depreciation allowance is made, however, the Company should fully account for the annuity as well as interest on the reserve. It appears that this utility has not in the past set aside each year the annuity as found reasonable by the Commission, nor has it fully accounted for interest upon the reserve which would have been created.

In this Commission's Decision No. 7305, (Opinions and Orders Railroad Commission, Volume 17, Page 949,) presiding Commissioner Devlin stated as follows:

> "San Joaquin Light and Power Corporation, according to its Exhibit No. 10, had, on December 31, 1919, a total depreciation reserve of $1,711,404 covering all departments. The pro rata of reserve for the electrical department is $1,585,000. Mr. Kenny computed the total reserve for depreciation based upon his estimated lives, at $2,405,823.70 as of December 31, 1919. Based upon the life table as used by the Commission the depreciation reserve to be set aside as of December 31, 1919, should be, on a comparative basis, approximately $2,000,000.
>
> I desire to point out at this time that in addition to the depreciation annuity of $270,000 herein allowed applicant should add to its reserve during the year 1920 the sum of 6 per cent upon the actual reserve of $1,585,000, or $95,100, and that as soon as its earnings are sufficient it should set aside, in order that the accrued depreciation will not increase more rapidly than the reserve, 6 per cent on approximately $2,000,000. The total addition to reserve for the year 1920 should be, therefore, $365,100, of which $270,000 should be considered as operating expenses."

Table No. 10 sets forth the accrued depreciation based upon the annuity heretofore found reasonable and interest at 6% upon the reserve commencing with the amount set forth in the Company's records as of January 1st, 1916, showing that at December 31st, 1921 the reserve for electric properties should have been $2,365,600 as compared with the reserve which the Company reports in its Exhibit No. 37 of $1,930,659. Table No. 11 sets forth the accrued depreciation and the reserve which should reasonably be set up on the Company's books based upon the findings of the Commission's Decision No. 7305.

TABLE NO. 10

DEPRECIATION RESERVE-ELECTRIC PROPERTIES

SAN JOAQUIN LIGHT & POWER CORPORATION

	1916	1917	1918	1919	1920	1921
Balance Jan. 1	$639,838.*	795,251.	997,953.	1,294,667.	1,556,155.	1,867,061.
Additions to Reserve						
Annuity	146,641.	166,453.	192,300.	216,000.	284,000.	422,522.
Interest	38,390.	47,715.	59,877.	77,680.	93,369.	112,024.
Miscellaneous	4,885.	2,253.	78,020.	232.	4,185.	2,892.
Total	$189,916.	216,421.	330,197.	293,912.	381,554.	537,438.
TOTAL	$829,754.	1,011,672.	1,328,150.	1,588,579.	1,937,709.	2,404,499.
Deductions from Reserve						
Replacements	$ 34,503.	13,719.	33,483.	32,424.	70,648.	38,899.
Balance Dec. 31	$795,251.	997,953.	1,294,667.	1,556,155.	1,867,061.	2,365,600.

* Reserve as of Jan. 1st, 1916, Based on Co. Ex. No. 37, Case 1544.

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TABLE NO. 11

DEPRECIATION RESERVE - ELECTRIC PROPERTIES

SAN JOAQUIN LIGHT AND POWER CORPORATION

Reserve as of January 1st, 1920 Based on C.R.C. Decision #7305.

	1920	1921
Balance Jan. 1	$2,000,000	$2,337,537
Additions to Reserve		
Annuity	$ 284,000	$ 422,522
Interest	120,000	140,252
Miscellaneous	4,185	2,892
Total	$ 408,185	$ 565,666
Total	$2,408,185	$2,903,203
Deductions from Reserve		
Replacements	$ 70,648	$ 38,899
Balance Dec. 31	$2,337,537	$2,864,304

San Joaquin Light and Power Corporation is operating several different departments and not maintaining separate depreciation reserves for each department. The Company should maintain separate accounts for its depreciation reserve and should transfer from its surplus to depreciation reserve sufficient to bring these reserves to a reasonable amount for each department. This depreciation reserve for electric properties should be immediately increased to at least $2,365,600 as of December 31st, 1921. Hereafter San Joaquin Company should, unless otherwise authorized by the Commission, set aside each year an annuity based upon the percentage set forth herein together with interest at 6% upon accrued depreciation of $2,864,000 as of January 1st, 1922, plus any additions to reserve thereafter. Table No. 12 sets forth the depreciation annuity, in per cent and in dollars, applied to capital as of December 31st, 1921. X

TABLE NO. 12

DEPRECIATION ANNUITY

SAN JOAQUIN LIGHT AND POWER CORPORATION

ITEM	CAPITAL	DEPRECIATION ANNUITY PERCENT	DEPRECIATION ANNUITY AMOUNT
Intangible	$ 98,598.00		
Lands-Undistributed	86,652.00		
Production	15,890,550.69	.8025	$127,522
Transmission	4,772,250.26	1.792	85,519
Distribution	9,142,186.11	2.421	221,332
General			
A. Depreciable	811,437.00	4.131	33,520
B. Not Depreciable	416,168.68		
Total	$31,217,842.74		$467,893

Revenue and Expense

Table No. 13 sets forth the revenue and operating expense of the electric department for the years 1919, 1920 and 1921, together with the estimates for the year 1922, based upon existing rates (submitted by Assistant Engineer W.J. Dodge of the Commission and also the estimates submitted by Mr. G.S. Jacobs of the San Joaquin Company). The estimates submitted by Mr. Jacobs of revenue include certain revisions of agricultural rates which would result in an increase over the present. Miscellaneous non-operating revenue is not included as it is not derived from public utility service and it appears that the segregation of cost by the Company eliminates charges applicable to this particular business.

The kilowatt hour sales and revenue for the year as estimated by Assistant Engineer W.J. Dodge both as to regular sales and the sales to foreign corporations appear to be reasonable.

The evidence shows that San Joaquin Light and Power Corporation has entered into a contract under which it will

TABLE NO. 13

EARNINGS AND OPERATING EXPENSES

SAN JOAQUIN LIGHT & POWER CORPORATION

				Estimate by O. S. Jacobs, S.J.L.& P. Corp. Ex. #13-Rev.	Estimate by W. J. Dodge California R.R.Commission Ex. #16-Revised
	1919	1920	1921	1922	1922
REVENUE					
Electric Sales	$2 965 244.47	$3 933 411.16	$5 102 107.00	$5 446 909.00	$5 535 649.00
Interest on Kerckhoff Transmission Line			38 940.00		38 940.00
Operation of Betteravia Steam Plant		59 831.00	46 410.00	**	**
TOTAL.........	$2 965 244.47	$3 993 242.16	$5 187 457.00	$5 446 909.00	$5 574 589.00
OPERATING EXPENSES					
Production					
Fuel Oil & Gas	$ 447 102.04	$ 399 165.00	$ 301 470.18	$ 172 011.00	$ 169 500.00
Purchased Energy	596 000.00	227 290.19	8 265.24	10 000.00	
Other Expense	177 219.48	230 775.19	320 086.14	360 000.00	330 000.00
TOTAL.........	$1 220 322.52	$ 857 230.38	$ 629 821.56	$ 542 011.00	$ 499 500.00
Transmission	36 350.00	42 443.71	64 856.66	85 000.00	76 445.00
Distribution	215 725.00	276 937.51	387 198.02	463 000.00	452 697.00
Commercial	118 350.00	157 355.52	204 266.95	240 000.00	230 000.00
General and Miscellaneous	227 050.00	306 085.10	502 617.39	697 000.00	560 000.00
Taxes	135 610.62*	165 424.88*	388 864.00*	561 197.00	531 864.00
Uncollectible Bills	4 800.00	10 450.00	5 934.00	25 000.00	7 000.00
TOTAL.........	$1 958 207.94	$1 815 947.10	$2 097 126.74	$2 613 208.00	$2 357 506.00
Net for Interest and Depreciation	$1 007 036.53	$2 179 295.06	$3 090 330.26	$2 833 701.00	$3 217 083.00

* Federal Income Tax excluded in 1919, 1920 and 1921

** Cost of operation of Betteravia Steam Plant not included.

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construct an additional steam unit in its Midway Steam Plant and sell to the Southern California Edison Company 80,000,000 kilowatt hours during the ten months commencing August 1922. This transaction contemplates a special investment by the San Joaquin Company of approximately $1,200,000 at least a year ahead of the requirements of its own service and I believe it should not be considered in connection with this proceeding as it is largely a separate and distinct service. It is apparent, however, that at the completion of the agreement consideration must be given to what shall be included as the investment or part of a future rate base.

Considerable evidence was introduced relative to the price of natural gas paid by the San Joaquin Company it being contended by Mr. J. J. Deuel and others that the price of 10¢ per 1000 cubic feet is excessive and that the evidence introduced in Application 4064 relative to this matter had not been fully considered by the Commission. It was contended that a price of 5¢ per 1000 cubic feet, plus the cost of transmitting the gas to the plants of the Company was all that should be allowed as the field price was in general that amount and offers had been made to sell gas at that price. The natural gas obtained by the San Joaquin Company is purchased from the Midway Gas Company and through the system formerly owned by the Valley Natural Gas Company and extensions and enlargements thereto. The price of 10¢ per 1000 cubic feet was fixed by this Commission for the Valley Natural Gas Company prior to the sale to the Midway Company and prior to the purchase of any large amounts of gas by the San Joaquin Company. An analysis of the evidence in these proceedings indicates that much of the complaint in this matter has been due to a lack of full information and appreciation of the actual conditions surrounding the delivery of gas to the steam plants of the San Joaquin Company. The supply of natural gas is more or less uniform, while the demand made by the San Joaquin Company is intermittent. Practically no gas was used by the Company during the past two or three months although during the fall period of 1921 a relatively large amount was consumed. It appears that during the year 1922 the amount of gas used to supply the power to the Company's own consumers and the wholesale service to Pacific Gas and Electric Company will be relatively small. In view of the intermittent character of the service required I am convinced that the rate of 10¢ per 1000 cubic feet is reasonable to the San Joaquin Company and to the public which it serves.

In determining production expenses both Mr. Jacobs and Mr. Dodge have estimated operations on the basis of a year of average hydro-electric power supply. This basis has been followed in other proceedings before this Commission and appears to be correct when considering definite rates of a stable character. Considerable difference exists in the two estimates of the average power supply, Mr. Jacobs estimating less useful kilowatt hours from hydro plants on the average than that estimated by Mr. Dodge. Additional records and computations were submitted to Mr. Dodge after his first estimates and this additional information has been carefully analyzed and the estimate set forth in the following table of the average useful hydro-electric power supply in kilowatt hours for the year 1922 appears correct. The table also sets forth the total estimated power requirements together with the steam-electric production necessary.

TABLE NO. 14

C.R.C. ESTIMATE OF STEAM REQUIREMENTS FOR 1922

BASED ON WATER DATA FOR AN AVERAGE POWER YEAR

Month	System Load KWH	Useful Hydro Power KWH	Steam Power KWH
January	28,821,000	21,961,000	6,860,000
February	24,169,000	23,669,000	500,000
March	26,500,000	26,000,000	500,000
April	35,000,000	34,500,000	500,000
May	40,000,000	39,500,000	500,000
June	42,000,000	40,023,000	1,977,000
July	43,600,000	42,463,000	1,137,000
August	44,700,000	31,790,000	12,910,000
September	35,600,000	23,368,000	12,232,000
October	29,600,000	22,776,000	6,824,000
November	25,300,000	19,727,000	5,573,000
December	25,800,000	21,632,000	4,168,000
TOTAL	401,090,000	347,409,000	53,681,000

It has been strongly urged by the San Joaquin Company that allowance be made in operating expenses for the estimated actuarial cost of a pension system for its employees. This is largely the result of the recommendations of Mr. George L. Bell, who made an exhaustive investigation of the Company's organization and operations. Various plans were suggested, but the one most recommended would require a permanent annuity of approximately $120,000 per year. The Company has included this amount in its estimate of operating expenses for 1922. If the system were put in operation immediately, the actual out-of-pocket cost the first year would be negligibly small. It is therefore not a matter of large practical importance whether the permanent annuity begin to be set aside coincidently with the inauguration of the system or a year or two later. However, if there is to be any such system, I believe it should be put within a reasonable time on a permanent actuarial basis; otherwise, the costs in the later years would become prohibitive. The decision whether to inaugurate such a system is, I think, part of the responsibility of management rather than of regulation. The initiative should, therefore, come from the Company, which can, if it wishes, establish the system and then justify its cost as a part of operating expenses. This is sounder than a tentative suggestion that if the consumers will agree in advance to pay for it, the Company will put it into effect. A pension system should result, among other things, in savings to the Company. Neither the savings nor the cost will be great the first year. There will be time, before either becomes large, to consider later how much of the money then to be set aside for the permanent annuity shall be reckoned against these savings and how much, if any, shall be charged directly to consumers in operating expenses. I am heartily in favor of the general principle of pensions, but I do not believe that it is the responsibility of the Commission to put it in operation in this Company. As the Company has not yet taken any definite steps in the matter, and as, if it did so, the question of an allowance could, without loss or lack of fairness, be taken up afterward, I do not think it necessary to make any allowance in the expense for the year 1922.

The request of the Company that an allowance of $25,000 be made to carry on a magazine is subject to the same comments as above (first) that it should be shared by the Company and its con-

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sumers as well and, (second) that it is the Company's duty to take the initiative in putting such beneficial changes in effect.

The San Joaquin Company's operating expenses have increased quite materially during the past few years due to increases in extent of business and also increases in salaries, wages and in the price of supplies. Without question during the periods 1919, 1920 and 1921 less efficiency existed than during pre-war periods or at the present time. On the other hand, the Company was growing at such a rate that it was if anything under-managed and supervised during 1919 and 1920 and an increase in general commercial expense could be expected, even with a tendency to reduction in costs. I cannot however agree that the estimates of the Company as submitted by Mr. Jacobs are entirely reasonable. This proceeding is for the consideration of rates which it is hoped would be more or less permanent. The conditions existing require the greatest economy and it appears that these estimates do not give due consideration to such factors. It would appear from a full consideration of the evidence that the operating expenses set forth in Table No. 15 represent a reasonable estimate of expenses chargeable to electric operation based upon the year 1922.

San Joaquin Light and Power Corporation in its estimate of 1922 operating expenses sets forth State tax as 7½% of the gross revenue for 1922. Mr. Dodge in his estimate bases the State tax for 1922 on 7½% of the 1921 revenue. San Joaquin Company in its brief modifies its position to agree with the method followed by Mr. Dodge. It is urged by Attorney for Farm Bureau Federation that the State tax to be allowed during any given calendar year should be the money actually paid the State that year which represents the second installment of the tax which becomes due in July of the preceding year and the first installment of tax which becomes due in July of the year in question. The State tax on electric utilities, is determined as a percentage of the gross revenue. The tax which becomes a lien upon the Company's property on the first Monday of March, 1922, is determined as $7\frac{1}{2}\%$ of the gross operative revenue for the year 1921, less uncollectible bills. This tax in its entirety is due and payable on the first Monday of July, 1922, and one-half becomes delinquent on the sixth Monday thereafter. The second one-half of this tax does not become delinquent until the first Monday of February, 1923. It appears that an obligation does exist for the year 1922 equivalent to the tax which becomes a lien upon the property for that year, and although the Company may delay in the payments of its second installment to as late as February of the following year, the total amount is an obligation on the Company and must be paid.

Mr. Brittain, in his brief, sets forth certain tables comparing the payments which would be made in each year with the amounts allowed on this basis, and then concludes that at the close of December 31st there existed a sum of money in excess of the amounts actually paid, and that the utility has been unjustly enriched. It is stated that this money will never be paid. He apparently neglects to consider the fact that within thirty-eight days at the most, from the date at which he ends his computation the entire amount must be paid or become delinquent. To follow Mr. Brittain's proposal would mean that the utility would first pay its tax and then accrue the amount paid. The Commission does not include in the working capital of the Company any allowance to cover taxes paid before they are accrued, as it is contemplated to allow the Company to accrue this tax out of earnings prior to the payment thereof. I conclude, therefore, that a reasonable estimate of State tax is an allowance equal to the amount which will become a lien upon the property durin the year used in determining the reasonableness of existing rates.

TABLE NO. 15

C.R.C. ESTIMATED EARNING, OPERATING EXPENSE AND RETURN-1922

SAN JOAQUIN LIGHT AND POWER CORPORATION

RATE BASE	$32,064,893.00
REVENUE Based on 1921 Rates.	
Electric Sales	5,535,649.00
Interest on Kerckhoff Transmission Line	38,940.00
Operation of Betteravia Steam Plant	47,349.00
TOTAL REVENUE........	$ 5,621,938.00
OPERATING EXPENSES	
Production	
Fuel Oil & Gas	$ 165,200.00
Other Expense	330,000.00
TOTAL.................	$ 495,200.00
Transmission	76,445.00
Distribution	435,752.00
Commercial	217,500.00
General & Miscellaneous	560,000.00
Taxes	388,864.00
Uncollectible Bills	7,000.00
TOTAL OPERATING EXPENSE	$ 2,180,761.00
Return for Interest & Depreciation	$ 3,441,177.00
Depreciation	491,300.00
Return for Interest	$ 2,949,877.00
Percent Return	9.20%

ELECTRIC RATES

If the rates of this Company are to be reduced so that the revenue as estimated will just make available the average return of 8.5%, a reduction of approximately $230,000 can be made. Conditions are, however, such that it appears advisable from the standpoint of the Company and the development of the territory that rates be reduced to a somewhat greater extent although a less return might be earned during the year 1922. The Company's system, though not overdeveloped, has possibilities of reducing costs due to the general tendency to reduced costs of operations and a greater concentration of business on its system. The economic depression prevailing all over the country in the past year and affecting the territory served by San Joaquin Company, although now showing indications of recovery, justifies a temporary sacrifice of a portion of the full return. The evidence shows that during the past year there was considerable curtailment of use of power by agricultural consumers. This resulted largely from economic conditions and partly from a misunderstanding of the actual application of the schedules. These factors and the suggestion of the Company in its own exhibits, that it would accept a lower return than that which it claimed was reasonable, and the further fact that certain refunding will tend to reduce the cost of money, justify the conclusion that the estimated return for this year should be somewhat less than a full fair return.

The existing rates of San Joaquin Company, with the exception of the agricultural rates, were fixed by this Commission in its Decision No. 7305, effective on and after April 1st, 1920. The agricultural rates fixed by that decision were modified by the Commission's Decision No. 8820, effective April 1st, 1921. The existing lighting rates are similar in form to those in effect on other utilities' systems with the exception of a commercial lighting schedule of the demand and energy form, against which some objection has been received. The industrial power schedules are of the standard block form, while the agricultural power schedule is in the form of a seasonal block schedule with a minimum bill of $18.00 per horsepower year for the first 10 horsepower and $15.00 per horsepower year for all over. This schedule is apparently generally acceptable as to form with the exception of the minimum bill and the proposal that the first block, which includes 1000 kilowatt hours per horsepower per year should be reduced to 500 kilowatt hours per horsepower per year. The present wholesale schedules for substation and transmission delivery and also the oil field schedule, which were made effective to cover power shortage conditions in 1920, are uniform energy rates without consideration being given to load factor of that service.

In these proceedings the Company introduced an exhibit setting forth a set of proposed schedules which it considered reasonable and which it recommended be made effective. These schedules in general are the same as existing at the present time, with the exception of the agricultural schedule where the general effect was an increase in rates over the present of approximately 8%, and the elimination of the present commercial lighting schedule, which is of a demand and energy form and to which considerable objection had been raised by certain consumers, due to the demand feature of that schedule.

Suggestions relative to agricultural, oil field and wholesale schedules were submitted by the Commission's engineers. These were suggested as to form only. Modifications were proposed in the wholesale and oil field schedules as the present rates were temporary rates made effective during the power shortage existing in 1920, and were such as would not be advisable as a permanent forms of schedules.

Certain suggestions were made by the Merced County Farm Bureau through its representative, Mr. George G. Washington, relative to agricultural schedules. It is urged that there should be no difference in the rates between the small and large size installations; that a considerably lower rate should be made effective than now exists, and that the minimum bill should be reduced materially. It is also suggested that a rate be fixed which will apply to all rural use, whether for agricultural pumping, house lighting, cooking, heating or other purposes, and that a third form of rate be made to cover operation of plants during the development period of the ranches.

Testimony of Mr. C. A. Melcher of McFarland is to the effect that some curtailment of use of power occurred in 1921 owing to the fact that consumers did not understand the schedule; that a considerable burden was thrown upon the consumers under the application of the present schedule owing to the relatively large bills received during the first part of the irrigation season, a time when the consumer had the greatest difficulty in paying the bills. It was his opinion that the demand charges for the power should be extended over a longer period, possibly for the entire 12 months of the year - in order that the billing during the early summer months would not be burdensome on consumers.

It is urged by Jay A. Ehrman and W.P. Grijalva that the present lighting schedule No. 2 for commercial service is unsatisfactory and should be eliminated, but that the domestic and commercial rate should be reduced so that the consumers now on Schedule No. 2 would not be increased by the change. The complaint relative to Schedule No. 2 is largely due to lack of confidence in the demand meters on the part of the consumers and some failure on the part of these meters to operate accurately. This schedule is lower than the general lighting rates where the lighting load has a fairly high load factor. This optional rate need not be used by the consumer unless he desires. In view of this fact I do not believe it should be eliminated.

Rosenberg Bros., operating packing houses served by San Joaquin Company, submitted evidence relative to the application of the present power schedules to their service. It is pointed out that they have a large installation of motors, not all of which operate at the same time; that owing to the limitation in the present schedule, under which the maximum demand shall not be less than 50% of the connected load, they have their motors sealed when not in operation in order to reduce the minimum charge and even then they are charged for a demand in excess of that actually created.

The sealing of motors by a consumer, thus eliminating the charge for connected load or demand during the season of the year when the consumer is not operating, is neither satisfactory to the consumer nor fair to the Company. The schedules of general power rates do not contemplate this being carried on.

The rates for industrial service will be modified herein to the extent that the maximum demand will be limited to not less than 50% of the connected load, which will, under operating conditions, be in operation at one time. The schedule will also be modified to the extent that where seasonal service is had and where the operation is primarily for less than 10 months in the year, the minimum bill for service will be made cumulative.

Temporary sealing of motors will not be permitted.

It is urged by representatives of the Oil Dale Water Company, that the rate for pumping purposes for municipal or privately owned public utilities serving water for domestic purposes should be the agricultural rate. The agricultural rates on this Company's system as well as others have not as a whole carried their proportional share of the total cost of service although they have not resulted in higher rates to other classes of service than would have existed had this service not been rendered. The operations of the water companies supplying water for domestic service cannot be considered as agricultural and it would not appear that an extension of this schedule to such service should be made.

Two matters relative to the question of extensions were formally submitted in these proceedings, in addition to the large number of other complaints and questions which were received and adjusted by the Commission's engineers.

Mr. Alex Gordon, representing some twenty-five applicants for service in the vicinity of Fresno, set forth the inability of these persons to obtain domestic lighting service from the San Joaquin Company. This matter has been taken up by the Commission's engineers and the Company's cost estimates revised. It appears that under the rules on extensions which have been found reasonable by the Commission the parties desiring the extension should be required to advance the sum of $18.00 each toward the cost of the extension.

Messers. Nordstrom and Jerpe appeared on behalf of nineteen consumers now receiving lighting service from an extension of the San Joaquin Company located on Preacher Avenue near Kingsburg. This extension was built in January 1921, the applicants being required to advance the amount of $170 each to obtain the service. It appears that prior to the construction of the line suggestion was made that the money would be refunded when the extension became profitable or when new power business was added, and apparently the suggestion was made by the Company's representative that it would be profitable when a third wire was added and refunds would then be made. For operating reasons the Company extended the third wire on this pole line at the time the extension was made and the consumers now contend that in view of this fact and the fact that some additional business has been taken on the money should be refunded. If any such promises were made by the Company's employees they are in violation of the Company's rules on extensions. The evidence indicates that the extension is not such as to justify the entire expenditure by the Company at this time and there appears considerable doubt whether it ever will be. In justice and fairness to the other consumers served and in view of the rules in effect, I cannot recommend that the Company be ordered to refund the advance.

Proposed Rates:

Exhibit "A" attached to the order in this proceeding sets forth the schedules of rates which I find reasonable for the service rendered by the San Joaquin Light and Power Corporation, to be effective based upon regular meter readings taken on and after May 1st, 1922.

Lighting rates for domestic and commercial service have been reduced under the new rate schedule L-1 from 9¢ for the first 20 k.w. hrs. to 8¢ for the first 30 k.w.hrs. and by including a lower block for all service over 1000 k.w.hrs. per month. Modification of the minimum charge for rural service taken from a single transformer has been made, reducing the charge slightly. A reduction in public outdoor street lighting service under Schedule L-3 has been made of practically 6 per cent.

Modification of the industrial power rate is made, reducing the average rate approximately 5% by reduction in the rate set forth in the schedule and adding a fourth block for consumptions over 200 k.w.hrs. per horsepower per month. Modification is made in the schedule making the minimum bill cummulative in the case of seasonal service.

Particular study has been given to the design and form of the agricultural rate in order that the numerous complaints which this Commission found in its investigation of service conditions might be eliminated. It appears that the demand and energy form of rate together with an optional rate on the energy basis will work out most satisfactorily. In order to reduce the burden upon the agricultural consumers during the first part of the season the annual demand charge and minimum bill have been made payable in eight equal monthly installments during the months of May to December, inclusive.

A reduction in the demand charge of $1.00 per horsepower per year is made and $3.00 per horsepower per year in the minimum charge. Modification in the energy blocks also have been made. It is contemplated that the Company will offer to each agricultural consumer the schedule of rates best suited to his operations, but in case a consumer selecting the demand and energy form rate has at the end of the year consumed less than 1000 kilowatt hours per horsepower year his bill will be adjusted to the second option.

Special instruction will be given San Joaquin Company relative to the proper application of these schedules in order that consumers may be correctly advised.

A modification is made whereby the period in which the agricultural rates are applicable will hereafter commence with April 1st rather than upon meter readings taken on and after April 1st. It appears from the evidence that the general irrigation season commences about April 1st and that it is reasonable to require the Company to read all agricultural meters within a 10-day period at the start of the season year. I find it reasonable to require that as regards meters which have been read regularly between April 1st and April 30th, 1922, inclusive, the Company should revise its bills to these consumers on the basis that the consumption during this period should be considered as a part of the consumption coming under the schedule for the season commencing April 1st, 1921.

From investigation regarding service conditions in the oil fields it appears advisable to continue the rate now in effect for this class of service, although a demand and energy form of rate was suggested by the Commission engineers.

Prior to 1920 the wholesale rate for electric service was in the form of a demand and energy rate. During 1920, owing to emergency conditions, this form was eliminated. It appears, however, at the present time that in fixing permament rates a form of schedule which will vary with load factor conditions should be made effective.

As regards electric service to street railways, it appears that owing to the fact that railways cannot modify their requirements, a uniform energy rate may be made to apply.

I recommend the following form of Order:

O R D E R

The Railroad Commission having instituted a proceeding on its own motion for the determination of rates and investigation of service of San Joaquin Light and Power Corporation and San Joaquin Light and Power Corporation having applied to the Railroad Commission for an Order establishing just and reasonable rates, hearings having been held, briefs filed, and the matter being submitted and now being ready for decision.

The Railroad Commission hereby finds as a fact that the rates for electric service rendered by San Joaquin Light and Power Corporation and the rules and practices now in effect are unjust and unreasonable insofar as they differ from the rates, rules and practices hereinafter set forth and that the rates, rules and practices herein set forth are just and reasonable.

Basing its Order on the foregoing findings of fact and other findings of fact contained in the Opinion which precedes this Order;

IT IS HEREBY ORDERED that San Joaquin Light and Power Corporation

(1) Charge and collect for electric service rendered, based on regular meter readings taken on and after May 1st, 1922, in accordance with the schedules of rates as set forth in Exhibit "A" attached hereto and made a part of this Order.

(2) File with the Railroad Commission on or before May 1st the schedules of electric rates as set forth in Exhibit "A".

(3) Read all meters used to measure agricultural service between May 1st and May 10th during the year 1922 and between April 1st and April 10th of each year thereafter beginning with the year 1923.

(4) Bill for all agricultural service rendered based on regular meter readings taken between April 1st and April 30th, 1922, inclusive on rates prescribed under present Schedule No. 7 for the 1921 season;

IT IS HEREBY FURTHER ORDERED that San Joaquin Light and Power Corporation

(1) Submit to the Railroad Commission on or before June 1st, 1922, a report setting forth in detail its plans for the improvement of electric service in its Los Banos District.

(2) Submit to the Railroad Commission a full and complete report of the measures it has taken or contemplates to take to eliminate conditions causing the "reversal of power" on its system.

(3) Institute a practice of holding monthly meetings beginning not later than May 15th, 1922, at which its district managers and other employees who carry on the business of the Company with the public may meet and where these employes may become acquainted and kept in constant touch with the proper application of rules and practices of the Company and policies affecting public relations.

(4) Give each consumer who since June 1st, 1921, has guaranteed a definite annual revenue or who has made an advance in order to obtain service the option of advancing an amount equal to the difference between the cost of the extension and three times the estimated annual revenue or of guaranteeing for a period of three years a total revenue equal to the cost of the extension as provided in the present extension rules.

(5) Submit to each consumer who since June 1st, 1921, has made an advance or guarantee for service from an extension in which the amount guaranteed or advanced is not based on

actual costs, a statement setting forth the actual cost of the extension and give any such consumer the option of adjusting the advance or guarantee as set forth in the contract on the basis of the actual cost.

(6) Supply each existing consumer who has signed a contract for electric service a copy of such contract if same has not already been submitted to him;

(7) Furnish each new consumer with a copy of any contract signed by him whether requested or not.

(8) Furnish each consumer hereafter required to make an advance or guarantee to obtain service from an extension with an itemized account of the cost of the extension upon completion of the work.

(9) Refund or credit to those agricultural consumers who have not been operating under present Schedule No. 16 and who would have been advantageously affected by this schedule during the past season an amount equal to the difference between the amount actually billed and the amount which would have been billed had Schedule No. 16 been applied.

(10) Install on or before July 1st, 1922 and thereafter maintain adequate demand recording and watt hour meters at Henrietta Substation and Betteravia Steam Plant and at such other points of delivery of power to Midland Counties Public Service Corporation for the measurement of power delivered to that Company.

IT IS HEREBY FURTHER ORDERED that San Joaquin Light and Power Corporation

(1) Set aside to its depreciation reserve for electric properties on or before July 1st, 1922 an amount sufficient to bring this reserve to a total of $2,365,600. as of December 31st, 1921.

(2) Set aside to its depreciation reserve commencing January 1st, 1922, and until otherwise directed by the Railroad Commission, the sum of $467,893. per annum, plus an amount per annum equal to that computed on the annuity rates set forth in Table No. 12 in the Opinion preceding this Order on all net additions to depreciable capital made after January 1st, 1922.

(3) Set aside annually to its depreciation reserve until further directed by the Railroad Commission, 6% upon an accrued depreciation of $2,864,304. plus all net additions to depreciation reserve made on and after January 1st, 1922.

San Joaquin Light and Power Corporation is hereby authorized to charge Midland Counties Public Service Corporation in addition to the charge for electric energy delivered on the basis of Schedule P-4 herein fixed the fixed charges and operating expenses, other than fuel, of the Betteravia Steam Plant.

The effective date of this Order shall be May 1, 1922.

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

Dated at San Francisco, California, this 25th day of April, 1922.

H. W. Brundige
Irving Martin
Clyde L. Seavey
W. A. Benedict
Commissioners

EXHIBIT "A"

-- SCHEDULES OF RATES --

SAN JOAQUIN LIGHT AND POWER CORPORATION

Effective for Service based on Regular
Meter Readings Taken on and after
May 1st, 1922.

SCHEDULE L-L

(Cancelling Schedule No. 1 - C.R.C. Sheet No. 422-E and Schedule No. 13 - C.R.C. Sheet No.357-E)

GENERAL DOMESTIC AND COMMERCIAL LIGHTING SERVICE

TERRITORY

Entire territory served.

RATE

First 30	KWH	per	meter	per	month	8¢	per	KWH
Next 70	"	"	"	"	"	6¢	"	"
" 200	"	"	"	"	"	5¢	"	"
" 700	"	"	"	"	"	4¢	"	"
All over1000	"	"	"	"	"	3½¢	"	"

MINIMUM CHARGE

(1) General $1.00 per meter per month.

(2) When separate transformers are required to be installed on distribution lines in excess of 5000 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	$3.00
2	2.00
3	1.50
4	1.25
5	1.00

(3) Lighting Service supplied from Power Bank of Transformers.

$1.00 per meter per month.

SPECIAL CONDITIONS

(a) Single phase motors aggregating not more than 3 H. P. may be served at the request of the consumer through the same meter with the lighting service at the above lighting rate and minimum charge.

SCHEDULE L-2

(Cancelling Schedule No. 2-C.R.C. Sheet No. 344-E)

COMMERCIAL LIGHTING SERVICE

This schedule is applicable to general commercial lighting service and is an optional schedule with L-1.

TERRITORY

Entire territory served.

RATES

(a) Demand Charge

First 4 kilowatts or less of maximum demand per month $10.00

All in excess of 4 kilowatts of maximum demand per " 2.00 per KW

(b) Energy Charge

2½¢ per kilowatt hour.

SPECIAL CONDITIONS

(a) The total monthly charge is the sum of the Demand Charge and Energy Charges.

(b) Under this schedule demand meters and watt hour meters will be installed and maintained by the Company ~~and at the Company's~~ expense.

(c) The maximum demand shall be the highest average kilowatt demand registered during any fifteen minute interval during the month for which the bill is rendered.

SCHEDULE L-3

(Cancelling Schedule No. 3-C.R.C. Sheet No. 345-E)

PUBLIC OUTDOOR LIGHTING SERVICE

Applicable to all street, highway and other public outdoor lighting service.

TERRITORY

Applicable to the entire territory served by the Company.

RATE

Type of Lamp	Rate: Annual Demand Charge per each lamp	Rate: Charge per 100 Lamp hours
Arc Lamps		
(1) 6.6 Ampers Enclosed Alternating Current	$34.50	$.50
(2) 6.6 Ampers Luminous	39.50	.55
(3) 4.0 " "	35.50	.50
Incandescent Lamps		
(4) 400 W. multiple or 600 c.p. series	32.00	.65
(5) 500 W. "	33.00	.75
(6) 300 W. "	30.50	.55
(7) 250 W. " " 400 c.p."	29.00	.45
(8) 150 W. " " 250 c.p."	25.00	.30
(9) 100 W. "	20.00	.23
(10) 80 W. " " 100 c.p."	17.50	.17
(11) 60 W. " " 80 c.p."	14.50	.11
(12) 40 W. " " 60 c.p."	12.50	.10
(13) 32 c.p."	12.00	.09

SPECIAL CONDITIONS

(a) The total charge is the sum of the demand and lamp hour charges.

(b) The total charge is normally to be paid in twelve equal payments throughout the year unless otherwise agreed to between the consumer and Company.

(c) All-night lamps will be considered as burning 4000 hours per year.

(d) Under the above schedule the Company bears the installation, maintenance and operating expenses and provides all necessary lamp renewals.

(e) Where the company is required to provide ornamental lighting posts or standards an additional charge will be made for the same

SCHEDULE L-4

(Cancelling Schedule No. 4-C.R.C. Sheet No. 346-E)

Rates and conditions the same as included under Schedule No. 4, C.R.C. Sheet 346-E.

SCHEDULE C-1

(Cancelling Schedule No. 5-C.R.C. Sheet No. 347-E, and Schedule No. 6-C.R.C. Sheet No. 348-E)

GENERAL HEATING, COOKING AND COMBINATION SERVICE

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

TERRITORY

Entire territory served.

RATE

(a) Domestic Combination Lighting, Heating, Cooking and/or Water heating service.

First 30	KWH	per meter	per month	8¢	per	KWH
Next 120	"	"	" "	4¢	"	"
All Over 150	"	"	" "	1½¢	"	"

(b) Domestic or Commercial Heating, Cooking and/or Water Heating Service

First 150	KWH	per meter	per month	4¢	per	KWH
All Over 150	"	"	" "	1½¢	"	"

MINIMUM CHARGE

$.75 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) Rate (a) 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.

SPECIAL CONDITIONS Cont'd.

(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 agregating 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.

SCHEDULE P-1

(Cancelling Schedule No. 8-C.R.C. Sheet No. 350-E)

GENERAL POWER SERVICE

Applicable to general power service supplied at 440 volts or less.

TERRITORY

Entire territory served.

RATE

(a) Installationsof less than 5 H.P. capacity

First	200	KWH	per	meter	per	month	5¢	per	KWH
Next	200	"	"	"	"	"	2½¢	"	"
All Over	400	"	"	"	"	"	1½¢	"	"

(b) Installations of 5 H.P. and over

Consumption per H.P. per month			Rate for Active Connected Loads of: 5 H.P. to 9 H.P.	10 H.P. to 24 H.P.	25 H.P. to 49 H.P.	50 H.P. to 99 H.P.	100 H.P. and Over.
First	50	KWH	4.2¢	3.4¢	3.0¢	2.8¢	2.6¢
Next	50	"	2.0	2.0	1.9	1.8	1.7
"	100	"	1.3	1.1	1.0	1.0	.9
All Over	200	"	1.0	.9	.9	.8	.8

MINIMUM CHARGE

(a) General Power Service

$ 1 per H.P. per month of active connected load. but in no case less than $ 2 per month.

MINIMUM CHARGE -Cont'd

(b) Seasonal Power Service

Where the primary use of power is seasonal and is limited to ten months or less the minimum charge may at the option of the consumer be cumulative over a twelve months period at the rate of $1.25 per month per H.P. of active load but not less than $12.50 per month.

SPECIAL CONDITIONS

(a) Upon application by the consumer or at the option of the Company, the rates and minimum charges may be based upon the maximum demand instead of active connected load for installations exceeding 20 H.P. in which case the maximum demand shall not be less than 50% of the rated active connected load and not less than 20 H.P.

(b) Maximum demand meters when installed will be installed and maintained by the Company at its expense.

(c) The maximum demand shall be the greatest average H.P. demand registered during any fifteen minute interval during the month.

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

(e) The sealing of motors will not be permitted under this schedule.

(f) Any consumer may obtain the rate for a larger size inxtallation by guaranteeing the rates and minimum charges for that larger installation.

(g) The rated active connected load in the case of industries having several motors installed, not all operated at one time may be determined by inspection upon request of consumer.

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SCHEDULE P-2

(Cancelling Schedule No. 7-C.R.C. Sheets 413-414-E)

AGRICULTURAL SERVICE

Applicable to general agricultural service.

TERRITORY

Entire territory served.

RATE

Demand Charge

Size of Installations	Annual Charge
1 - 4 H.P.	$16.00 per H.P. per year, but not less than $30. per year
5 - 14 "	14.00 per H.P. per year
15- 49 "	13.00 " " " "
50- 99 "	12.00 " " " "
100 H.P. and over	11.00 " " " "

Energy Charge

First	1000	KWH per H.P. per year	0.9¢ per KWH
Next	1000	" " " " "	0.8 " "
"	1000	" " " " "	0.7 " "
"	2000	" " " " "	0.6 " "
All Over	5000	" " " " "	0.5 " "

OPTIONAL RATE

Any consumer may select at his option the following rate instead of the demand and energy rate set forth above.

Annual Consumption per H.P.			Rate per KWH for Connected Load of 1 H.P. to 4 H.P.	5 H.P. to 14 H.P.	15 H.P. to 49 H.P.	50 H.P. to 99 H.P.	100 H.P & Over
First	500	KWH	3.0¢	2.8¢	2.6¢	2.4¢	2.3¢
Next	500	"	2.0	1.8	1.8	1.8	1.7
"	1000	"	.8	.8	.8	.8	.8
"	1000	"	.7	.7	.7	.7	.7
"	2000	"	.6	.6	.6	.6	.6
All Over	5000	"	.5	.5	.5	.5	.5

MINIMUM CHARGE

First	10 H.P. at $15.00 per H.P. per year, but not less than $30.00 per year
All Over	10 H.P. at $12.00 per H.P. per year.

SPECIAL CONDITIONS

(a) Demand and Minimum Charges

The annual demand charges (or minimum charges) of the rate set forth above are due and payable in eight equal monthly installments during the months of May to December inclusive.

SPECIAL CONDITIONS - Cont'd.

(b) Energy Charges

The energy rates of the two rates set forth above shall apply to service rendered based on all regular monthly meter readings taken on and after May 1st of any year and before May 1st of the succeeding year.

(c) Service Commencing after April 1st.

Any consumer whose service begins at a later date than April 1st of any year will be billed in accordance with the above rates modified as follows:

1. Service Commencing on and after April 1st but on or before November 30th.

(a) The demand charge (or minimum charge) is tobe applicable only during that period from date service is first taken to November 30th at the rate of one-eighth of the annual demand charge (or minimum charge) per month.

(b) The sizes of the energy blocks of the rate (or optional rate) are to be determined by multiplying the sizes of the blocks given in the rate (or optional rate) by the following factor,, according to the month in which service commences:

Month in Which Service Commences	Factor
April	1.0
May	.9
June	.8
July	.7
August	.6
September	.5
Octobwr	.4
November	.3

2. <u>Service Commencing on and after December 1st but Prior to April 1st of the following year.</u>

The optional rate only (but with no minimum charge) will apply to such service up to April 1st of the following year. However, on April 1st the consumer then will have the option of selecting either the rate proper or of continuing with the optional rate. The charges for this service will be determined as follows:

(a) No minimum charge to apply.

(b) The sizes of the energy blocks of the optional rate are to be determined by multiplying the sizes as given in the optional rate by the following factors according to the month in which service commences.

Month in which Service Commences	Factor
December	.2
January	.1
February	.1
March	.1

(d) <u>Agricultural Season</u>

Meters on all agricultural services will be read by the Company between April 1st and April 10th of each year, beginning with 1923, and the above rates will apply for that year for service rendered after that date on which the meters are so read during ten day period.

(e) <u>Date of first Demand or Minimum Payment</u>

The first payment of the annual demand charge (or annual minimum charge) will be due and payable upon presentation of the bill for service rendered, based on regular meter readings taken on or after May 1st.

(f) Consumers permanently increasing or decreasing connected load will have a corresponding adjustment in rates.

(g) Guaranteeing rates for larger size installation

Any consumer may obtain the rate for a larger installation by guaranteeing the rates and demand charges (or minimum charges) for that larger installation.

(h) 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 or minimum charges apply instead of horsepower of connected load, providing the total connected load of the installation is 20 H.P. or over in which case the maximum demand shall not be taken as less than 75% of the total active 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 that maximum demand is at least 10% greater or less than the total active connected load.

The maximum demand shall be the greatest average horsepower demand registered during any fifteen minute interval during the period in which the demand or minimum charges apply.

(i) 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.

(j) Consumers operating on the demand and energy rate whose use in any one year is less than 1000 KWH per H.P. [redacted] will have their bills adjusted to the optional schedule at the end of the twelve months period.

SCHEDULE P-3

(Cancelling Schedule 15 C.R.C. Sheets 416 and 417-E and Schedule 16 C.R.C. Sheets 419 and 430-E)

INTERMITTENT SERVICE

Applicable to industrial or agricultural power service required intermittently throughout the year. For industrial power service this schedule may be selected instead of P-1 and for agricultural service this schedule may be selected instead of P-2.

TERRITORY

Entire territory served.

RATE

(a) Demand Charge

First	10 H.P. of connected load	$5.00 per H.P. per year
All Over	10 H.P. " " "	3.50 " " " "

(b) Energy Charge

For industrial power service the energy charges without the minimum charges as set forth under Schedule P-1 will apply.

For agricultural power service the energy charges without the minimum charges as set forth under the optional rate of Schedule P-2 will apply.

SPECIAL CONDITIONS

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

(b) 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.

SCHEDULE P-4

(Cancelling Schedule No. 9-C.R.C. Sheet No. 351-E)

OIL FIELD SERVICE

Applicable to all power service supplied to equipment used for pumping oil wells, operating and 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 additional 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.

SCHEDULE P-5

(Cancelling Schedule No. 10 C.R.C. Sheet No. 398-E
and Schedule No. 11 C.R.C. Sheet No. 353-E)

WHOLESALE POWER SERVICE

Applicable to general power and resale 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 k.w. or less of max. demand per mo.	...	$230.00
Next	300 k.w. of maximum demand per month	...	1.00 per k.w.
All over	500 " " " " " "	...	.90 " "

ENERGY CHARGE:

		Oil Field Service	Resale & Other Service
First	300 kwh per kw of maximum demand per month	.85¢ per kwh	.75¢ per kwh
All over	300 " " " " maximum demand per month	.7 " "	.6 " "

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%

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 at the 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 electrid energy is greater than in any other fifteen minute interval in the month. The maximum demand on which the demand charge will be

SPECIAL CONDITIONS: (Cont'd)

based will not be less than 60% 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.

SCHEDULE P-6

(Cancelling Schedule No. 12 - C.R.C.Sheet No. 411-E)

RAILWAY SERVICE

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

RATE

1¢ per kilowatt hour.

MINIMUM CHARGE

No minimum charge.

SPECIAL CONDITIONS

The above rate applies to the service delivered and measured at 2300 volts.

SCHEDULE P-7

(Cancelling Schedule No. 14 - C.R.C. Sheet No. 358-E)

Rate and conditions same as set forth in Schedule No. 14.