PUBLIC UTILITIES COMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY & COMPLIANCE DIVISION Water Utilities Branch

RESOLUTION NO. W-3385 February 24, 1988

RESOLUTION

(Res. W-3385) LAS FLORES WATER WORKS (LFWW). ORDER AUTHORIZING A GENERAL RATE INCREASE PRODUCING \$2,079 OR 45.0\$ ADDITIONAL ANNUAL REVENUE.

LFWW, by draft advice letter accepted by the Water Utilities Branch (Branch) on September 15, 1987, requested authority under Section VI of Genéral Order 96-A and Section 454 of the Public Utilities Code to increase rates for water service by \$2,208 or 45.0%. After removing the effects of user fee surcharges, which are not considered for ratemaking, LFWW's estimates show that 1988 gross revenue of \$4,817 at present rates would increase to \$7,008 at proposed rates which would produce a rate of return on rate base of 13.66%. LFWW serves 56 metered customers in the community of las Flores, Tehama County, and is one of three water utilities in the area under common ownership and management. The Branch is concurrently processing a draft advice letter general rate increase request for Vista Grande Water System. The third, Mira Monte Water System, has not requested an increase.

The present rates were established by Resolution No. W-2382, effective June 1, 1978 which authorized a general rate increase.

The Branch made an independent analysis of LFWW's summary of earnings. Appendix A shows LFWW's and the Branch's estimated summary of earnings at present, requested and adopted rates. Appendix A shows differences in revenue, expenses and rate base.

The Branch's estimate of revenue at present and proposed rates is slightly lower than LFWM's. LFWW used its 1986 recorded revenue as its estimate of 1988 revenue at present rates, and increased that figure by 45% for its revenue at proposed rates. The Branch derived a figure more consistent with expected 1988 customers and consumption by applying the present and proposed rates to its projected estimates for those items. LFWW's figures shown in Appendix A have also been adjusted to remove the user fee surcharges it had initially included in both revenue and expenses.

The differences in estimates for operating expenses are in purchased power, employee labor, materials, contract work, office supplies and expense, insurance, vehicle expense, office services and rental, depreciation expense, property tax, payroll tax and income tax. For many of its expense estimates, LFWW used its recorded 1986 expenses increased by differing arbitrary inflation factors. Since the recorded figure for one year may not be representative of the level of an expense in other years, the Branch used a four-year average for most of its estimates.

The Branch's estimate of purchased power expense is lower than LFWM's. LFWM projected an increase of 16% over 1986 for 1988, but had no explanation for the derivation of the 16% escalation factor. The Branch used the projected water consumption for 1988 and the latest available Pacific Gas and Electric Company rates effective July 1, 1987 in deriving its estimate. The Commission's procedures allow water utilities to seek rate relief to offset increased costs arising from increased power rates between general rate cases.

The Branch's estimate of employee labor is slightly lower than LFWW's. One employee reads meters for all three affiliated water systems and the cost is allocated equally among the companies without regard to the time required. For ratemaking, the Branch reestimated LFWW's share using information provided by LFWW on the number of meters read per hour and the hourly pay rate.

LFWW did not include an amount for materials expense. The Branch used the inflation-adjusted average of LFWW's last four years' recorded amounts to arrive at its \$270 amount. The Branch's escalation factors for this and other items were those provided by the Advisory Branch of the Commission Advisory and Compliance Division.

LFWW estimated contract work expense at \$400 while the Branch used \$250. The Branch and LFWW agree on the items to be included, but differ on the cost. LFWW made the assumption that Tehama County Environmental Health Services would do its required monthly and triennial water testing, but the Branch found that the private lab LFWW presently uses charges considerably less.

The Branch's estimate of office supplies and expense is higher than LFWW's. No justification was provided by LFWW for its estimate other than it used an inflation adjustment of 6% over the 1986 level for 1988. The Branch used an inflation-adjusted four-year recorded average and added an amount for telephone bills, which LFWW had misclassified as general expense and had not included for ratemaking.

The Branch's estimate of insurance is higher than LFWW's. LFWW's estimate is based on 1987 premiums and an assumption that one-half of the master policy related to the owner's home and one-quarter each to two of the three water companies. The Branch's estimate is also based on 1987 premiums, but the Branch allocated the portion of the premium applicable to the owner's house based on the previous year's recorded allocations (done by the insurance company) and assigned one-third of the remainder to each water company.

The Branch's estimate of vehicle expense is lower than LFWM's. The Branch agrees with LFWM's estimate of annual vehicle mileage, but differs on the appropriate cost per mile. LFWM used \$0.30 per mile while the Branch used \$0.21, the rate currently allowed by the Internal Revenue Service. LFWW provided no support for its cost per mile figure. LFWW also requested an additional \$100 for vehicle licenses, but the Branch's \$0.21 per mile rate already compensates for vehicle license payments.

The Branch's estimate of office services and rental is higher than LFWM's. LFWW and the Branch agree with the total amount and LFWM's method of allocating that amount to the three water systems, but LFWW made a mathematical error in its calculations and this accounts for the difference between the Branch's and LFWM's estimates.

The Branch's estimate of depreciation expense is slightly lower than LFWM's because LFWM inadvertently calculated depreciation on land. LFWM made this and other errors in calculating its depreciation expense and reserve in prior years, and used its end-of-year 1987 reserve figure as its 1988 average. The Branch went back to LFWM's last general rate increase in 1978 to correct the annual depreciation accruals since that time and derive a new depreciation reserve figure. Both the Branch and LFWM used a 2.2% depreciation rate.

To prevent future inconsistencies between the figures adopted by the Commission and the figures shown in LFWM's annual reports, the Branch recommends that LFWM be directed to record on its books of account the depreciation reserve balance upon which the average amount adopted in this resolution is based, and to reflect that balance in its 1987 annual report to the Commission. That balance is \$10,045 as of December 31, 1986.

The Branch's estimate of property taxes is lower than LFWW's. The Branch used the 1986-87 property tax bills received from the county tax collector and escalated them to compute its 1988 test year estimate of \$83. LFWW used the wrong assessed value to compute its estimate of \$138.

LFWW did not include payroll taxes in its estimate. The Branch computed payroll taxes based on its total estimated payroll.

LFWW did not include income taxes in its estimate. The Branch's figures for income taxes reflect the current rates under the federal Tax Reform Act of 1986 and the corresponding state rates for 1988.

The differences in rate base are due to differences in average depreciation reserve and working cash.

The Branch's estimate of average depreciation reserve is higher than LFWW's for the reasons discussed under depreciation expense above.

LFWN did not include an amount for working cash. The Branch used the simplified method for a water utility using monthly metered billing as prescribed by the Commission's Standard Practice U-16, "Determination of Working Cash Allowance" to arrive at its estimate of \$700.

LFWW's initial draft advice letter requested a rate of return on rate base of 9.7%. After recasting it into the standard rate-making format of Appendix A, LFWW's proposed summary of earnings shows a rate of return of 13.66%. The Branch's recommended summary of earnings would produce a rate of return of 5.08% at the Branch's recommended rates. This rate of return, although lower than the 10.25% to 10.75% range recommended by the Accounting and Financial Branch of the Commission Advisory and Compliance Division for small water utilities with 100% equity financing, results in LFWW being granted the total revenue percentage increase requested. The authorized rate of return in the last rate case is generally used to determine whether a utility's earnings are excessive when the Commission is considering granting rate relief for offsettable items such as purchased power. The Branch therefore recommends that the Commission find a rate of return on rate base not exceeding 10.50% to be reasonable for the purpose of future earnings tests for LFWW.

LFWW was informed of the Branch's differing view of revenues, expenses, rate base and rate of return and has stated that it accepts the Branch's estimates.

A notice of the proposed rate increase and public meeting was mailed to each customer on September 16, 1987. Three letters of protest were received by the Branch. One letter complained that a well pump is in an unfenced location; one complained of low water pressure; and the third forwarded thirty-six completed questionnaires a customer had distributed to his neighbors soliciting their opinions on service and the increase. Some of those responding to the questionnaire had no comments; many stated that service should be improved before the rates are raised.

On September 29, 1987, a public meeting attended by 21 people was held in Red Bluff with representatives of the Branch and LFWM to explain the increase request and answer customers' questions. The customers' complaints were directed primarily towards LFWM's service. The complaints included low water pressures, water main leaks, inadequate fire protection, and sand in the water. The sand in the water is not a health problem but is undesirable, and has become an inconvenience because it results in the meters clogging and not registering water usage accurately. The consensus was that LFWM's water quality is good. A Tehama County Department of Environmental Health official confirms that no water quality problems exist based on its recent tests.

A Branch engineer conducted a field inspection of LFWW's service area on September 30, 1987. The investigation revealed that service is less than adequate and the system is in need of major improvements:

- a) The utility does have an unfenced well pump that could prove hazardous. The Commission's General Order (G.O.) 103, "Rules Governing Water Service Including Minimum Standards for Design and Construction", and good operating practice call for fencing around such locations.
- b) Water pressures barely meet the requirements of G.O. 103.
- c) The system does not produce adequate fire flow.
- d) The distribution system consists of old, undersized and leaking 3-inch and 4-inch mains badly in need of replacement. These cause low water pressures and high water losses and require excessive repairs.
- e) The system does not have at least two sources of supply as required by G.O. 103. Failure of the well or pump could result in an extended outage.
- f) The system's only well is apparently introducing sand into the water. This could be a sign that the well may fail in the future. The sand has become a regular maintenance hazard by clogging meters and causing them to register low. The solution may entail major work on the well or just the installation of a sand separator.
- g) The well pump's 39.1% efficiency is far below expected standards. This causes increased electric power usage and may foreshadow failure of the pump. The normal efficiency range for such pumps is about 53% to 61%.

h) The well does not have a production meter. 0.0. 103 requires that every source of supply have some means for determining water production. Production metering is needed to monitor system water losses and reveal major leaks, and to measure pumping efficiency.

The Branch recognizes that making all the needed improvements to correct these deficiencies would require a major rebuilding of the system. Despite low pressures, there is an adequate supply of good quality water and the situation is tolerable for the present. LFWW's rates, even with the proposed increase, are low in comparison with those of most other water utilities.

However, because of the potential for future catastrophic problems, the Branch believes that LFWM should be required to engage a qualified engineer to study the system and prepare a plan of improvements, including a proposed schedule and a breakdown of costs, within 180 days. The reasonable costs of such studies are typically included in ratemaking, and the Branch recommends that LFWM submit those costs for consideration at its next general rate increase proceeding. Within 90 days after submitting its plan, LFWM should hold a public meeting with its customers following the requirements of the Commission's Service Improvement Policy for water utilities. The Service Improvement Policy specifies that if water service is inadequate but the water is not unhealthful, the utility should seek the consensus of its customers as to whether to make needed improvements in light of the increased rates that would result. If customers' consensus is to support some or all of the improvements, the utility should proceed to make them.

Although there are severe problems with LFWM's source and distribution system, it does have an excellent ground water supply. Neither in the dry year of 1986/87 nor during the drought of 1976/77 did it experience a significant drop in the water table. There is an abundant supply available; the problem is extracting and distributing it efficiently and reliably to its customers. LFWM's system is fully metered. No additional conservation measures are needed.

The Branch has drafted a letter of reply to customers who expressed concern about service and this increase. The draft letter is attached as Appendix B and will be mailed after this resolution is signed.

LFWW's current rates consist of a metered rate schedule with a service charge which recovers revenues equivalent to 45% of its fixed costs, a lifeline block of 300 cubic feet per month, and a block for consumption over 300 cubic feet. The Branch recommends a service charge which would recover 50% of fixed costs, and a single metered quantity rate. This is consistent with the Commission's rate design policy for water companies established by Decision 86-05-064 which calls for phasing out lifeline rates, allows for reduction of multiple blocks to a single block and recovery of up to 50% of fixed expenses through the service charge.

Since LFWW's customers are fully metered, it has no need to continue its Schedule No. 2, General Flat Rate Service. The Branch recommends, and LFWW agrees, that this schedule be canceled.

At the Branch's recommended rates shown in Appendix A, the monthly bill for a typical metered rate customer using the system average of 1,260 cubic feet per

month would increase from \$6.80 to \$9.90 (45.6%) per month. A comparison of the present and recommended rates is shown in Appendix C.

The Branch recommends that the Commission authorize an increase of \$2,079 or 45.0% which would increase estimated annual operating revenue from \$4,620 at present rates to \$6,699 at the recommended rates contained in Appendix B. This provides a 5.08% rate of return on rate base in test year 1988 and results in LFMM's being granted the full percentage revenue increase it requested.

FINDINGS

- 1. The Branch's recommended summary of earnings (Appendix A) is reasonable and should be adopted.
- 2. The rates recommended by the Branch (Appendix B) are reasonable and should be adopted.
- 3. The quantities (Appendix D) used to develop the Branch's recommendations are reasonable and should be adopted.
- 4. LFWW should be required to record on its books of account the depreciation reserve balance upon which the average amount adopted in this resolution is based, and to reflect that balance in its 1987 annual report to the Commission. That balance is \$10,045 as December 31, 1986.
- 5. LFWW should be required to engage a qualified engineer to study its system and prepare a plan of improvements, including a proposed schedule and a breakdown of costs. It should submit the system improvement plan to the Commission Advisory and Compliance Division for review within 180 days.
- 6. Within 90 days thereafter, LFWW should hold a public meeting with its customers following the requirements of the Commission's Service Improvement Policy for water utilities. If its customers' consensus is to support some or all of the improvements, LFWW should implement the plan accordingly.
- 7. Tariff Schédule No. 2, General Flat Rate Service, should be canceled.
- 8. The rate increase authorized herein is justified and the resulting rates are just and reasonable.

IT IS ORDERED that:

- 1. Authority is granted under Public Utilities Code Section 454 for Las Flores Water Works to file an advice letter incorporating the summary of earnings and revised rate schedule attached to this resolution as Appendices A and B respectively, and concurrently to cancel the presently effective rate Schedules Nos. 1 and 2. Such filing shall comply with General Order 96-A. The effective date of the revised rate schedule shall be the date of filing.
- 2. For the purpose of earnings tests in any future offset rate increase requests for Las Flores Water Works, a rate of return on rate base not exceeding 10.50% shall be considered reasonable.

- 3. Las Flores Water Works shall record on its books of account the depreciation reserve balance upon which the average amount adopted in this resolution is based, and shall reflect that balance in its 1987 annual report to the Commission.
- 4. Las Flores Water Works shall engage a qualified engineer to study its system and prepare a plan of needed improvements, including a proposed schedule and a breakdown of costs. The plan shall address all of the system improvement needs discussed in the body of this resolution. It shall submit the plan to the Commission Advisory and Compliance Division for review within 180 days of the effective date of this order.
- 5. Within 90 days of its submittal of the improvement plan required by Ordering Paragraph No. 4 above, Las Flores Water Works shall hold a public meeting with its customers following the requirements of the Commission's Service Improvement Policy for water utilities. If its customers' consensus is to support some or all of the improvements, it shall implement the plan accordingly. Recovery of the reasonable costs of the improvement plan and any resulting system improvements are to be considered in its next general rate case.
- 6. This resolution is effective today.

I certify that this resolution was adopted by the Public Utilities Commission at its regular meeting on February 24, 1988. The following Commissioners approved it:

STANLEY W. HULETT'
President
DONALD VIAL
JOHN B. OHANIAN
Commissioners

VICTOR R. WEISSER Executive Director

APPENDIX A

1

Las Flores Water Works

SUMMARY OF EARNINGS (Test Year 1988)

	: Utility	Estimated	: Bránch	Estimated	
i		: Requested			Adopted
Item	: Rates	Rates	: Rates	: Rates	Rates
Operating Revenue					
Metered	0	٨	Ó	. 0	Ò
Flat Rate	\$ 4,817	\$ 7,008	\$ 4,620	\$ 6,717	\$ 6,699
Total	\$ 4,817	\$ 7,008	\$ 4,620	\$ 6,717	
10/41	\$ 41011	4 11000	\$ 4,020	\$ 0,111	\$ 6,699
Operating Expenses		-			• • •
Purchased Power	1,055	1,055	950	950	950
Employee Labor	275	275	240	240	240
Management Salaries	2,436	2,436	2,436	2,436	2,436
Materials	0	. 0	270	270	270
Contract Work	400	400	250	250	250
Office Suppls & Exp.		240	340	340	340
Insurancé	140	140	200	500	200
Professional Sycs.	80	80	80	80	80
Vehicle Expenses	360	360	250	250	250
Office Svcs & Rntl	150	150	190	190	190
General Expense	0	0	0	0	0
Uncollectibles	40	40	40	40	40
Maintenance Expense	Ó	Ó	0	0	O,
Reg. Comm. Exp.	0	0	0	. 0	0
Subtotal	5,176	5,176	5,246	5,246	5,246
Depreciation	427	427	412	412	412
Property Taxes	138	138	83	83	83
Payroll Taxes	0	0	330	330	330
Income Taxès	Ŏ	0	Ó	148	144
Total Deductions	5,741	5,741	6,071	6,219	6,215
Net Revenue	(924)	1,267	(1,451)	498	484
Rate Base	-			* * * * * * * * * * * * * * * * * * * *	•
Avg. Plant in Svc.	19,417	19,417	19,417	19,417	19,417
Avg. Depr. Res.	10,140	10,140	10,660	10,660	10,660
Net Plant	9,277	9,277	8,757	8,757	8,757
Less: Advances	0	0,211	0	0,151	0,151
Contrib.	ŏ	ŏ	ŏ	0	Ö
Plus: Work, Cash	ő	Ŏ	770	770	770
Mat'l & Supp.		ŏ	0	110	0
Rate Base	9,277	9,277	9,527	9,527	9,527
	21611	•	7174	-	-
Rate of Return	Loss	13.66%	Loss	5.23%	5.08%

APPENDIX B

Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The unincorporated community of Las Flores, Tehama County.

RATES

		·		Meter Month	
Service Ch	argė:	·		٠	
For 5	/8 x 3/4-inch	meter	\$	4.10	(I)
For	3/4-inch	metèr	,	4.50	= , =
For	1-inch	meter		6.15	(1)
Quantity C	harge:		•		
All w	ater, per 100	cu.ft	\$	0.46	(I)

^{*}The service charge is applicable to all service. It is a readiness-to-serve charge to which is added the charge, computed at the Quantity Rates, for water used during the month.

APPENDIX C

Las Flores Water Works

COMPARISON OF RATES

A comparison of the present and Branch's recommended rates is shown below:

HETERED SERVICE

Service Charge:

	Per Meter Per Month		
	Present	Recommended	Percent
	Rates	Rates	Increase
For 5/8 x 3/4-inch meter	\$ 2.50	\$ 4.10	64.0
For 3/4-inch meter	2.75	4.50	63.6
For 1-inch meter	3.75	6.15	64.0
Quantity Rates:			-
First 300 cu.ft., per 100 cu.ft	\$ 0.25	\$ 0.46	84.0
Over 300 cu.ft., per 100 cu.ft	0.37	0.46	24.3

A comparison of monthly customer bills at present and Branch's recommended rates for 1988 test year for a 5/8 x 3/4-inch meter is shown below:

Usage 100 cu.ft.	Present Rates	Recommended Rates	Amount Increase	Percent Increase
Ó	\$ 2.50	\$ 4.10	\$ 1.60	64.0
3	3.25	5.48	2.23	68.6
ร์	3.99	6.40	2,41	60.4
10	5.84	8.70	2.86	49.0
12.6 (Avéragé)	6.80	9.90	3.10	45.6
15	7.69	11,00	3.31	43.0
20	9.54	13.30	3.76	39.4
30	13.24	17.90	4.66	35.2
40	16.94	22.50	5.56	32.8

APPENDIX D Page 1

ADOPTED QUANTITIES (Test Year 1988)

Name of Company: Las Flores Water Works Net-to-Gross Multiplier: N/A Federal Tax Rate: 15.0% State Tax Rate: 9.3% Local Franchise Tax: 0.0% Uncollectibles: 0.6% Business Licenses: 0.0%	
Expenses for Test Year 1988	
1. Purchased Power Electric: Pacific Gas & Electric Company Schedule & Effective Date kWh Used - Summer kWh Used - Winter	A-1P:7/87 6,708
kWh Used Total \$/kWh Used: Summer \$/kWh Used: Winter Service Charge Total Cost	2,357 9,065 0.10096 0.08297 \$ 72 \$ 950
2. Purchased Water	None
3. Pump Tax - Replenishment Tax	None
4. Payroll: Employee Labor: Management Salaries: Office Salaries: Total	\$ 240 \$ 2,436 \$ 0 \$ 2,676
Payroll Taxes:	\$ 330
5. Ad Valorem Taxes Tax Rate Assessed Value	\$ 83 1.02\$ \$ 8,138
Metered Sales to Design Rates 0 - 3 Cef > 3 Cef Total	1,607 6,860 8,467
Connections Used to Design Rates Metered 5/8 x 3/4-inch Flat Total	56 0 56

APPENDIX D Page 2

ADOPTED QUANTITIES

Adopted Tax Calculations - 1988 Test Year

Item	CCFT	FIT
Operating Revenues	\$ 6,699	\$ 6,699
O&N Expenses	5,246	5,246
Taxes Other Than Income	413	413
Dépréciation	41Ž	412
Interest	0	0
CCFT	0 .	58
Subtotal Deductions	6,071	6, 129
State Taxable Income	628	_
CCFT at 9.3%	58	- ·
Taxable Income for FIT	<u>-</u>	570
FIT at 15%	_	86
Total Income Tax	•	144

APPENDIX E

TO CUSTOMERS WHO HAVE WRITTEN TO THE COMMISSION REGARDING LAS FLORES WATER WORKS' REQUEST TO INCREASE WATER RATES:

On September 16, 1987 Las Flores Water Works sent notices to its customers that it was requesting authorization from the Public Utilities Commission to increase its rates for water service by \$2,208 per year (45.01) to recover increases in operating expenses since its last increase in 1978. Customers were invited to write to the Commission with any comments on the increase or any service problems.

After an investigation by its staff, the Commission has authorized Las Flores to increase its rates by 45% to cover the company's expenses and provide a small return on its investment in water plant. The bill for a typical metered customer using the system average of 1,260 cubic feet per month will increase from \$6.80 to \$9.90 per month. Even with this increase, Las Flores' water rates will still be low in comparison to those of most other water companies.

However, the investigation revealed that although Las Flores' water quality is healthful, service overall is less than adequate and does not meet the Commission's standards. The system's water mains are very old, undersized, and cause excessive pressure losses. The only well is apparently introducing sand into the system which is a nuisance to customers and causes maintenance problems. A second source of supply is needed to assure continued service if the well should be put out of service for any reason. There are other problems as well.

In short, the system is in need of substantial improvements. To correct all the deficiencies could require a rebuilding of the system which would be very expensive. The cost of rebuilding would eventually result in higher rates for Las Flores' water customers.

The Commission has ordered that, as a condition of receiving an increase, las Flores engage a qualified engineer to study the system and prepare a plan of improvements, including a proposed schedule and a breakdown of costs. When the improvement plan is ready, las Flores must hold a public meeting to seek a consensus of its customers as to whether to make the improvements considering the increased water rates that would result. If the customers' consensus is to support some or all of the improvements, the utility must make them. If, however, customers prefer to retain the present level of service rather than pay the higher rates that would come with improvements, the company should make only those improvements necessary to maintain service at a level customers wish to pay for.

We appreciate that you took the time to provide your opinion on the proposed increase and the quality of las Flores' water service. If you have any questions, please contact Donald McCrea of our staff at (415) 557-2527.

Very truly yours,

WESLEY FRANKLIN, Chief Water Utilities Branch