

Decision No. 22228

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of
THE SAN JOAQUIN AND KINGS RIVER CANAL
AND IRRIGATION COMPANY, INCORPORATED,
for authority to increase rates.

ORIGINAL
Application No. 15271.

In the Matter of the Investigation upon
the Commission's own motion into the
rates, charges, rules, regulations, con-
tracts, practices and operations of THE
SAN JOAQUIN AND KINGS RIVER CANAL AND
IRRIGATION COMPANY, INCORPORATED.

Case No. 2658.

J.E. Woolley, for The San Joaquin and Kings River
Canal and Irrigation Company, Incorporated.

Vincent J. McGovern, for Miller & Lux, Incorporated.

Stephen Downey, for the People's Protective Association,
and for the following water users, directors of said
Association:

Crows Landing:

George Fink, Joe Carriera, George Thoning, Jr.

Newman:

V.T. Freitas, Joaquin Munyon, Hans Krogh.

Gustine:

N. Newsome, Will Pflilger, Joe Vierra.

Los Banos:

F.S. Smith, T.L. Baldwin, C.H. Waggoner.

Dos Palos:

George Wells, R.B. Hume, S.J. Mason.

L.H. Walters, for the Golden State Milk Products Company.

J.J. Deuel, L.S. Wing and Edson Abel, for the California
Farm Bureau Federation, Fresno County Farm Bureau, Merced
County Farm Bureau and Stanislaus County Farm Bureau.

Milton T. Farmer, for Chowchilla Farms, Inc.

A.L. Cowell, for Dos Palos Farm Center and Dos Palos Chamber
of Commerce.

George L. Klug, City Attorney of Los Banos, for the City of
Los Banos.

DECOTO, COMMISSIONER:

O P I N I O N

In this proceeding The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, engaged in the business of selling water for irrigation, industrial and domestic purposes in Fresno, Merced and Stanislaus Counties, asks for authority to increase its rates.

The petition alleges that the average gross annual revenue of this company from 1911 to 1927, inclusive, is \$168,087., which amount is insufficient to provide a reasonable return on the company's property, and asks that the Commission establish rates that will provide an annual revenue of not less than \$500,000.

An amendment to the original application was filed by the company asking authority to change the collection date of the annual charge for service from July 1st to January 1st of each year and that the company be permitted to charge its irrigation consumers, commencing on January 1st, 1930, as follows:

An annual charge of \$1.00 per acre for each and every acre within the service area as a "standby" or "ready to serve" charge, and, in addition thereto, \$1.25 for each acre foot of water delivered to the consumer's land.

In order to broaden the scope of the rate proceeding to include matters relating to contracts, service, rules, regulations and practices of the company, the Commission, on its own motion, instituted an investigation into the affairs of this utility. By stipulation of all interested parties it was agreed that these matters be combined for hearing and decision.

Public hearings in these proceedings were held at Los Banos and San Francisco.

The rates now in effect were established by the Boards of Supervisors of the various counties in which the company serves prior to the taking of jurisdiction over irrigation utilities by the Railroad Commission and are as follows:

For Irrigation

Per Acre per Season:

Fresno County-----	\$1.25
Merced County-----	1.75
Stanislaus County-----	2.25

For Stock

Per Head per Month:

Fresno County	- Horses and Cattle-----	5¢
	Sheep, Goats and Hogs-----	1¢
Merced County	- Horses and Cattle-----	10¢
	Sheep, Goats and Hogs-----	1¢
Stanislaus County	- Horses and Cattle-----	12¢
	Sheep, Goats and Hogs-----	12¢

For Domestic Use

Gallons per Day

0- 10,000-----	\$10.00 per month
10,000- 15,000-----	14.00 per month
15,000- 20,000-----	18.00 per month
20,000- 25,000-----	22.00 per month
25,000- 30,000-----	26.00 per month
30,000- 40,000-----	34.00 per month
40,000- 50,000-----	42.00 per month
50,000- 60,000-----	50.00 per month
60,000-100,000-----	60.00 per month
100,000-200,000-----	75.00 per month
200,000-300,000-----	85.00 per month
300,000-400,000-----	95.00 per month

The predecessors in interest of the present company organized originally for the purpose of constructing and operating a combination navigation and irrigation canal extending from Tulare Lake in Kern County to tide water at Antioch. Construction on this project was started on the section of the present Main Canal from the point of diversion at the mouth of Fresno

Slough to Los Banos Creek on June 1, 1871. The present company bought out the rights and interests of the original company on September 19, 1871, and thereafter completed the construction of the above portion of canal. In 1874 the Main Canal was extended from Los Banos Creek northward to Orestimba Creek and completed in 1878. This extension made it necessary to increase the capacity of the upper section of the Main Canal which was accomplished by the construction of a separate ditch alongside of and parallel to the Main Canal, now called the Parallel Canal. This was completed in 1885. In 1880 the Main Canal was again extended northward to its present terminus and finished December, 1881. In 1896 and 1897 the Outside Canal was constructed from a point near the Main Canal diversion at the San Joaquin River to Los Banos Creek and thereafter extended northerly to Quinto Creek and to its present terminus.

Originally the diversion of water to the Main Canal was made with the aid of a brush dam but after the building of the Outside Canal it was necessary to hold the water at a higher level and a timber dam was constructed which was replaced, in 1919, by the existing concrete weir.

The irrigation system now consists of a concrete diversion dam known as Mendota Weir across the San Joaquin River at its confluence with Fresno Slough near the Town of Mendota and a canal system comprising approximately 204 miles of transmission and distribution canals. There are two primary transmission canals owned by the company conveying water to the service area and from which water is also delivered for the irrigation of adjoining lands. These canals are known as the "Main Canal" and the "Outside Canal". The former extends approximately 71 miles

from Mendota Weir in Fresno County to a point beyond the Town of Crows Landing in Stanislaus County. The Outside Canal is approximately 56 miles long, running in the same general direction as the Main Canal but supplying an area higher in elevation than can be served by the latter. The territory in the vicinity of Dos Palos is furnished with water by a system of distribution ditches locally known as the Colony Canals which are supplied from the Main Canal near Dos Palos. The Dos Palos section is the only one, with the exception of the lands adjoining the Main and Outside Canals, to which water is delivered directly through the company's facilities. The balance of the area is served through several hundred miles of privately-owned canals and ditches. Another distribution system, consisting of approximately 83 miles of canals owned by the Poso Canal Company, a mutual company, receives its water supply from the utility through the Helm Canal which heads at the Mendota Dam and serves an area lying between the Main Canal and the San Joaquin River.

The company's water rights on the San Joaquin River permit it to divert the first 1,360 cubic feet per second in the river, subject to an intrusion by the Chowchilla Canal of 120 second feet, which latter right comes into entitlement between the river stages of 775 and 895 second feet at the control point known as the Whitehouse Gauging Station located on the San Joaquin River three or four miles above Mendota Dam. The company's water rights consist of two appropriations, of which the first in priority of filing, consisting of the first 785 second feet of the natural flow of the river, has at times been considered as attached to the Main Canal; the remaining 575 second feet having been filed on at a later date has at

times been considered as a subordinate right and attached to the Outside Canal. In periods of water shortage in the past the above priorities in filings have resulted in the company granting a preference to those consumers supplied through the Main Canal over those receiving water through the Outside Canal. When a surplus of water is available, it is also sold to a few consumers under temporary agreements called "provisional contracts" which are rated next in priority of service right after the demands of the Outside Canal consumers have been satisfied. The Poso Canal Company is a mutual concern serving lands which are, according to the claims of the company, entitled to receive water on a parity or on an equal basis with those lands served by the Main Canal and is alleged to have been so operated in the past although this position is disputed by protestants herein. Consumers in the Poso area pay the company directly at the regularly established rates and, in addition thereto, also pay an assessment to the mutual company to cover the local system distribution costs.

Since 1913 the company has reported to the Commission as irrigating from a minimum of 57,193 acres in 1924, which was the shortest water year of record, to a maximum of 119,523 acres in 1914. In the present proceeding the company claims a service area of 155,500 acres, of which it is estimated that approximately eighty per cent, or 124,400 acres, may be considered irrigable land. In this acreage is included, however, some 5,000 acres of the Pick-Anderson area which has no canals in it at present and, as far as the record indicates, has never at any time in the past received regular utility water service. The above service area also includes some 17,000 acres of alkali and swamp lands which require drainage and reclamation to produce crops and which

have never applied for or used water to any extent.

The acreage claimed by the company to be in the service area under each canal system is as follows:

Main Canal-----	50,030 acres
Outside Canal-----	35,690 acres
Colony Canal-----	19,530 acres
Poso Canal Company-----	<u>50,250</u> acres

Total-----155,500 acres.

Estimates of cost of the physical properties of the canal company were submitted by August Kempkey for the company, Thomas H. Means for the Consumers Protective Association and P.E. Dufour and E.R. Robbins for the Commission. These estimates were based upon an agreed inventory of the utility's property and were made as of December 31, 1928. The estimates of Mr. Kempkey and Mr. Means were based on cost to reproduce new; the latter, however, did not submit a complete detailed appraisal of the properties but furnished totals on various selected items, such as rights-of-way, the Mendota Weir, earthwork, structures, overheads, etc. The Commission's engineers submitted two estimates of costs, one of which was based on the historical or estimated original cost and the other on reproduction cost new.

The differences in the various estimates of costs submitted are due almost entirely to the unit costs used by the engineers. Those used by the Commission's engineers and Mr. Means were based on actual costs of similar construction under similar conditions. Mr. Kempkey likewise used units that were based on comparable construction and his judgment and opinion of what costs would fairly apply in this particular area. Mr. Kempkey's estimate included \$4,342. for buildings at the Dos Palos Farms, title to which had been transferred to the company subsequent to December 31, 1928, and for that reason not included in the ap-

praisal submitted by the Commission's engineers. Certain other minor differences were due to the classifying of certain canals and structures as non-operative property by the engineers of the Commission.

Mr. Means testified that the Main Canal was constructed for the dual purpose of navigation and irrigation and for that reason the grades thereof were flatter than necessary and proper under present standards of irrigation design and practice, resulting in a reduction of water velocities, increased seepage losses, canal-silting and weed growth. According to Mr. Means, had the canal been constructed solely for irrigation purposes a much narrower and deeper canal cross-section would have provided a higher velocity and eliminated the above objectionable features and also reduced the yardage approximately nine per cent. This engineer further contended that the construction of the Helm Canal, which has a capacity of 700 to 800 second feet, resulted in a duplication of facilities in that the Main Canal was originally designed to convey the water the Helm Canal now carries, resulting in excessive capacity in the Main Canal to that extent.

There exists a radical difference in the three appraisements of the lands and rights-of-way. Mr. Robbins used the present fair market value of the lands and rights-of-way based upon recent sales throughout the general area involved. Mr. Means estimated the cost of lands before water was made available thereon for irrigation, apparently upon the assumption that this would more nearly reflect the actual reproduction cost new theory and would exclude the increment of value accruing to the land as direct result of the availability of water for irrigation purposes. Mr. Kampkey used the present market value of the

adjoining lands as a basis for his appraisalment of lands and rights-of-way but, in connection with the rights-of-way, in addition to this present market value he added fifty per cent to cover a further purported value which he stated in his judgment inhered thereto by reason of the fact that there existed a continuous strip of land for the canal system. For this proceeding the values to be established for the lands and rights-of-way involved herein will be based upon the present fair market value thereof as disclosed by the evidence submitted in connection therewith.

A comparison of the totals of estimates presented covering the various classes of the physical properties of the company is set out as follows:

	Reproduction Cost New			Historical
	Kempkey	Means	Comm. Engrs.	Cost Comm. Engrs.
OPERATIVE PROPERTY:				
Organization	\$50,000	-	\$15,000	\$15,000
Lands and R.o.W.	732,080	\$114,080	384,116	384,116
Buildings	43,142	30,210	38,505	26,542
Dams	167,740	108,111	166,158	181,410
Canal earthwork	1,045,288	660,000	626,126	569,205
Canal structures	354,287	337,304	300,544	254,972
Canal roads	19,600	19,600	9,800	9,800
Telephone lines	24,000	19,200	30,904	18,512
Automobiles, etc.	44,000	99,000*	54,757	54,757
Office furniture	-	-	586	586
General overheads	248,196	108,700	128,924	74,231
Interest during construction	138,095	78,600	78,058	56,734
Records	5,000	-	-	-
TOTAL OPERATIVE PROPERTY	\$2,892,009	\$1,575,505	\$1,833,458	\$1,645,845
NON-OPERATIVE PROPERTY:				
Lands and R.o.W.	-	-	\$7,325	\$7,325
Canal earthwork	-	-	13,653	12,413
Canal structures	-	-	19,210	11,968
General overheads	-	-	3,615	1,707
Interest during construction	-	-	2,189	1,304
TOTAL NON-OPERATIVE PROPERTY	-	-	\$45,992	\$34,717
GRAND TOTAL	\$2,892,009	\$1,575,505	\$1,879,450	\$1,680,562

* Includes organization, equipment and records.

In the estimate of reproduction cost new less depreciation submitted by Mr. Kempkey, the accrued depreciation was obtained by applying to the cost to reproduce new a condition per cent, determined by a field inspection of the various depreciable structures. A similar estimate was presented by the Commission's engineers who, in addition, also submitted an estimate in which the accrued depreciation was computed by the sinking fund method with interest at five per cent.

A comparison of the various estimates of reproduction cost new less depreciation is shown as follows:

	Kempkey's Residual Value	Commission's Engineers Straight Line	Sinking Fund
OPERATIVE PROPERTY:			
Organization	\$50,000	\$15,000	\$15,000
Lands and R.O.W.	732,080	384,116	384,116
Buildings	30,910	22,670	28,433
Dams	150,966	139,573	157,850
Canal earthwork	1,045,269	626,126	626,126
Canal structures	277,478	197,933	227,824
Canal roads	19,600	9,800	9,800
Telephone Lines	19,200	18,370	23,834
Automobiles, etc.	44,000	37,105	37,105
Office furniture	-	203	203
General overheads	231,513	111,592	118,125
Interest during construction	150,421	67,564	71,520
Records	5,000	-	-
TOTAL OPERATIVE PROPERTY	\$2,756,437	\$1,630,032	\$1,699,936
NON-OPERATIVE PROPERTY:			
Lands and R.O.W.	-	\$7,325	\$7,325
Canal earthwork	-	13,653	13,653
Canal structures	-	6,856	9,497
General overheads	-	2,256	2,548
Interest during construction	-	1,366	1,542
TOTAL NON-OPERATIVE PROPERTY	-	\$31,456	\$34,563
GRAND TOTAL	\$2,756,437	\$1,661,508	\$1,734,499

Testimony submitted for the purpose of indicating the value which should be allowed for the water rights of this utility

for the establishment of rates varied from nothing to \$1,400,000. The water rights as now claimed by the company amount to adjudicated rights of appropriation to 1,350 second feet of the natural flow of the San Joaquin River, subject to the single intrusion of the so-called Chowchilla right of 120 second feet. Although this river is regulated to some extent by several large power storage reservoirs, the utility up to this time has not been able to take advantage thereof, except through the consent of Miller & Lux, Incorporated, who claim all rights to the use of power released waters. The result of this is that the company's water rights in the natural flow are insufficient to properly irrigate its service area throughout the entire period during which water is required in normal years and causes a serious water shortage in years of subnormal rainfall unless supplemented with power released waters. The testimony of Mr. Means for protestants was to the effect that there is no standard such as the present market value upon which to appraise water rights and that in a very great many instances irrigation systems, including water rights, have been purchased in California for a sum less than the value of the bare physical properties. Mr. Kempkey for the company estimated the present value of the water rights to be \$1,400,000. based upon the difference in his estimated value of the 155,600 acres of land within the service area with and without water, amounting to \$7,000,000. and taking twenty per cent thereof. No logical explanation was offered by Mr. Kempkey as to why the above assumed percentage might not have been five, ten or even thirty other than that his judgment dictated twenty per cent to be fair under the circumstances. Another method was advanced by Mr. Kempkey as a check on the above estimate whereby he accumulated the \$1,400,000. for an

assumed development period of thirty years with interest at five and one-half per cent, producing \$7,000,000., which he claimed represented the above enhanced value of the lands within the service area due to the use of the company's water supply.

Evidence was presented on behalf of the company indicating that from 1905 to date \$373,799.87 had been actually spent in litigation and other matters in connection with maintaining and defending its water rights. A single item of \$90,000. was paid to James J. Stevinson, a corporation, in settlement of a controversy arising over the riparian rights of that corporation. A consideration of the evidence, however, shows that part of these expenditures greatly benefited Miller & Lux, Incorporated, and, accordingly, a portion thereof should have been chargeable against them. Furthermore, it also developed that some of the above expenditures should have been more properly classified as operating costs rather than capital charges.

There can be no doubt that the water rights of this utility are of considerable value and due and proper allowance will be made therefor as hereinafter indicated.

Computations of annuities by the five per cent sinking fund method to provide for the replacement of worn-out structures and other properties subject to depreciation were made by Mr. Kempkey and the Commission's engineers. Mr. Kempkey's depreciation annuity amounting to \$26,412. was computed on the theory of providing a fund to replace various items at the end of their estimated residual lives from date of appraisement rather than over their entire life expectancies. Obviously, this method results in materially and unreasonably increasing the depreciation fund by wholly ignoring the past life of all

items involved. Mr. Stava, one of the hydraulic engineers of the Commission, presented a study of the replacement annuity based on the entire estimated probable lives of all items as determined by their physical condition at the time of actual inspection in the field, consideration being given and allowance being made for such elements of depreciation as obsolescence, inadequacy, hazards, etc. Those replacement annuities amounted to \$8,503. applied to the estimated historical cost of the operative properties, and \$10,800. in connection with reproduction cost now of the operative properties. The method used by the Commission's engineers is in accordance with the standard practice adopted by this body and, with certain changes as indicated by the evidence, will be used in this proceeding.

Estimates of future maintenance and operation expenses were presented by Mr. Kempkey for the company and by Wm. Stava for the Commission. Mr. Kempkey's estimate totalled \$130,000. and was based on an average of the past ten years' expenditures for maintenance and operation. The estimate of the Commission's engineer amounted to \$123,331., determined as a result of a detailed analysis of the company's books and records covering the four years last past. Consideration therein was given to such abnormal expenditures as cleaning and dredging canals, which varied from year to year, repairs to the Mendota Weir, together with the cost of the present proceeding. However, no allowance was made for the operation and maintenance of those lateral ditches now in private control and through which service is rendered to a very large area, nor to such matters as the fact that canal systems other than those belonging to the company benefit by the construction and use of the said Mendota Weir but pay

nothing toward its upkeep and maintenance.

Using the figures presented by Mr. Kempkey, the gross revenues of \$165,484. received by this system for the twelve-month period ending June 30, 1929, would result in a return of 0.22 of 1% on his estimated present fair value of all utility properties both physical and intangible, amounting to a total of \$4,156,437. Assuming a return thereon of seven per cent, this would require a total gross annual revenue of \$447,363., or additional revenues of \$281,879., which is over 270% greater than present rates produce. On the other hand, using the figures presented by the Commission's engineers without modification, the above gross revenues would produce a return of 1.8% on the bare operative physical property alone amounting, in round figures, to \$1,700,000., exclusive of water rights.

There is no question that this utility is entitled to a readjustment in its present rates. It is also equally clear from the evidence, however, that under present conditions the consumers will be wholly unable to pay rates which will yield the return indicated above on the valuation of the properties as presented by the company and that such a rate would not only be prohibitive but far more than the service is reasonably worth. It appears therefore that under the circumstances and conditions as now existing on this system the reasonable and proper thing is to establish a rate which will produce a reasonable return on a tentative rate base of \$2,000,000., using operating and maintenance costs, together with depreciation, of \$137,000., which sum is a fair allowance for the immediate future. With the adoption of improved distribution and delivery methods by the company and more efficient irrigating practices on the part of the consumers, it is believed that rates predicated as set

out above can be borne by the users without suffering undue hardship thereby.

It will therefore be unnecessary to go further into the matter of valuation at this time.

A considerable controversy arose in this proceeding over the determination of a proper service area of the company, the utility taking the position that it had obligated itself to supply a gross area comprising 155,000 acres and counsel for protestants claiming that the utility had an insufficient water supply for such an acreage and that a part thereof had never at any time been served with other than surplus or so-called "grass-land" waters and was therefore not entitled to equality of service with the regular consumers served from the Main and Outside Canals. Were there ample water available on this system throughout the entire irrigation season the matter of service area would present no serious problem. However, as heretofore stated, the natural flow of the San Joaquin River is seldom sufficient to meet these service demands throughout the entire irrigation year. During periods of peak discharge when the company can divert its full entitlement of 1,360 second feet of water, there is enough water for adequate service to the gross area of 155,000 acres. Hydrographs of the river, however, show that the peak flow generally occurs during the months of May and June and declines rapidly thereafter; so that normally there is insufficient water from the natural flow for full irrigation throughout July, less in August and usually no water available for practicable irrigation service in September. The climatic conditions in this area are such that, together with the fact that the major crop is alfalfa, frequently there is created a demand for beneficial irrigation until the latter part of the

month of October. Cotton culture is fast increasing in acreage in this part of the San Joaquin Valley and requires full irrigation in August and September to mature the crop.

The gross area of 155,000 acres includes 5,000 acres in the Pick-Anderson section not heretofore regularly irrigated and approximately 50,250 acres supplied by the Poso Canal Company (mutual), together with some 17,000 acres, more or less, of land scattered throughout which are alkaline and water-logged and which have never applied for or received regular utility service. Including the above Poso, or "Over-Lap", area as it is sometimes called, there are then 133,000 gross acres entitled to service, or, upon a basis of eighty per cent actually irrigated, a net normal demand of 106,400 acres per season. The annual reports of the company filed with the Commission set out the acreage irrigated and indicate a variation from 57,193 acres in 1924, a very dry year, to 119,523 acres in 1914.

Miller & Lux, Incorporated, originally owned the largest part of the lands served by the company, of which it is a subsidiary being still operated and controlled under and by the same management and officials. Past diversion records of the utility do not definitely indicate the amounts of water nor the actual acreage of lands of Miller & Lux, Incorporated, heretofore irrigated although charges have been made by the company for such services rendered. As Miller & Lux, Incorporated, claim and divert large quantities of water for their private uses upon their own lands under their riparian rights, at times using the company's facilities therefor, there is no data available from the record as it stands in this proceeding to make a definite allocation of acreage to which utility service has been clearly dedicated through past use, either as to regular service or

surplus deliveries only. Scattered acreages have been irrigated in the past at various times in the Poso area by both the company water and Miller & Lux riparian water giving rise to the designation "Over-Lap" area. During the recent negotiations to sell this system to the San Joaquin and Kings River Water Storage District, since dissolved, the various interested parties therein for feasibility in operation concentrated in one contiguous group about 52,500 acres of Poso lands allocating thereto full rights to utility water, the remainder being considered as having to rely on Miller & Lux riparian waters for future service. There can be no doubt from the uncertainty of the evidence concerning the utility service in this "Over-Lap" area that it is indefinite in extent as well as entitlement and was determined in a more or less arbitrary fashion to suit the exigencies of the occasion. It is also clear, however, that certain sections of these lands have received utility water in the past and that some more or less arbitrary method as applying an estimated duty to the gross waters diverted was the only recourse available under the circumstances. As to the lands served by the Main and Outside Canals, there is no such uncertainty at all.

Miller & Lux, Incorporated, through private negotiations have assumed full and exclusive control over practically all power released waters in the San Joaquin River through the leverage of their vast riparian land-holdings, at least to the complete exclusion of this company which has necessarily been forced under the circumstances to sleep on whatever rights thereto it may have had or now has, to the great detriment of the rights and interests of itself and the members of the public whom it serves. During 1929 and at other times as well,

the company has supplemented its supply with power released waters through acquiescence of Miller & Lux, Incorporated. If the use of this water is permitted in the future in adequate amounts, there is no reason at this time to make a final determination on the matter of exclusion of all or any part of the Poso or "Over-Lap" area. However, if such waters are not to be available, the position of the Commission is clear in that the service area will necessarily have to be restricted and reduced to fit the available water supply. Since submission of this proceeding, a flow schedule has been presented to and accepted for filing by the Commission whereby the use of power released waters by the company is provided for, based upon an apparently reasonable and practicable service demand-curve, in exchange for use by Miller & Lux, Incorporated, of certain amounts of the company's natural flow waters in the early part of the irrigation season when usually not all required by the utility consumers. This flow schedule is the result of negotiations among the engineers for Miller & Lux, Incorporated, the Farm Bureau, Farmers Protective Association, the company and the Railroad Commission, and is reported to have their unanimous approval. Operation under the above flow schedule is at present limited to the coming season of 1930. However, it is clear that neither Miller & Lux, Incorporated, nor the company can afford to discard this compensating arrangement with its manifold advantages to both and it is confidently believed that, given a fair trial this season, necessarily it will be continued in effect for the future. With this expectation in view, no attempt will be made herein to limit or restrict the acreage in the Poso or "Over-Lap" area now considered by the company as entitled to utility service. In the event, however, that the use of power released water is

denied the utility in the future or should onerous terms for the use thereof be demanded, the Commission reserves the right, upon its own motion or upon complaint, to reconsider the entire matter of the service area of this company.

As to the Pick-Anderson lands, the utility has not pressed its desire to include them within the service area. These lands clearly are not now entitled to utility water and in fairness to the other water users service should not be extended thereto until definite knowledge is obtained that, by so doing, there will result no unreasonable dilution of water deliveries. Should it develop that there will be available in the future sufficient or additional water to supply this territory without prejudicing present consumers, the matter may be brought before the Commission in the regular manner through petition for a certificate of public convenience and necessity to extend service thereto.

In connection with the above mentioned flow schedule, it should be observed and pointed out at this time that untold benefits would result if serious efforts were inaugurated to prevail upon the various power companies, irrigation companies, irrigation districts, riparian and other private appropriators of water from the San Joaquin River and its tributaries to enter into negotiations with a view of making a general agreement for a more complete regulation of the entire river. The manifold advantages that would accrue to each, especially in years of sub-normal rainfall and/or runoff, would more than repay for the slight efforts necessary to bring it about. Manifestly, this matter is without the jurisdiction of the Railroad Commission but the vast public interests involved are such that I would be glad to lend the good offices of this Board to assist to the fullest extent possible. It is therefore hoped that this company and

Miller & Lux, Incorporated, may see fit to take the initiative in this matter.

Numerous complaints were registered by consumers to the effect that they have, in the past, been severely handicapped by incomplete and delayed deliveries. The testimony shows that such conditions, to a large extent, have arisen through the archaic methods of water distribution which apparently have been but little improved since the company first commenced operating in the early eighties. All distribution of water should be scheduled and controlled directly from the main office of the company, discarding the present inefficient practice of permitting the various section foremen and ditch-tenders to function independently. Practically all the dissatisfaction with service conditions will be eliminated through the adoption of new rules and regulations providing, among other things, for the pre-season filing at a definite date of applications for service required during the year for all consumers and for all lands, including Miller & Lux, Incorporated, setting forth the description and acreage of the lands upon which service is required, kind of crops and approximate dates of deliveries, applications not filed as specified to become secondary and entitled to surplus water only; to provide under the direct supervision of the main office a schedule of deliveries embracing, throughout the entire system on a basis of equality, the rotation thereof under specified heads of water at intervals of approximately every thirty (30) days, such rotation to commence each season whenever the water supply makes such methods reasonable and proper; and to prorate the water equally whenever a shortage thereof arises. Such rules should be filed and placed in immediate effect.

In fairness to the company, it should be stated at this time that to a large extent many of the consumers are also to blame for excessive use and waste of water through maintaining lands poorly prepared for irrigation and using lateral ditches wholly inadequate in capacity and foul with weeds. In this connection it should be observed that good service on a scheduled basis can never be accomplished while the existing system of community-owned and operated lateral ditches exists. Immediate steps should be taken by the company to take over and maintain all such ditches, proper rights-of-way for which should be donated willingly to the company in view of the benefits thereby resulting to the consumers. As to those ditches which may not be acquired by the utility, the Commission will approve a rule providing that service may be refused through any and all privately-owned and operated ditches whose capacities are inadequate or whose conditions are such that the use thereof would result in a waste of water or an unreasonable delay in serving other consumers. Provisions have been made in the operating expenses for such additional costs as appear may reasonably be expected through assuming the above additional obligations.

The company has requested the establishment of a rate for measured service. Such a rate will be fixed in the following order and its general use is urgently recommended. A measured service will tend to promote a higher duty of water and will greatly eliminate carelessness and waste, thereby making available more water for larger acreages. In addition to these benefits, there should also result less water-logging of lands, and, last but not least, there will be the gratifying incentive on the part of the company to continue service throughout the season as long as water can

be made available from the river in place of the practice indulged in at times in the past of discontinuing further utility deliveries before the river flow had in fact made further service wholly impracticable.

Besides agricultural irrigation service, this company through its ditches for many years has supplied water for certain municipal and industrial uses, including the Towns of Dos Palos, South Dos Palos, Los Banos, and water for the Southern Pacific Company, several creameries and various oil-pumping stations. While the above towns now rely solely on ditch water for their supplies, the majority of the industrial consumers are now equipped with wells used for standby purposes. The difficulty in this connection is due to the fact that, to provide this service, water must be maintained to full capacity in about thirty-five miles of the Main and Colony Canals throughout every day of the year, which places a heavy and unreasonable burden upon the company for maintenance, repairs and canal cleaning, besides resulting in considerable seepage and percolation losses. From the testimony, it appears that this situation could and should be remedied through the lowering of pipe intakes, where used, by the consumers and the installation by them of wells to provide auxiliary service if and when it becomes necessary to lower the water in the canals or take the water out entirely. No objection is made by the company to continuing this service when the water is running in the canals. Certain of the users of this class are located at considerable distance from the main distribution canals and are supplied through lateral ditches. These consumers already have wells for emergency or standby purposes and can rely entirely thereon or install the necessary pipe lines to the main distribution canals. The company is hereby authorized

to so notify, in writing not later than thirty (30) days from and after the date of the order herein, all those consumers in the above municipal and industrial classes of the changes authorized herein in such service, duly informing each thereof that the changes as indicated must be made and completed on or before the thirtieth day of September, 1930, which will permit a reasonable time for all such consumers to provide for whatever changes may be necessary in their individual water supplies.

The record shows that an average of approximately 2,000 acres of rice have been irrigated annually by the utility for several years last past at the same rate that applied to general crops. In this instance rice has been irrigated in Fresno County at a rate of \$1.25 per acre per season and, as this crop requires from six to eight or nine acre feet of water per acre, these users have been enjoying a highly preferential rate which is unfairly discriminatory against the other consumers. Water has also been delivered to rice-growers when not made available to the others. The canal company could and should have filed a rate covering this service and thereby increased its annual revenues by several thousand of dollars. In order that rice-growers pay in accordance to the demands made upon the system, a special rate will be established for this class of service.

The existing rates were fixed by the Boards of Supervisors of the three counties in which the canal system is located. A different rate was fixed for each county. This rate structure is neither reasonable nor logical and results in unfair discrimination in charges for the same type of use. The rates established in the following order will be upon a uniform basis, the same rate applying to all service within its particular

classification regardless of the geographic location of the lands.

Applicant filed an amendment to its application asking authority to change the date of making the annual charge for service from July 1st to January 1st of each year. Under the present practice a consumer applying for service on new land prior to July 1st is required to pay for a full year's irrigation in order to obtain water until July 1st, and again required to make another application and pay for service for the period July 1st to July 1st of the next year. The method has resulted in a consumer having to pay two seasons' charges in order to obtain one season's irrigation and is neither necessary nor good practice. Therefore the company's request will be granted and the irrigation year hereafter will be considered as running coincident with the calendar year.

I recommend the following form of order.

O R D E R

The San Joaquin and Kings River Canal and Irrigation Company, Incorporated, having applied for authority to increase its rates and the Commission on its own motion having instituted an investigation into the affairs of said company, public hearings having been held thereon, the matters having been submitted and the Commission being now fully advised in the premises and basing this order on the findings of fact and the conclusions contained in the opinion which precedes this order,

It is hereby found as a fact that the present rate schedule of San Joaquin and Kings River Canal and Irrigation Company, Incorporated, in so far as it differs from the schedule of rates herein established, is unfair and unreasonable and that the rates herein established are just and reasonable rates to be charged for the service rendered, and

IT IS HEREBY ORDERED that San Joaquin and Kings River

Canal and Irrigation Company, Incorporated, be and it is hereby authorized and directed to file with this Commission, within thirty (30) days from the date of this order, the following schedule of rates to be charged for all service rendered subsequent to the date of this order:

IRRIGATION SERVICE - FLAT RATES

General Crops

For irrigation of all crops other than grain or rice—\$2.75 per acre per season; 65¢ per acre to accompany application; balance payable in three installments at the rate of 70¢ per acre on or before the first day of April, July and October.

Grain Crops

For irrigation of grain other than rice—\$1.50 per acre per season; 75¢ per acre to accompany application and balance payable on or before April 1st.

When additional irrigations are required for second croppings of grain land, 75¢ per acre per irrigation, payable before each irrigation.

Rice Crops

For irrigation of rice—\$7.50 per acre per season; \$1.50 per acre to accompany application; balance payable in three installments at the rate of \$2.00 per acre on or before the first day of April, July and October.

IRRIGATION SERVICE - MEASURED RATES

For all water delivered, per acre foot-----\$1.15

General Crops

For the irrigation of all crops other than grain or rice, a payment of 75¢ per acre to accompany application; other payments to be made on or before the first day of May, August and November for water delivered for the three-month periods ending March 31st, June 30th and September 30th, respectively.

Grain Crops

For the irrigation of grain other than rice, a payment of 75¢ per acre to accompany application; balance payable on or before June 1st.

When additional irrigations are required for second croppings of grain land, a payment of 75¢ per acre to accompany application therefor; balance payable on or before thirty (30) days after completion of said service.

Rice Crops

For the irrigation of rice, a payment of \$1.50 per acre to accompany application; other payments to be made on or before the first day of May, August and November for water delivered for the three-month periods ending March 31st, June 30th and September 30th, respectively.

DITCH SERVICE FOR DOMESTIC AND INDUSTRIAL PURPOSES

Gallons per Day

0- 10,000-----	\$10.00 per month
10,000- 15,000-----	14.00 per month
15,000- 20,000-----	18.00 per month
20,000- 25,000-----	22.00 per month
25,000- 30,000-----	26.00 per month
30,000- 40,000-----	34.00 per month
40,000- 50,000-----	42.00 per month
50,000- 60,000-----	50.00 per month
60,000-100,000-----	60.00 per month
100,000-200,000-----	75.00 per month
200,000-300,000-----	85.00 per month
300,000-400,000-----	95.00 per month

DITCH SERVICE FOR STOCK PURPOSES

Temporary or emergency water supplied to traveling bands or herds of live-stock.

Per Head per Month

Horses, mules, cattle, etc.-----	15¢
Sheep, goats and hogs-----	2¢

IT IS HEREBY FURTHER ORDERED that San Joaquin and Kings River Canal and Irrigation Company, Incorporated, be and it is hereby directed to file with the Railroad Commission, within thirty (30) days from the date of this order, rules and regulations governing the distribution of water to its consumers, said rules and regulations to become effective upon their acceptance for filing by the Railroad Commission.

IT IS HEREBY FURTHER ORDERED that San Joaquin and Kings River Canal and Irrigation Company, Incorporated, shall file with the Railroad Commission, within ninety (90) days from the date of this order, a map outlining the service area of said company and delineating thereon, in appropriate color, all the lands that the company now holds itself out to serve as such area and such lands

are indicated in the foregoing opinion.

For all other purposes the effective date of this order shall be twenty (20) days from and after the date hereof.

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

Dated at San Francisco, California, this 19th day of March, 1930.

Oliver S. Jones
Wm. H. Smith
Leon W. White
John D. Smith
W. A. Carr
 Commissioners.