



had requested annual revenues of \$1,009,810 which it computed to be an increase of 87.01%.

Additional increases of \$58,900 or 6.05% for 1985 and \$59,000 or 5.71% for 1986 are authorized.

A 14.5% return on equity is adopted, yielding a rate of return on rate base of 11.93% for test year 1984. Applicant had requested a 15.75% return on equity and a rate of return on rate base of 12.45%.

Applicant's request for our adoption of a sales adjustment mechanism is denied as this generic question remains under study.

This order constitutes an exception to our policy of limiting rate increases to no more than 50% in a single year, as Western Canal customers are farmers using water for irrigation purposes rather than domestic use. ✓

#### General Description of Western Canal

Western Canal serves an area of approximately 55 square miles between the Feather and Sacramento Rivers north of the Richvale Irrigation District in Butte and Glenn Counties. There is no specific field service area as is typical of most irrigation systems as the same areas may not be served every year. The system consists of a large main canal, lateral canals, numerous floodgates, checkgates, and drain structures. Water for the canal system is diverted from the Feather River at the Department of Water Resources Thermolito Afterbay. The principal use of the water is for the irrigation of rice.

#### Western Canal Users' Association

Although not appearing at the formal hearing, the Western Canal Users' Association addressed a letter to the Commission objecting to any rate increase and, particularly, to the PGandE proposed supply adjustment mechanism.

The letter states that a group of Western Canal water customers is in the process of forming a public agency for the purpose of purchasing the water system and that the group is allocating its resources to that end rather than to appear at the San Francisco hearings.

Rate of Return

In this application, PGandE requests the same return on rate base (12.45%) and return on equity (15.75%) that were determined to be just and reasonable in Decision (D.) 83-12-068, applicant's most recent general rate case for its gas and electric departments.

Staff recommends that Western Canal be authorized a rate of return of 11.93% for test year 1984, which equates to an earnings allowance on common stock equity of 14.5%. Staff further recommends that the rate of return be increased in 1985 and 1986 to 12.01% and 12.09%, respectively, to compensate for projected financial attrition, thereby allowing the utility an opportunity to earn the recommended equity return throughout the test periods and 1986.

Staff suggests that the appropriate return on equity should be based upon an analysis of investors' perceived risk relative to the specific operations of the utility. Noting that the Commission has determined that a reasonable return for PGandE's gas and electric operations is 15.75%, staff believes that an investment in a water company is less risky than an investment in an energy company and, hence, should receive an equity return somewhat less than applicant's requested 15.75%.

In 1980, in PGandE's most recent decision affecting its water operations, the Commission found that a reasonable return on equity was 11.49% while its energy operations were allowed to earn an equity return of 14.10%. Other examples of differing energy and water returns include C.P. National Corporation which is currently authorized equity returns of 16.2% and 15.0% for its energy and water operations, respectively, and Citizens Utilities Company which is

presently authorized equity returns of 14.1% and 13.2% for its telephone and water systems, respectively.

Staff argues that the determination of the appropriate return on equity requires an analysis of investors' perceived risk in Western Canal. An analysis of PGandE's overall risk, for this purpose, masks any relevant conclusions concerning water operations because of the negligible impact that water revenues and costs have on total company earnings and return, according to staff.

Staff submitted a study of the equity returns which have been authorized for Class A water companies by this Commission since 1980 and suggests that the results of this study be used as a surrogate for the fair equity return which PGandE should be entitled to earn on its investment in Western Canal. Based upon its study, staff concludes that a 14.5% return on equity for PGandE's Western Canal investment will provide a reasonable return to applicant for those assets dedicated to furnishing water service which is consistent with the returns required for other water systems.

We think it is proper to consider rate of return for Western Canal independently of PGandE's energy operations and adopt staff's 1984 test year rate of return recommendation of 11.93% which provides an equity return of 14.5%. The rate of return will increase to 12.01% in 1985 and 12.09% in 1986 to recognize financial attrition, thus enabling PGandE to earn the 14.5% equity return through 1986.

Table 1

Summary of Earnings  
Test Year 1984  
 (Thousands of Dollars)

	<u>Present Rates</u>			<u>Authorized Rates</u>
	<u>PGandE</u>	<u>Staff</u>	<u>Adopted</u>	
Operating Revenues	\$540.0	\$597.5	\$ 597.5	\$ 973.7
<u>Operating Expenses</u>				
Operation & Maintenance	468.0	414.4	468.0	468.0
Administrative & General	<u>153.5</u>	<u>129.1</u>	<u>153.5</u>	<u>153.5</u>
Subtotal	621.5	543.5	621.5	621.5
<u>Taxes</u>				
Property	16.1	7.7	9.7	9.7
Payroll	24.2	22.0	24.2	24.2
State Corp. Franchise Tax	(25.2)	(11.3)	(19.2)	16.9
Federal Income	<u>(105.9)</u>	<u>(44.7)</u>	<u>(78.9)</u>	<u>77.6</u>
Total Taxes	(90.8)	(26.3)	(64.2)	128.4
Depreciation	31.4	26.5	26.5	26.5
Total Operating Expenses	562.0	543.7	583.8	776.4
Net for Return	(22.0)	53.8	13.7	197.3
Rate Base	1,627.7	1,627.7	1,654.3*	1,654.3*
Rate of Return	-1.35%	3.30%	0.83%	11.93%

(Red Figures)

\*Adopted rate base reflects adopted revenues and expenses in the lead-lag portion of working cash.

Table 2

Summary of Earnings  
Test Year 1985  
 (Thousands of Dollars)

	<u>Present Rates</u>			<u>Authorized Rates</u>
	<u>PGandE</u>	<u>Staff</u>	<u>Adopted</u>	
Operating Revenues	\$540.0	\$597.5	\$ 597.5	\$1,032.6
<u>Operating Expenses</u>				
Operation & Maintenance	498.9	436.8	498.9	498.9
Administrative & General	<u>163.4</u>	<u>135.7</u>	<u>163.4</u>	<u>163.4</u>
Subtotal	662.3	572.5	662.3	662.3
<u>Taxes</u>				
Property	16.1	8.0	10.2	10.2
Payroll	24.2	23.2	24.2	24.2
State Corp. Franchise Tax	(29.9)	(14.4)	(23.3)	18.4
Federal Income	<u>(125.3)</u>	<u>(57.9)</u>	<u>(96.6)</u>	<u>84.4</u>
Total Taxes	(114.9)	(41.1)	(85.5)	137.2
Depreciation	34.0	27.3	27.3	27.3
Total Operating Expenses	581.4	558.7	604.1	826.8
Net for Return	(41.4)	38.8	(6.6)	205.8
Rate Base	1,683.4	1,683.4	1,713.5*	1,713.5*
Rate of Return	(2.46%	2.30%	-0.39%	12.01%

(Red Figures)

\*Adopted rate base reflects adopted revenues and expenses in the lead-lag portion of working cash.

Results of Operation

Tables 1 and 2 show applicant's results of operation as proposed by applicant and staff for the years 1984 and 1985, respectively. They show our adopted results and revenues and expenses at authorized rates for the test years, as well. Our discussion is primarily keyed to the 1984 test year.

Operating Revenues

The PGandE sales estimate for the Western Canal Water System for the years 1984, 1985, and 1986 is 190,800 acre-feet/year. The staff sales estimate is 209,829.2 acre-feet/year. The sales estimate is developed by multiplying "acre-feet/acre" (the average annual sales per acre) times the number of "acres served." The table below compares the "sales estimate," "acre-feet/acre," and "acres served" for PGandE and staff.

	<u>PGandE</u>	<u>Staff</u>
Sales Estimate	190,800.0	209,829.2
Acre-feet/Acre	5.30	5.47
Acres Served	36,000	38,360

PGandE and staff disagree on both the number of acres to be served and the number of acre-feet/acre.

Staff based its 1984 estimate on actual 1984 contracts. PGandE recognized that, because (pursuant to the Regulatory Lag Plan) its testimony was filed after PGandE filed its application, staff, unlike PGandE, utilized recorded 1984 data. Applicant thus concedes that staff's estimate is probably more accurate than applicant's for acres served in 1984. With respect to the years 1985 and 1986, PGandE contends that its estimate of acreage to be served is the more reasonable, but it provides no additional evidence in support of that position.

PGandE points out that staff included 781 acres of raw land as being irrigated in 1984 although there were no contracts for raw

land at the time of hearings. Staff's estimate is supported, however, by analysis of prior years' irrigation and the knowledge that raw land contracts are not negotiated until late in the water season.

We adopt staff's estimate of acres served.

Sales per acre were estimated by PGandE using an average of the last 5 years through 1983 while the staff used the 10-year period ending with the year 1982. Staff omitted 1983 data because only 83% of the total acreage irrigated in that year was for rice while the average acreage irrigated for rice for the preceding 10 years was 97%.

As the evidence shows that 1983 was an unusually low year for rice acreage, we think staff's use of the 10-year period immediately preceding that year produces the more reasonable estimate. We adopt staff's estimate of sales per acre.

Operations and Maintenance  
(O&M) Expenses

There is one major difference between staff and utility regarding O&M labor expense. PGandE's estimates reflect two summer employees who are working at Western Canal at the present time and who have worked there in summers from 1980 to 1984 with the exception of 1983. Since 1980, except for 1983, Western Canal has been operated by 10 fulltime and two summer personnel. This is demonstrated by recorded labor expenditures in constant dollars for 1980, 1981, 1982, and 1983 which are \$273,590, \$277,729, \$278,672, and \$259,721, respectively.

PGandE testified that 1983 was not a normal year in either expenses or sales. A 40% reduction in customer water demand in 1983 reduced manpower requirements and, as a result, the summer personnel were not hired.

Staff's estimates for O&M labor are based upon 1983 recorded data which do not include the two summer employees. As these personnel are presently employed and our adopted sales



estimates will require their reemployment in the test years, we think applicant's labor expense estimate is more reasonable.

Staff's reliance upon 1983 recorded data for other O&M accounts is also criticized by PGandE. While staff data is more current than that used by applicant, PGandE points out that the low flow experienced in Western Canal in 1983 is reflected in unusually low expenses such as weed control, rodent control, and maintenance of canal banks.

Recorded maintenance expenses for canals, ditches, and tunnels for 1980, 1981, and 1982 are \$79,288, \$116,989, and \$149,326, respectively, or in constant 1982 dollars, are \$96,422, \$127,203, and \$149,326. These expenditures show a general upward trend from year to year. Recorded 1983, however, was an exception to this historical pattern. Recorded 1983 maintenance expense dropped to \$114,400, a result of a 40% decrease in flow and customer delivered water.

We adopt applicant's estimates of O&M expenses for the test years.

Administrative and General  
(A&G) Expenses

Historically, A&G expenses have been developed using a four-factor methodology. This methodology utilizes total PGandE A&G expenses and allocates these expenses to PGandE's operating departments based on four factors: net plant, number of customers, O&M expenses, and direct labor expenses.

Because PGandE has recently sold or is in the process of selling all of its water systems except Western Canal, the established and approved four-factor approach for test years 1984 and 1985 resulted in what PGandE believed were excessive A&G expenses assigned to Western Canal. In order to more accurately reflect indirect expense estimates, PGandE utilized a direct allocation methodology for test years 1984 and 1985 based on an account-by-account review of related Western Canal expenses.

While the results of the direct allocation method indicated an increase in some accounts and a decrease in other accounts over 1983 recorded A&G expenses, total indirect A&G expense estimates were significantly reduced. Total indirect A&G expense estimates using the four-factor approach were \$182,157 in 1984 and \$192,194 in 1985, compared to \$153,554 in 1984 and \$163,242 in 1985 using the direct allocation methodology. Thus, direct methodology results in annual estimates approximately \$29,000 less than those derived from the previously used four-factor methodology.

Staff reviewed all A&G estimates and found them reasonable except for salaries and for payroll escalation. Staff used 1983 recorded figures as a base as it believed PGandE's estimates of 1.3 man-years and annual salary of \$36,800 were high.

As staff made no independent analysis of labor costs and related expenses for either of the test years, we are inclined to accept applicant's indirect labor estimate as being the more reasonable. We will also adopt PGandE's 6.5% escalation factor applied to 1982 recorded figures as that factor was utilized in applicant's last general rate case for its energy divisions.

We adopt applicant's estimate of A&G expenses for the test years.

#### Property Tax

PGandE does not receive a property bill for its Western Canal properties alone. It is necessary for ratemaking purposes to allocate a portion of applicant's total property tax to its water properties.

Applicant apportions tax to Western Canal by, basically, applying its systemwide tax rate to the total cost less depreciation of its water properties including intangible costs, as reported to the State Board of Equalization.

Staff differs with this method. It contends that Western Canal should be viewed as an independent water utility for tax

purposes, and no tax should be assigned to intangible costs which are themselves not taxable property.

We think staff's point is a valid one, particularly since there are ongoing discussions which may lead to a sale of Western Canal, and we will exclude intangibles from the base to which ad valorem taxes are to be apportioned. We will, however, employ applicant's overall tax rate for apportionment purposes.

Our adopted property tax for the test years is developed as follows:

	<u>1984</u>	<u>1985</u>
Taxable plant	\$813.9	\$864.9
Common plant	<u>64.2</u>	<u>59.8</u>
Tax base	878.1	924.7
Tax rate (x 1.1%)	\$ 9.7	\$ 10.2

#### Water Sales Adjustment Mechanism

Applicant states that Western Canal is subject to severe and unpredictable sales fluctuations resulting from government crop support programs. It proposes a water sales adjustment mechanism (WSAM), similar to its balancing accounts for gas and electric operations, in order to ensure that PGandE receives its authorized revenues from water sales.

As staff points out in opposition to WSAM, this Commission is currently reviewing its rate design policy for water utilities. In D.84-01-02, San Jose Water Company, staff was directed to study water rate design and report in 1984.

We will accordingly not consider WSAM in this proceeding.

#### Attrition

Staff's recommendation of operational attrition equivalent to the decline in rates of return from 1984 to 1985 based on the adopted expenses, rate bases for both years and the revenues based on 1984 adopted rates is approved.

Operational attrition is 1.60% and financial attrition is .08% for 1986. Increased revenues required for 1986 are \$59,000 (1.68% x 2.0485 x \$1,713,500).

Findings of Fact

1. The adopted estimates of operating revenues, operating expenses, rate base, and rate of return for test years 1984 and 1985 shown on Tables 1 and 2 are reasonable.
2. A rate of return of 11.93% on the adopted rate base of \$1,654,300 for 1984 is reasonable.
3. Applicant's earnings under present rates for test year 1984 would produce a rate of return of 0.83%.
4. A rate of return of 12.01% on the adopted rate base of \$1,713,500 for 1985 is reasonable.
5. Applicant's operations under present rates for test year 1985 would produce a loss to applicant.
6. An attrition allowance for 1986 of 1.68% is reasonable.
7. Applicant's level of water service is adequate.
8. The increases in rates and charges authorized by this decision are just and reasonable, and the present rates and charges are for the future unjust and unreasonable.
9. WSAMs are currently under study by the Commission.
10. No change in rate design is warranted in this proceeding.

Conclusion of Law

The application should be granted to the extent provided in the following order.

O R D E R

IT IS ORDERED that:

1. Pacific Gas and Electric Company (PGandE) is authorized to file the revised schedules attached to this order as Appendix A and to concurrently cancel its present schedules for such service. This filing shall comply with General Order (GO) Series 96. The effective date of the revised schedules shall be 4 days after the date of filing. The revised schedules shall apply only to service rendered on and after their effective date.

2. On or after November 15, 1984, PGandE may file an advice letter, with appropriate work papers, requesting the step rate increases, attached to this order as Appendix B, or to file a lesser increase in the event that the rate of return on rate base for this district, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ending September 30, 1984, exceeds the rate of return adopted in this proceeding. This filing should comply with GO 96-A. The requested step rates should be reviewed by the staff to determine their conformity with this order and should go into effect upon the staff's determination of conformity. The staff shall inform the Commission if it finds that the proposed step rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised schedule should be no earlier than January 1, 1985, or 30 days after the filing of the step rate, whichever is later. The revised schedule should apply only to service rendered on and after its effective date.

3. On or after November 15, 1985, PGandE may file an advice letter, with appropriate workpapers, requesting the attrition offset rate increases, attached to this order as Appendix C, or to file a lesser increase in the event that the rate of return on rate base, adjusted to reflect the rates then in effect and normal ratemaking adjustments for the 12 months ending September 30, 1985, exceeds the

rate of return adopted in this proceeding. Such filing should comply with GO 96-A. The requested step rates should be reviewed by the staff to determine their conformity with this order and should go into effect upon the staff's determination of conformity. The staff shall inform the Commission if it finds that the proposed attrition rate increase is not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised schedule should be no earlier than January 1, 1986, or 30 days after the filing of the attrition rate increase, whichever is later.

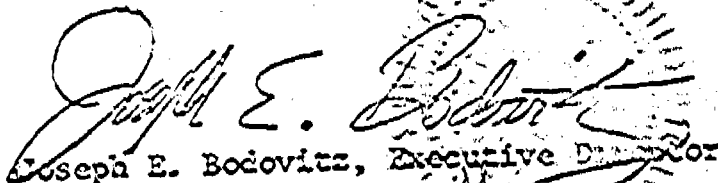
4. The request to establish a water sales adjustment mechanism is denied.

5. The application is granted in part as set forth above. This order becomes effective 30 days from today.

Dated OCT 17 1984, at San Francisco, California.

VICTOR CALVO  
FRISCILLA C. GREW  
DONALD VIAL  
WILLIAM T. BAGLEY  
Commissioners

I CERTIFY THAT THIS DECISION  
WAS APPROVED BY THE ABOVE  
COMMISSIONERS TODAY.

  
Joseph E. Bodovitz, Executive Director

APPENDIX A  
PACIFIC GAS AND ELECTRIC COMPANY  
WESTERN CANAL DISTRICT  
SCHEDULE NO. WC-1

IRRIGATION SERVICE, METERED

APPLICABILITY

This schedule is applicable to the service of water supplied for irrigation during the period from March 1st to November 15th, inclusive.

TERRITORY

This schedule is applicable to all territory in Butte and Glenn Counties served from the Utility's Western Canal Water System.

RATE

For all water .....	\$4.61 per acre-foot (I)
Minimum delivery charge, April 1st to October 15	
For irrigation of rice .....	5 acre-feet per acre
For irrigation of other crops .....	2 acre-feet per acre
For fertilization and preparation of lands .....	1/2 acre-foot per acre

SPECIAL CONDITIONS

Gravity water service from the entire Western Canal System will be made available only during the period April 1st to October 15th, inclusive. During the periods March 1st to March 31st and October 16th to November 15th, general water and operating conditions permitting, water will be supplied from the system, excluding the High Line Canal, at water levels which may be available without operation of the check structures.

APPENDIX B  
PACIFIC GAS AND ELECTRIC COMPANY  
WESTERN CANAL DISTRICT

Each of the following increases in rates may be put into effect on the indicated dates by filing the rate schedule which adds the appropriate increase to the rate which would otherwise be in effect on that date.

<u>Schedule No. WC-1</u>	<u>Effective Dates</u>	
	<u>1-1-85</u>	<u>1-1-86</u>
Rate for all water .....	\$0.28	\$0.28

(END OF APPENDIX B)



APPENDIX C

Page 1

ADOPTED QUANTITIES

Name of Company: Pacific Gas & Electric  
 District: Western Canal

1. Net to Gross Multiplier: 2.0485

2. Federal Tax Rate: 46%

3. State Tax Rate: 9.6%

4. Ad Valorem Taxes	1984	1985
	\$9,700	\$10,200

5. Customers and Sales

<u>YEAR</u>	<u>CUSTOMERS</u>	<u>ACRES SERVED</u>	<u>SALES PER ACRE (ACRE-FEET)</u>	<u>BILLING (ACRE-FEET)</u>
1984	148	38,360	5.47	209,829.2
1985	148	38,360	5.47	209,829.2

## APPENDIX C

Page 2

ADOPTED INCOME TAX CALCULATION

LINE NO.	ITEM	1984		1985	
		<u>CCFT</u>	<u>FIT</u>	<u>CCFT</u>	<u>FIT</u>
1	OPERATING REVENUE	\$973.7	\$973.7	\$1,032.6	\$1,032.6
2	O&M EXPENSES	621.5	621.5	662.3	662.3
3	TAXES OTHER THAN INCOME	33.9	33.9	34.4	34.4
4	CCFT	0.0	16.9	0.0	18.4
5	SUBTOTAL	655.4	672.3	696.7	715.1
6	DEDUCTIONS FROM TAXABLE INCOME				
7	TAX DEPRECIATION	61.9	52.3	59.3	48.9
8	EMPLOYEE BENEFITS CAPITALIZED	13.6	13.6	14.5	14.5
9	INTEREST	66.3	66.3	70.0	70.0
10	PREFERRED DIVIDEND CREDIT	0.0	0.6	0.0	0.6
11	SUBTOTAL DEDUCTIONS	141.8	132.8	143.8	134.0
12	NET TAXABLE INCOME FOR CCFT	176.5		192.1	
13	CCFT	16.9		18.4	
14	TOTAL CCFT	16.9		18.4	
15	NET TAXABLE INCOME FOR FIT		168.6		183.5
16	FEDERAL INCOME TAX		77.6		84.4
17	GRADUATED TAX ADJUSTMENT		0.0		0.0
18	FED INCOME TAX BEFORE ADJ.		77.6		84.4
19	INVESTMENT TAX CREDIT		0.0		0.0
20	TOTAL FIT		77.6		84.4

(END OF APPENDIX C)

had requested annual revenues of \$1,009,810 which it computed to be an increase of 87.01%.

Additional increases of \$58,900 or 6.05% for 1985 and \$59,000 or 5.71% for 1986 are authorized.

A 14.5% return on equity is adopted, yielding a rate of return on rate base of 11.93% for test year 1984. Applicant had requested a 15.75% return on equity and a rate of return on rate base of 12.45%.

Applicant's request for our adoption of a sales adjustment mechanism is denied as this generic question remains under study.

This order constitutes an exception to our policy of limiting rate increases to no more than 50% in a single year, as Western Canal customers are farmers using water for irrigation purposes rather than residential customers whom our policy was designed to assist.

#### General Description of Western Canal

Western Canal serves an area of approximately 55 square miles between the Feather and Sacramento Rivers north of the Richvale Irrigation District in Butte and Glenn Counties. There is no specific field service area as is typical of most irrigation systems as the same areas may not be served every year. The system consists of a large main canal, lateral canals, numerous floodgates, checkgates, and drain structures. Water for the canal system is diverted from the Feather River at the Department of Water Resources Thermolito Afterbay. The principal use of the water is for the irrigation of rice.

#### Western Canal Users' Association

Although not appearing at the formal hearing, the Western Canal Users' Association addressed a letter to the Commission objecting to any rate increase and, particularly, to the PGandE proposed supply adjustment mechanism.