

Decision 89 11 016 NOV 3 1989

**ORIGINAL**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of )  
CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA for authority to increase )  
rates and charges for water service )  
in its Felton District (U-87-W). )

Application 89-03-028  
(Filed March 21, 1989)

In the Matter of the Application of )  
CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA for authority to increase )  
rates and charges for water service )  
in its Sacramento District (U-87-W). )

Application 89-03-029  
(Filed March 21, 1989)

In the Matter of the Application of )  
CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA for authority to increase )  
rates and charges for water service )  
in its Guerneville District (U-87-W). )

Application 89-03-030  
(Filed March 21, 1989)

In the Matter of the Application of )  
FRANCIS LAND AND WATER COMPANY for )  
authority to increase rates and )  
charges for water service in the )  
City of Ferndale and vicinity, in )  
Humboldt County (U-26-W). )

Application 89-03-031  
(Filed March 21, 1989)

Investigation on the Commission's )  
own motion into the rates and charges )  
of CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA, a California corporation, )  
in its MONTARA DISTRICT. )

I.89-02-011  
(Filed February 8, 1989)

Cooper, White & Cooper, by E. Garth Black,  
Attorney at Law, and Lawrence D'Addio, for  
Francis Land and Water Company; Ronald E.  
Walsh, for Citizens Utilities Company of  
California and Francis Land and Water  
Company; applicants.

Carlos E. Benemann, for Ferndale Intervention Team; Sherwin H. Wiersig, for City Council, City of Ferndale; Messrs. Armour, St. John, Wilcox, Goodin & Schlotz, by James D. Squeri, Attorney at Law, for Sweetwater Springs Water District; and Bruce H. Burton, for California Department of Health Services, Public Water Supply Branch; interested parties.  
Lawrence O. Garcia, Attorney at Law, and Arthur Jarrett, for the Commission Advisory and Compliance Division.

### OPINION

#### Summary of Decision

This decision authorizes the following rate increases to Citizens Utilities Company of California (Citizens) and Francis Land and Water Company (Francis).

<u>District</u>	<u>1989</u>		<u>1990</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Felton	\$ 81,800	20.07	\$ 16,700	3.41
Sacramento	1,216,700	17.02	259,100	2.97
Francis Land & Water Company	71,700	42.58	5,400	2.22

The increases are based on rate of return of Citizens' rate base of 10.29% for each of the two years. The related return on common equity is 11.75%.

The decision also orders further evidentiary hearings to address service problems in Citizens' Guerneville District and defers the rate revision for the district until the hearings are completed and the Commission issues a decision.

In the Order Instituting Investigation (I.) 89-02-011 concerning Citizens' Montara District, this decision finds that Citizens is not earning a rate of return in excess of the last authorized rate of return for the Montara District.

Background

Citizens is an operating public utility corporation with its principal place of business located in Redding, California. Citizens provides public utility telephone and water services in various areas of California.

Francis is a wholly owned subsidiary of Citizens' parent Citizens Utilities Company, a Delaware Corporation. Francis' principal place of business is located in Ferndale, California. Francis provides public utility water service in the City of Ferndale and vicinity in Humboldt County.

On March 21, 1989 Citizens filed applications requesting rate increases for water services in its Felton (Application (A.) 89-03-028), Sacramento (A.89-03-029), and Guerneville (A.89-03-030) Districts. Francis also filed an application (A.89-03-031) for increase in rates for water services on March 21, 1989. Citizens and Francis requested the following rate increases:

<u>District</u>	<u>1989</u>		<u>1990</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Felton	\$ 210,325	54.3	\$ 46,890	8.0
Sacramento	2,193,142	31.0	360,443	3.7
Guerneville	447,392	41.0	118,361	7.5
Francis Land & Water Company	223,819	135.0	7,655	2.0

The request for rate increases for both Citizens and Francis was based on a rate of return on rate base of 11.73%.

On April 10, 1989, Citizens and Francis amended their applications. In their amended applications Citizens and Francis request a rate of return on rate base of between 11.85% to 12.50% based on return on common equity of between 14% and 15%.

On February 8, 1989, the Commission issued I.89-02-011 on its own motion into the rates and charges in Citizens' Montara District.

This decision addresses these applications and I.89-02-011 which were consolidated for hearings. Following is a brief description of the three districts and Francis.

Felton District

The district serves the unincorporated area of Felton and vicinity. All of the district's operation is within Santa Cruz County.

A diversion on Fall Creek is the system's surface source of water supply. The system's ground water sources include Bennett and Bull Springs and one well equipped with a deep well turbine. Nine reservoirs and tanks of various sizes provide a total combined storage capacity of about 871,000 gallons.

As of December 31, 1987, the distribution system contained about 119,000 feet of transmission and distribution mains that varied in size from 1-1/2 inches to 10 inches in diameter. Also, as of December 31, 1987, this system had 1,301 active metered service connections, and 7 private fire hydrant connections.

The district's operation is conducted from an office in Felton by a district manager, a superintendent, two service persons, and one service clerk.

Sacramento District

The district provides water service within areas of Sacramento County commonly known as Lincoln Oaks, Royal Oaks, Arden, Suburban (Rancho Cordova and Rosemont areas), Parkway, Sunrise, City of Isleton, and vicinities.

The district's water supply is provided by 96 deep wells located strategically throughout the areas served. These wells produce approximately 10.23 billion gallons of water annually which is delivered to customers through approximately 2,500,000 feet of distribution main. These mains are primarily asbestos cement pipe, 1-1/2 inches to 20 inches in diameter.

As of December 31, 1987, the district had 44,768 customers, 36,086 of these were flat rate customers and 4,532 were

metered customers. The district also serves 359 private fire protection connections and 3,791 public fire hydrants.

The district's operations are conducted from the office at 3335 Longview Drive, North Highlands. The district manager, 12 administrative and office employees, and 21 field employees operate in or out of this office. The general manager of Citizens' California water operations, his administrative, engineering, and drafting staff also share this facility.

#### Guerneville District

The district serves the resort areas of Guerneville, Rio Nido, East Guerneville, Guerneville Park, Northwood, Monte Rio, Vacation Beach, River Meadows, and vicinity, along the Russian River.

The district obtains its primary source of water supply from several wells throughout the system. The district has nine booster pumps in the system ranging from 1 HP to 15 HP, and a total storage capacity of approximately one million gallons in tanks that are located at different elevations throughout the distribution system.

As of December 31, 1987 the system consisted of approximately 430,000 feet of transmission and distribution mains, 3,302 active metered services, and 3 private fire hydrant connections.

The district maintains an office in Guerneville where the district manager, office manager, superintendent, three clerks, and seven service persons are located.

#### Francis

Francis provides water service in the City of Ferndale and vicinity in Humboldt County.

Francis' main source of water supply is from tunnels, springs, and a well. The combined yield of all sources is estimated to be from 235 to 330 gallons per minute, depending on

the season of the year. The amount of water sold in 1987 was slightly in excess of 84,000 hundred cubic feet.

Two concrete reservoirs with a combined capacity of 1.33 million gallons provide storage for the system. In addition, the system has five small collecting tanks. Francis' total combined capacity is about 1.36 million gallons.

The distribution system in Francis' service area includes approximately 60,000 feet of main varying in size up to 10 inches.

As of December 31, 1987, Francis served 666 metered customers and 3 private fire hydrant connections.

Francis' local operations are conducted from its office in Ferndale. In addition to the local superintendent, there are two service clerks shared jointly with Citizens' telephone operations and one full-time service person.

#### Public Meetings and Hearings

As part of its investigation, the Water Utilities Branch (Branch) of the Commission Advisory and Compliance Division conducted informal public meetings in each of the service areas. In addition to the project manager from Branch, the public meetings were attended by Citizens' general manager of California water operations and local district managers.

Based on the comments received at the informal public meetings, the project manager recommended that public participation hearings (PPH) be held in all service areas. Accordingly, PPHs were held before Administrative Law Judge Garde in Felton, Sacramento, Guerneville, and Ferndale.

The PPHs in Felton, Guerneville, and Ferndale were attended by over 150 people. These customers complained about the quality and/or cost of service provided by Citizens and Francis.

Evidentiary hearings were held in San Francisco during the period July 31, 1989 to August 4, 1989. The proceedings in A.89-03-028, A.89-03-029 A.89-03-030, and I.89-02-011 were submitted upon the receipt of concurrent briefs on August 21, 1989.

Although this order addresses most of the issues in A.89-03-031, further hearings in the proceeding were held on September 19, 1989 to address certain expense and rate base items. ✓

Issues

During the hearings, Citizens stipulated to most of Branch's estimates, so only a few issues were litigated during the evidentiary hearings. There were two types of contested issues between Citizens and Branch. The first kind applied to all districts and the second kind applied to specific districts:

The disputed items common to all districts were:

1. Rate of return.
  - a. Capital structure.
  - b. Return on equity (ROE).

The disputed items in relation to individual districts were:

2. Sacramento District - The addition of one employee plus related expenses for test year 1990.
3. Francis - The addition of one-half employee plus related expenses for test years 1989 and 1990 and the unamortized legal and regulatory expense incurred in connection with continued hearings in A.60303.
4. Rate base for Francis.

In addition to Citizens and Branch, Ferndale Intervention Team (FIT), City Council of the City of Ferndale (Ferndale), the California Department of Health Services (DHS) and the Sweetwater Springs Water District (Sweetwater) were active participants in the proceeding. FIT and Ferndale are interested in Issues 3 and 4. Sweetwater recommends the following for the Guerneville District:

- o Since Citizens has pursued its main extension replacement program in an unreasonable and haphazard manner, the Commission should delete from rate base all amounts associated with main extension replacements for the years 1989 and 1990.

- o The Commission should substantially reduce Citizens' otherwise authorized rate of return because of the poor quality of water service provided by Citizens in its Guerneville District.

DHS requests that Citizens be ordered to submit a master plan detailing the deficiencies in the Guerneville system and the method of correcting the deficiencies. DHS also requests that Citizens should seek the approval of the master plan from DHS and the Commission before making any improvements to the system.

Results of Operation

Tables 1 through 6 show a comparison of Citizens' and Branch's estimate of results of operation for 1989 and 1990 for the three districts under consideration. Tables 7 and 8 show a comparison of Francis' and Branch's estimates of results of operation for 1989 and 1990. The tables also show the adopted and authorized results of operations.

The adopted quantities, tax calculation, and comparison of rates are included in Appendixes C, D, and E, respectively.



Table 1

Citizens Utilities Company of California  
Felton District  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 407.5	\$ 0.0	\$ 407.5	\$ 407.5	\$ 489.3
<u>Deductions</u>					
OGM Expenses	156.2	0.0	156.2	156.2	159.7
A&G Expenses	113.0	0.0	113.0	113.0	113.0
Taxes other than Income	22.6	0.0	22.6	22.6	22.6
Depreciation	37.2	0.0	37.2	37.2	37.2
Subtotal	329.0	0.0	329.0	329.0	329.5
<u>Net Operating Revenue</u>					
Before Income Taxes	78.5	0.0	78.5	78.5	159.8
Income Taxes	14.1	0.0	14.1	14.1	46.8
Net Operating Revenue	64.4	0.0	64.4	64.4	113.0
Rate Base	1,097.9	0.0	1,097.9	1,097.9	1,097.9
Rate of Return	5.87%	0.00%	5.87%	5.87%	10.29%
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%	10.29%	
Est. Net Oper. Revenue	128.8	15.9 <sup>a</sup>	112.9	113.0	
Net Revenue Deficiency	64.4	15.9 <sup>a</sup>	48.5	48.6	
Net to Gross Multiplier	1.68325		1.68325	1.68325	
Revenue Increase	108.4	26.8 <sup>a</sup>	81.6	81.8	

<sup>a</sup> Difference due to estimated rate of return.

Table 2

Citizens Utilities Company of California  
Fulton District  
Summary of Earnings Reconciliation  
Test Year 1990  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 408.1	\$ 0.0	\$ 408.1	\$ 408.1	\$ 506.7 ✓
<u>Deductions</u>					
O&M Expenses	168.2	0.0	168.2	168.2	168.8
A&C Expenses	116.4	0.0	116.4	116.4	116.4
Taxes other than Income	23.4	0.0	23.4	23.4	23.4
Depreciation	37.8	0.0	37.8	37.8	37.8
Subtotal	345.8	0.0	345.8	345.8	346.4
<u>Net Operating Revenue</u>					
Before Income Taxes	62.3	0.0	62.3	62.3	160.3 ✓
Income Taxes	8.2	0.0	8.2	8.2	47.6
Net Operating Revenue	54.1	0.0	54.1	54.1	112.7 ✓
Rate Base	1,095.5	0.0	1,095.5	1,095.5	1,095.5
Rate of Return	4.94%	0.00%	4.94%	4.94%	10.29%
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%	10.29%	
Est. Net Oper. Revenue	128.5	15.9 <sup>a</sup>	112.6	112.7	
Net Revenue Deficiency	74.4	15.9 <sup>a</sup>	58.5	58.6	
Net to Gross Multiplier	1.68325		1.68325	1.68325	
Revenue Increase	125.2	26.7 <sup>a</sup>	98.5	98.6	

<sup>a</sup> Difference due to estimated rate of return.

Table 3

Citizens Utilities Company of California  
Sacramento District  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

<u>Item</u>	<u>Citizens</u>	<u>Dif.</u>	<u>Branch</u>	<u>Adopted at Present Rates</u>	<u>Adopted at Auth. Rates</u>
Operating Revenues	\$ 7,149.6	\$ 0.0	\$ 7,149.6	\$ 7,149.6	\$ 8,366.3 ✓
<u>Deductions</u>					
O&M Expenses	2,739.5	0.0	2,739.5	2,739.5	2,741.5
A&G Expenses	1,970.2	0.0	1,970.2	1,970.2	1,970.2
Taxes other than Income	294.1	0.0	294.1	294.1	296.4
Depreciation	1,298.4	0.0	1,298.4	1,298.4	1,298.4
Subtotal	6,302.2	0.0	6,302.2	6,302.2	6,306.5
<u>Net Operating Revenue</u>					
Before Income Taxes	847.4	0.0	847.4	847.4	2,059.8
Income Taxes	223.3	0.0	223.3	223.3	711.2
Net Operating Revenue	624.1	0.0	624.1	624.1	1,348.6
Rate Base	13,106.0	0.0	13,106.0	13,106.0	13,106.0
Rate of Return	4.76%	0.00%	4.76%	4.76%	10.29%
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%	10.29%	
Est. Net Oper. Revenue	1,537.3	190.0	1,347.3	1,348.6	
Net Revenue Deficiency	913.3	190.0	723.2	724.5	
Net to Gross Multiplier	1.68024		1.68024	1.67942	
Revenue Increase	1,534.5	319.3	1,215.2	1,216.7	

<sup>a</sup> Difference due to estimated rate of return.

Table 4

Citizens Utilities Company of California  
Sacramento District  
Summary of Earnings Reconciliation.  
Test Year 1990  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 7,459.3	\$ 0.0	\$ 7,459.3	\$ 7,459.3	\$ 8,988.4
<u>Deductions</u>					
O&M Expenses	2,942.5	32.7 <sup>a</sup>	2,909.8	2,909.8	2,912.3
A&G Expenses	2,094.4	1.6 <sup>a</sup>	2,092.8	2,092.8	2,092.8
Taxes other than Income	310.7	5.9 <sup>a</sup>	304.8	304.8	307.6
Depreciation	1,459.6	0.0	1,459.6	1,459.6	1,459.6
Subtotal	6,807.2	40.2	6,767.0	6,767.0	6,772.3
<u>Net Operating Revenue</u>					
Before Income Taxes	652.1	(40.2)	692.3	692.3	2,216.1
Income Taxes	167.7	(16.2)	183.9	183.9	797.2
Net Operating Revenue	484.4	(24.0)	508.4	508.4	1,418.9
Rate Base	13,789.0	0.0	13,789.0	13,789.0	13,789.0
Rate of Return	3.51%	-0.17%	3.69%	3.69%	10.29%
Estimated Rate of Return	11.73%	1.45% <sup>b</sup>	10.28%	10.29%	
Est. Net Oper. Revenue	1,617.4	199.9	1,417.5	1,418.9	
Net Revenue Deficiency	1,133.0	224.0	909.1	910.5	
Net to Gross Multiplier	1.68024		1.68024	1.67942	
Revenue Increase	1,903.8	376.3	1,527.4	1,529.1	

(Red Figure)

<sup>a</sup> Difference due to one employee excluded by Branch.

<sup>b</sup> Difference due to estimated rate of return.

Table 5

Citizens Utilities Company of California  
Guerneville District  
Summary of Earnings Reconciliation  
Test Year 1989  

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(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$1,069.0	\$ 0.0	\$1,069.0	\$1,069.0	
<u>Deductions</u>					
O&M Expenses	534.6	0.0	534.6	534.6	
A&G Expenses	328.6	0.0	328.6	328.6	
Taxes other than Income	66.9	0.0	66.9		
Depreciation	88.3	0.0	88.3		
Subtotal	1,018.4	0.0	1,018.4		
<u>Net Operating Revenue</u>					
Before Income Taxes	50.6	0.0	50.6		
Income Taxes	(13.4)	0.0	(13.4)		
Net Operating Revenue	64.0	0.0	64.0		
Rate Base	2,669.4	0.0	2,669.4		
Rate of Return	2.40%	0.00%	2.40%		
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%		
Est. Net Oper. Revenue	313.1	38.7 <sup>a</sup>	274.4		
Net Revenue Deficiency	249.1	38.7 <sup>a</sup>	210.4		
Net to Gross Multiplier	1.68771		1.68771		
Revenue Increase	420.4	65.3 <sup>a</sup>	355.1		

(Red Figure)

<sup>a</sup> Difference due to estimated rate of return.

**Note:** Since we are ordering further hearings to address service problems and plant additions for the district, only revenues at present rates and expenses that are independent of plant estimates are being adopted at this time.

Table 6

Citizens Utilities Company of California  
Guerneville District  
Summary of Earnings Reconciliation  
Test Year 1990  
(Dollars in Thousands)

<u>Item</u>	<u>Citizens</u>	<u>Dif.</u>	<u>Branch</u>	<u>Adopted at Present Rates</u>	<u>Adopted at Auth. Rates</u>
Operating Revenues	\$1,071.5	\$ 0.0	\$1,071.5	\$1,071.5	
<u>Deductions</u>					
O&M Expenses	573.9	0.0	573.9	573.9	
A&G Expenses	351.7	0.0	351.7	351.7	
Taxes other than Income	71.8	0.0	71.8		
Depreciation	94.1	0.0	94.1		
Subtotal	1,091.5	0.0	1,091.5		
<u>Net Operating Revenue</u>					
Before Income Taxes	(20.0)	0.0	(20.0)		
Income Taxes	(43.3)	0.0	(43.3)		
Net Operating Revenue	23.3	0.0	23.3		
Rate Base	2,840.5	0.0	2,840.5		
Rate of Return	0.82%	0.00%	0.82%		
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%		
Est. Net Oper. Revenue	333.2	41.2 <sup>a</sup>	292.0		
Net Revenue Deficiency	309.9	41.2 <sup>a</sup>	268.7		
Net to Gross Multiplier	1.68771		1.68771		
Revenue Increase	523.0	69.5 <sup>a</sup>	453.5		

(Red Figure).

<sup>a</sup> Difference due to estimated rate of return.

Notes: Since we are ordering further hearings to address service problems and plant additions for the district, only revenues at present rates and expenses that are independent of plant estimates are being adopted at this time.

Table 7

Francis Land and Water Company  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$168.4	\$ 0.0	\$168.4	\$168.4	\$240.1 ✓
<u>Deductions</u>					
OGM Expenses	94.9	12.6 <sup>a</sup>	82.3	82.3	82.4
A&G Expenses	90.7	20.7 <sup>b</sup>	70.0	70.0	70.0
Taxes other than Income	14.3	3.0 <sup>c</sup>	11.3	11.3	11.3
Depreciation	28.4	12.6 <sup>d</sup>	15.8	15.8	15.8
Subtotal	228.3	48.9	179.4	179.4	179.5
<u>Net Operating Revenue</u>					
Before Income Taxes	(59.9)	(48.9)	(11.0)	(11.0)	60.6
Income Taxes	(36.1)	(21.3)	(14.8)	(14.8)	14.0
Net Operating Revenue	(23.8)	(27.6)	3.8	3.8	46.6
Rate Base	823.8	370.6 <sup>e</sup>	453.2	453.2	453.2
Rate of Return	-2.89%	-3.73%	0.84%	0.84%	10.29% ✓
Estimated Rate of Return	11.73%	1.45% <sup>f</sup>	10.28%	10.29%	✓
Est. Net Oper. Revenue	96.6	50.0	46.6	46.6	
Net Revenue Deficiency	120.5	77.7	42.8	42.8	
Net to Gross Multiplier	1.67471		1.67471	1.67471	
Revenue Increase	201.7	130.1	71.6	71.7	✓

(Red Figure)

For explanation see p. 17.

Table 8

Francis Land and Water Company  
Summary of Earnings Reconciliation  
Test Year 1990  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at <u>Present Rates</u>	Adopted at <u>Auth. Rates</u>
Operating Revenues	\$170.6	\$ 0.0	\$170.6	\$170.6	\$248.6
<u>Deductions</u>					
O&M Expenses	98.5	13.0 <sup>a</sup>	85.5	85.5	85.6
A&G Expenses	93.2	20.8 <sup>b</sup>	72.4	72.4	72.4
Taxes other than Income	15.1	5.0 <sup>c</sup>	10.1	10.1	10.1
Depreciation	29.4	13.1 <sup>d</sup>	16.3	16.3	16.3
Subtotal	236.2	51.9	184.3	184.3	184.4
<u>Net Operating Revenue</u>					
Before Income Taxes	(65.6)	(51.9)	(13.7)	(13.7)	64.2
Income Taxes	(38.2)	(22.4)	(15.8)	(15.8)	15.5
Net Operating Revenue	(27.4)	(29.5)	2.1	2.1	48.7
Rate Base	816.2	342.8 <sup>e</sup>	473.4	473.4	473.4
Rate of Return	-3.36%	-3.80%	0.44%	0.44%	10.29% ✓
Estimated Rate of Return	11.73%	1.45% <sup>f</sup>	10.28%	10.29%	✓
Est. Net Oper. Revenue	95.7	47.1	48.7	48.7	
Net Revenue Deficiency	123.1	76.6	46.6	46.6	
Net to Gross Multiplier	1.67471		1.67471	1.67471	
Revenue Increase	206.2	128.2	78.0	78.0	

(Red Figure)

(Continued)



- a Difference due to one-half employee excluded by Branch.
- b Difference due to:
  - 1. One-half employee excluded by Branch.
  - 2. Amortization of deferred rate case expense of \$16,630.
- c Difference due to:
  - 1. One-half employee excluded by Branch (payroll taxes).
  - 2. Differences in plant.
- d Difference due to different plant estimates.
- e Difference due to different plant estimates.
- f Difference due to recommended rates of return.

Note:

These issues were addressed during the hearings held on September 19, 1989. Because of the limited time available since the completion of the September hearings, this order does not resolve the issues addressed during the hearings. ✓

### Rate of Return

Since Francis is a wholly owned subsidiary of Citizens' parent Citizens Utilities Company, the rate of return analysis discussed below applies to Citizens as well as Francis.

Citizens' capital structure consists of two components: long-term debt and common equity. The ratio in which these two components are included is known as debt-equity ratio or equity ratio. Rate of return is a composite value of capital costs expressed as the total weighted cost of long-term debt and common equity. The determination of the cost of long-term debt is based primarily on recorded costs; however, estimates must be made for the costs associated with future debts. Determination of the ROE is more difficult because additional factors, such as business and financial risks, investor expectations, ratepayer interest, and equity ratios.

The following table shows the rate of return calculations proposed by Citizens and Branch<sup>1</sup>:

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1 The testimony regarding rate of return and cost of capital was provided by the Financial and Economic Analysis Branch of the Division of Ratepayer Advocates.

Table 9

<u>Citizens</u>			
<u>Item</u>	<u>[A] Capital<sup>2</sup> Ratio</u>	<u>[B] Cost Rate</u>	<u>[C] Weighted Cost [A]*[B]</u>
Long-term Debt	35.52%	7.95% - 7.95%	2.82% - 2.82%
Common Equity	<u>64.48%</u>	14.00% - 15.00%	<u>9.03% - 9.67%</u>
Total	100.00%		11.85% 12.50%

<u>Branch</u>			
<u>Item</u>	<u>[A] Capital Ratio</u>	<u>[B] Cost Rate</u>	<u>[C] Weighted Cost [A]*[B]</u>
Long-term Debt	45.00%	8.52%	3.83%
Common Equity	<u>55.00%</u>	11.75%	<u>6.46%</u>
Total	100.00%		10.29%

As is evident from Table 9, Citizens and Branch recommend different equity ratios, cost of debt, and ROE. Following is a discussion of each component.

#### Capital Structure

Citizens' proposed capital structure for the two test years is based on its actual consolidated equity ratio as of December 1988. Branch believes that since Citizens' consolidated equity ratio reflects the overall company capitalization (which includes Citizens' telecommunications and energy operations), it is too high in comparison to a typical water utility. Therefore, for ratemaking purposes, Branch recommends an imputed capital structure of 55% equity and 45% debt which is more in line with California

<sup>2</sup> During the hearings Citizens rounded its equity ratio to 35% debt and 65% equity, with cost rates of 7.5% and 14%, respectively, for a total weighted average cost of 11.73%.

Class "A" water utilities. Citizens is opposed to the use of an imputed capital structure.

In developing its proposed capital structure, Branch examined Citizens' capitalization against the capitalization of a group of California Class "A" water utilities and a comparable group of regional water utilities listed in C.A. Turner's Utility Report of July 1989. Branch then used a computer model to develop its proposed capital structure which is based on projected balance of Citizens' business and financial risks.

Business risk is associated with the dependability of revenues based on the stability of the customer base and level of technological changes. Branch believes that water utilities face more stable and reliable revenue streams than other types of utilities because water utilities use a renewable resource, face minimal threat of bypass, and are allowed to earn a return on construction work in progress.

Financial risk is associated with the proportional level of debt to capital. Financial risk increases as the level of debt increases. This is because as the level of debt increases, the utility's contractual fixed obligation to make interest payments increases and the cost of marginal debt issues increase. Telecommunications and energy utilities attempt to offset their higher business risk by reducing their financial risk by maintaining higher equity ratios.

Debt financing is less expensive than equity financing because interest payments on debt are generally less than returns paid to common stockholders and because interest payments are tax deductible while returns on common equity are not. The tax savings generated by interest expense directly benefits ratepayers through a proportional reduction of revenue requirement needs. Therefore, Branch maintains that if Citizens' proposed capital ratio is adopted, ratepayers will have to pay excessive costs.

Branch points out that Citizens is classified as a telecommunications utility by Value Line rating service. Therefore, according to Branch, Citizens' capital structure though appropriate for a telecommunications utility is not appropriate for a water utility. Branch opines that when Citizens applies its consolidated equity ratio to its California water operations, it is in fact imputing a hypothetical capital structure.

Citizens contends that Branch's use of a hypothetical capital structure is an unjustified departure from sound policy previously enunciated by the Commission and is based on faulty logic and a distorted view of the evidence. Citizens contends that the Commission has never adopted the large debt imputation recommended by Branch. In support of contention Citizens cites D.92604, where we declined to impute a capitalization structure for California Water Service Company:

"But this applicant has an excellent record of service and a reputation for responsible management behind it. Where, as here, the applicant proposes to proportion its total capitalization structure for the immediate future within parameters which on their face cannot be said to be unreasonable, imprudent, or insufficient, and which clearly have been shown not to be out of line with those maintained by comparable regional water utilities, we will not intervene, absent exigent circumstances not present here, to induce the utility by the drastic device of imputation to substitute Staff's judgment for its own."

Citizens maintains that the evidence in these proceedings supports the Commission's above-cited policy of eschewing hypothetical capital structure for the water districts.

According to Citizens, imputing a substantial amount of nonexistent debt would effectively prevent it from earning whatever rate of ROE is authorized by the Commission. Citizens opines that the unfairness of Branch's proposal is evident when one considers

the fact that Citizens will have to convert a large amount of equity into debt very quickly in order to earn the authorized rate of return.

In addition, Citizens offers the following reasons to establish the reasonableness of its proposed capital structure.

1. Citizens' "AAA" ratings are attributable primarily to its telephone and energy operations which provide a benefit to water ratepayers by lowering the cost of debt financing.
2. Citizens' requested embedded cost of debt (7.50%) and Branch's computed cost of debt (8.52%) are substantially less than the average cost of debt (9.97%) for other Class "A" water companies. ✓
3. The average debt ratio for California Class "A" water companies was 39.17% for the period ending December 31, 1988 and debt ratios have been trending down.

Finally, Citizens maintains that if the Commission wishes to impute numbers, then it should not stop at the equity ratio as Branch did. It should impute other numbers (i.e. debt costs and ROE) which would be more appropriate for Citizens' California water operations.

#### Discussion

Citizens' diversification into three regulated industries (telecommunications, energy, and water) makes it difficult for Citizens to develop a capital structure that is ideal for all three industries.

An increasing number of services in the telecommunications and energy industries are being deregulated. This trend towards deregulation has encouraged competition and consequently has increased the business risks for telecommunications and energy utilities. Utilities have tried to

offset this increase in their business risk by reducing their financial risk by maintaining higher equity ratios.

Water utilities do not face the business risks associated with deregulation. In addition, water utilities enjoy a stable customer base with minimal threat of bypass. Therefore, water utilities have predictable revenue streams and thus a much lower business risk than telecommunications and energy utilities. Accordingly, water utilities' customers should not be required to finance higher equity ratios which are reflected in the capital structure of diversified telecommunications and energy utilities such as Citizens.

We note that the average capital structure of the California Class "A" utilities is composed of 57.71% common equity, 39.17% long-term debt, and 3.12% preferred stock. In comparison, Citizens has a 65.5% common equity ratio and a 34.5% long-term debt ratio. Citizens does not utilize preferred stock as part of its capital structure blend, unlike some of the California water utilities. Overall, Citizens' common equity ratio of 65.5% is 7.8 percentage points higher than the 57.7% ratio for the California Class "A" utilities. Also Citizens' equity ratio far exceeds the average equity ratio of 44% for comparable group of regional water utilities included in C.A. Turner's Utility Report of July 1989. Therefore, Citizens' equity ratio is not appropriate for its California water operations. If rates are set based on Citizens' high equity ratio it would require Citizens' water customers to pay excessive rates.

Turning to Branch's proposed capital structure of 55% equity and 45% debt, we believe that it is more representative of Citizens' water operations in California. Based on Standard & Poor's rating benchmark in Table 10, Citizens will be able to maintain its "AAA" if Branch's recommended capital structure is used for setting rates in this proceeding. Therefore, we will

adopt the Branch's recommended equity ratio of 55% equity and 45% debt.

Table 10

Standard & Poor's Rating Benchmark Definitions for  
Pretax Interest Coverage, Debt Leverage and  
Net Cash Flow for Water Companies

Criteria	Debt Rating			Branch Proposal For Citizens
	AAA	AA	A	
Total Debt/Capital	Less than 48%	46% - 54%	52% - 60%	45%
Pretax Int. Coverage	More than 3.75x	3x - 4.25x	2x - 3.25x	3.82x <sup>3</sup>
Net Cash Flow/Capital	More than 7%	5% - 8%	3% - 6%	14.2%

Next, we will address Citizens' claim that the Commission has not adopted such high imputed debt ratio for ratemaking purposes. Contrary to Citizens' claims, the Commission has adopted an imputed capital ratio for California Water Service Company in D.89-04-005. And more recently, in D.89-09-048 the Commission has adopted comparably higher imputed debt ratio for San Gabriel Valley Water Company. Therefore, adoption of an imputed capital structure will not be contrary to the Commission's policy.

Turning to Citizens' claim that with higher equity ratios debt financing becomes cheaper, we note that there are limits to this benefit. First, lower cost financing affects the cost of new debt issues only. Also, Citizens already enjoys a high "AAA" rating from Standard & Poor. Therefore, we believe that Citizens'

<sup>3</sup> Based on Branch's recommended and adopted rate of return on equity of 11.75%.



California water operations will not benefit from its proposed high equity ratio.

Finally, we will consider Citizens' contention that if the Commission uses a hypothetical capital ratio, it should impute other numbers (i.e debt cost and ROE) which would be representative of Citizens' California water operations. As will be evident from the discussion on the issues of long-term debt and ROE, the adopted rates for long-term debt and ROE are representative of Citizens' California water operations. We find the adopted capital structure of 55% equity and 45% debt is reasonable.

Long-term Debt

Citizens' and Branch's proposed costs of long-term debt are 7.95% and 8.52%, respectively. ✓

Citizens used the average of its recorded consolidated long-term debt as of December 31, 1988 and its projected cost of consolidated long-term debt as of December 31, 1989.

Since Branch uses a hypothetical capital structure for ratemaking purposes, its cost of long-term debt was developed to be representative of Citizens' California water operations. Branch determined its cost of long-term debt by separating the specific debt associated with Citizens' out-of-state utility operations. According to Branch's estimate approximately 57% of the long-term debt outstanding is associated with Citizens' out-of-state utility operations. Branch contends the remaining debt classified as "company nonspecific debt" is the portion of debt representative of Citizens' California operations.

According to Branch, in the absence of more precise data, it would be appropriate for ratemaking purposes to use the cost of Citizens' nonspecific long-term debt in Branch's proposed imputed capital structure.

Branch's method of isolating debt costs for Citizens' California water operations, though not precise, is the best available estimate based on the available data. Since Branch

proposes to use the best available approximation of the cost of debt for Citizens' California water operations, its proposed cost of debt will be appropriate for use in the adopted hypothetical capital structure. Therefore, we will use 8.52% as the cost of long-term debt for Citizens' California water operations. ✓

Return on Common Equity (ROE)

This is the most difficult component of the rate of return equation to evaluate. Citizens is requesting an ROE of 14% - 15% for 1989 and 1990; while Branch recommends 11.75% as the proper return for the two years. Both Citizens and Branch support their recommendations by use of two market based financial models, the discounted cash flow (DCF) model and risk premium (RP) model. These financial models provide a range for ROE.

Branch applied its DCF and RP analysis to a group of investor-owned water utilities (the Group) which have similar investment risk as Citizens' California water operations and for which market data was readily available. Branch contends that the only market data available for Citizens was for its combined operations which include telecommunications and energy operations. Branch believes that market data for Citizens' combined operations cannot be used to assess the business risk for its water operations.

Citizens strongly disagrees with Branch's assertion that Citizens' market data for combined operations is not valid for its California water operations. Citizens asserts that Citizens is the sole source of financing for its water operations and the cost of capital for Citizens is the actual cost of capital for its California water operations.

Branch and Citizens disagree regarding certain inputs to their DCF and RP models.

Citizens also faults Branch's analysis for failing to recognize the particular risks faced by Citizens' water operations in California. Citizens contends that it will be required to make

large investments for its water operations to comply with the new health standards for domestic water supply. In addition, Citizens faces additional regulatory risk associated with disallowance of approximately \$300,000<sup>4</sup> of plant for Francis.

Discussion

Both Branch and Citizens relied on financial models in arriving at their recommendations. We believe that the results of various financial models are good starting points as well as analytical guides for establishing ROE and that the actual determination of a reasonable ROE should be tempered by judgment and examination of particular circumstances surrounding the utility.

Because these models are used only to establish a range for ROE, we do not repeat the detailed descriptions of each model contained in this record. Additionally, both parties have advanced arguments in support of their analyses and a criticism of the input assumptions used by the other party. These arguments are not addressed in this decision, given our assessment that they do not alter the model results. These models provide a reasonable range from which to choose, and we will use them as a guidepost in selecting Citizens' ROE. In the final analysis, it is the application of judgment, not the precision of these models, which is the key to our decision.

While we are not addressing the arguments in support of the analyses made by each party, we think it is important to address Citizens' concerns regarding Branch's use of the Group for its analysis. We believe that since we are adopting a hypothetical capital structure which is representative of Citizens' California water operations, it is appropriate to use the Group for making the

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<sup>4</sup> This disallowance is explained later under the discussion of Francis' results of operations.

DCF and RP analysis. Branch's recommendation for all elements of cost of capital (capital structure, cost of debt, and ROE) are intended to represent Citizens' California water operations. To this extent, Branch's use of the Group in making its DCF and RP analysis is consistent with its premise and, therefore, is reasonable.

Returning to the question of applying judgment, we must assess Citizens' arguments that it faces increased risk during the period covered by these proceedings. We recognize that Citizens may experience additional risk due to more stringent water quality standards. We also recognize the risk associated with the possibility of the plant disallowance for Francis. But we doubt whether these kinds of risks make Citizens' water operations as risky as its telecommunications and energy operations. We also doubt if these risks justify an increase in the ROE. Since we are imputing a capital structure and cost of long-term debt which are representative of Citizens' California water operations, Citizens' risks will also be similar to those of a water utility.

Branch's proposed ROE would provide Citizens a pretax interest coverage of 3.82x (see Table 10). This coverage with Citizens' adopted debt leverage of 45% would easily qualify it for a "AAA" rating according to the benchmark definition used by Standard & Poor.

While we recognize that interest coverage and debt leverage are not the only indicators used by rating agencies when assigning bond rating, an ROE of 11.75% would certainly improve Citizens' chances of maintaining its "AAA" rating. After reviewing all the evidence regarding Citizens' risk and its need for capital improvements we believe that an ROE of 11.75% is just and reasonable for Citizens for the years 1989 and 1990. It will enable Citizens to raise the necessary capital to finance its construction plan in these years. This adopted ROE produces an overall rate of return of 10.29% for 1989 and 1990. Table 11 shows ✓

the adopted capital ratio, cost factors, and weighted cost for 1989 and 1990.

Table 11

<u>Component</u>	<u>Capital Ratios</u>	<u>Cost Factor</u>	<u>Weighted Cost</u>
<u>Test Years 1989 and 1990</u>			
Long-term Debt	45.00%	x 8.52%	= 3.82%
Common Equity	<u>55.00</u>	x 11.75	= <u>6.46</u>
	100.00%		10.29%

Sacramento District - Salaries and Wages

Citizens proposes to add one more employee than Branch believes to be reasonable for the test year 1990 in the Sacramento District. Citizens contends that it needs the new employee to compensate for customer growth and the increase in workload expected as result of new water quality requirements imposed by DHS. According to Citizens, the need for this new position is made more critical by the fact that the growth in the Sacramento District is taking place at distant ends of the system requiring longer travel by service employees. Citizens opines that the need for the new employee is justified by the fact that traffic congestion in the Sacramento area increases the travel time for service employees.

Branch's recommendation against this new employee position is based upon a comparison of 1988 and 1990 ratios of customers per employee man-hour available. Branch contends that even with one less employee, its estimated 1990 customer per employee man-hour ratio is lower than the ratio for 1988. Branch believes that the decrease in customers per employee man-hour ratio resulted from the hiring of two new employees in 1989 and that an additional employee is not needed for 1990. Branch contends that

the impact of new water quality standards on manpower requirements is unknown and thus does not justify the new position.

Discussion

Citizens correctly states that the growth in its Sacramento system is taking place at the distant ends of the system. However, the growth to which Citizens alludes relates to flat rate customer connections. Flat rate customers do not have meters which are to be read, repaired, or maintained and thus will not require visits by service employees. In fact, this is true for most of the customers in the Sacramento District because approximately 88% of the them are on flat rates. Therefore, the need for the new employee is not justified on the basis of customer growth or traffic congestion.

Next, we will consider Citizens' claim that the new employee will be needed to meet the new water quality requirements of the DHS. The precise nature of system improvements to meet the DHS' water quality standards is not known at this time. Even if system improvements are made in 1990, they will increase Citizens' capital expenditure, not its operations and maintenance expenses. Therefore, the Citizens' claim for the new employee on this basis is not justified for test year 1990.

Since Citizens has not justified the need for the new employee, we will not allow the inclusion of the cost of the employee in test year 1990 estimates.

Results of Operations for Francis

D.82-07-014 in Francis' last general rate case application (A.60303) authorized an interim general rate increase. It also ordered further hearings to allow Francis an opportunity to justify the inclusion of \$299,100 worth of plant improvements in its rate base.

In accordance with the interim order, further hearings in A.60303 commenced on August 3, 1983. The hearings were interrupted and postponed so that parties could more effectively participate in

the investigation on the Commission's own motion (OII 83-11-09) into Citizens' practices regarding the transfer of real property rights and management of its watershed resources.

Hearings in A.60303 had not resumed when Francis filed this general rate increase application (A.89-03-031) and the rate base issue was still unresolved. Therefore, on April 26, 1989, the Commission issued D.89-04-061 closing A.60303 and directing parties to resolve the rate base issue in A.89-03-031.

As directed by the Commission, the rate base issue will be resolved in this proceeding. However, since parties had requested additional time to prepare their testimony, further hearings were held in Ferndale on September 19, 1989 to address the issue. During the September hearings, parties also addressed other disputed issues regarding Francis' results of operations shown in Tables 7 and 8. Because of the limited time available since the completion of the September hearings, the issues addressed during the hearings will be resolved in a separate order.

As to authorizing Francis an interim rate increase in this proceeding, Francis and Branch have agreed that Francis be authorized an interim rate increase based on Branch's estimate of the results of operations for 1989 and 1990 which excludes the disputed expense and rate base items. Francis' adopted summary of earnings reflects this agreement.

#### Rate Design

There is no disagreement between Citizens or Francis and Branch regarding rate design. Branch recommends that the adopted general metered service rates incorporate the following guidelines:

1. Eliminate the lifeline consumption block and have a single quantity rate for all water used.
2. Service charges be set to recover no more than 50% of the metered customers' share of adopted fixed costs in the test years.  
(Fixed costs are gross revenue at adopted rates less purchased power, purchased

water, chemicals, income taxes, uncollectibles, and any other costs which vary with water usage).

3. Final rates should not cause any customer bill to go up more than twice the adopted system average increase.

Branch also recommends that the rates in the Private Fire Protection Service Schedule be increased by the adopted system average increase.

Following is a brief description of rate design for each service area:

Felton District

Citizens proposes to recover approximately 41% of its fixed costs through service charge.

Branch believes that Citizens' proposed rate design is in accordance with the recommended guidelines.

Sacramento District

Approximately 90% of Sacramento District customers are on flat rate service schedule. Citizens proposes to increase the flat rate service rates by the adopted system average increase for the test years.

Citizens proposes to recover approximately 35% of metered customers' fixed costs through service charge.

Branch believes that Citizens' proposed rate design is in accordance with the recommended guidelines.

Guerneville District

Citizens proposes to recover approximately 74% of its fixed costs through service charge. Although the proposed service charge exceeds Branch's recommended guidelines, Branch agrees with Citizens' proposal for the following reason:

The Guerneville District's service area is a semirural resort where a significant number of customers do not reside for the full year. Consequently, the average water use per customer per month is approximately 700 cubic feet, which is low but not



unusual for a system with part-time customers. Branch believes that if the district is not allowed to recover more than 50% of its fixed costs through service charge, the full-time customers in the district would end up subsidizing the part-time customers.

Therefore, Branch recommends that Citizens be allowed to recover 74% of its fixed costs through service charge in the Guerneville District.

While Branch does not oppose Citizens' proposal for recovering 74% of the fixed cost through the service charge, it opposed to certain special conditions of tariff Schedule No. GU-1A. Schedule GU-1A requires new customers to pay their annual service charge in advance in one lump sum. Special Condition No. 4 of Schedule GU-1A exempts Citizens from refunding any portion of this initial payment to a customer who terminates service within ten months after first receiving service. Citizens does not make the refund even when another customer is subsequently served and pays for service at the same location before the previous customer's year is up. Branch believes that even though this practice does not violate Citizens' tariff rules, it is unfair because it allows Citizens to collect more than once for the same service. Therefore, Branch recommends that Special Condition No. 4 should be revised so that:

1. There is no time limit in which a customer may receive a refund if he/she terminates service and another customer pays for and is subsequently served at the same location for the remainder of the initial customer's annual service charge period.
2. Under no circumstances should the utility receive payment for the same service more than once.

Finally, Branch believes that for those new customers who may have difficulty in making the entire annual service charge payment in one lump sum, Citizens should accept payments in installments.

Francis

Francis proposes to recover 34% of its fixed costs through service charges.

Branch believes that Francis' proposed rate design follows the recommended guidelines.

Discussion

Since Citizens has agreed with Branch's rate design recommendations and Branch's recommendations follow the Commission's policy regarding rate design, we will adopt Branch's recommendations.

As to Branch's recommendation to allow new customers to pay the annual service charge in installments, we note that Branch does specify the number of payments to be made. We believe that it would be reasonable to allow new customers to pay the annual service charge in four equal payments made every three months.

Service Problems in Guerneville District

During the PPHs in Felton, Ferndale, and Guerneville, numerous customers expressed dissatisfaction with Citizens. While most speakers in Ferndale and Felton complained about the high water rates and their inability to pay such rates, customers in Guerneville complained about high rates as well as poor service. In addition to the statements made at the PPHs, the Commission has received numerous letters in expressing dissatisfaction with Citizens' service and rates.

Further, customers in Guerneville District conducted a survey of approximately 600 customers through a questionnaire. The responses to the questionnaire expressed an overwhelming dissatisfaction with the service and quality of water provided by Citizens. The problems expressed by customers related to the taste and appearance of the water and damage to clothing and plumbing from the deposits in the water. Approximately 70% of the customers surveyed have to obtain bottled drinking water.

Because of the service problems mentioned above, Sweetwater recommends that Citizens' authorized rate of return for the Guerneville District be lower than that otherwise found to be appropriate. Sweetwater and DHS also make specific recommendations regarding remedying the service problems in the Guerneville District.

All recommendations regarding service problems are addressed in the discussion of "Plant Addition" for the Guerneville District which follows.

Recommendations by DHS and Sweetwater re  
Plant additions in the Guerneville District

DHS is concerned that Citizens may be authorized a rate increase while deficiencies in the Guerneville District that pose a health hazard may be uncorrected. Therefore, DHS recommends that Citizens be ordered to submit a master plan to be approved by DHS and the Commission which details deficiencies in the system and establishes the method and order of correcting the deficiencies.

According to DHS, its request for a master plan does not imply any restriction on Citizens' ability to make emergency repairs or improvements to the system. DHS maintains that its concern is to see that the health deficiencies are corrected.

Branch supports DHS' recommendation.

Sweetwater not only supports DHS' recommendation, it recommends that Citizens' proposed plant additions for 1989 and 1990 be excluded from rate base. Sweetwater contends that Citizens had undertaken plant modifications without any comprehensive engineering study or plan which might justify the modifications. Sweetwater believes that DHS' requested master plan will require Citizens to make future modifications in accordance with an approved plan.

Sweetwater also takes issue with Branch's analysis of Citizens' estimated plant additions of \$227,000 for 1989 and \$194,000 for 1990. Branch checked the reasonableness of Citizens'

estimated plant additions by applying the linear regression analysis, with appropriate inflation factor, to the last five years of recorded plant additions. Sweetwater maintains that Branch's method is flawed in its failure to recognize that the 1986 plant addition figure of \$216,000 represents, in large measure, a one-time extraordinary main replacement cost incurred due to a once-in-a-century rainstorm. Sweetwater contends that if the 1986 data point had been properly adjusted to discount for the extraordinary plant addition cost, Branch's linear regression analysis would have provided a different conclusion regarding the reasonableness of Citizens' estimated plant additions. Therefore, Sweetwater insists that Citizens has failed to justify its plant additions, and the Commission must exclude those from Citizens' rate base.

While Citizens does not oppose DHS' recommendation regarding a master plan, it does have certain reservations about it. Citizens believes that such an order should be applicable to deferrable projects and should not restrain Citizens' ability to deal with emergencies and to undertake necessary improvements.

Citizens believes that Sweetwater's recommendation regarding exclusion of plant additions from rate base are without merit. Citizens contends that Sweetwater's recommendations were made by a lay witness who is not equipped to evaluate Citizens' main replacement program. Citizens maintains that its witness D'Addio clearly explained that the district's main replacement program over the past several years has focused on severe leaks and has not required an engineering master plan.

#### Discussion

It is evident from the testimony provided at the PPHs and the evidentiary hearings that the Guerneville District has serious service problems. Citizens needs to take prompt action to remedy the problems in the district.

We believe that customers are entitled to water which meets the generally acceptable standards of taste, smell, and

appearance, is safe to drink, and does not harm clothes and plumbing. DHS' proposed master plan will be a significant step towards achieving that goal. Therefore, we will require Citizens to submit a report containing its short-term and long-term plans to improve the water service in the Guerneville District. The plans should list the proposed improvements in order of priority and should include a schedule as well as a cost estimate for making the improvements. Citizens should submit its report containing the plans within 120 days of the effective date of this order and should provide a copy of this report to Sweetwater and DHS. Branch should prepare a response to the report, after consultation with DHS, within 90 days of its issuance. Sweetwater and DHS may also file their response to the report within 90 days of its issuance. Upon completion of the report Citizens should notify each customer in the Guerneville District, through bill inserts, that the report will be made available to individual customers upon request. We will schedule further hearings to consider the proposals contained in Citizens' report and the responses. Since the proposals made in Citizens' report will have an impact on the Guerneville District revenue requirements, we will defer the rate revision for the Guerneville District (A.89-03-030) until the hearings are completed and the Commission issues a decision. The proceeding in A.89-03-030 will remain open to receive further evidence regarding service problems in the district.

Turning to the question of the impact on Citizens' earnings resulting from deferring the rate increase for the Guerneville District, we note that by its own estimation Citizens, at current rates, will achieve rates of return of 2.40% and 0.84% with net revenues of \$64,000 and \$23,300 (Tables 5 and 6) for 1989 and 1990, respectively. It is clear that even if the rate increase for the Guerneville District is deferred, Citizens will continue to earn a positive rate of return.

Having deferred the rate increase for the Guerneville District until the service problems are addressed, we believe we have adequately addressed all concerns raised by Sweetwater and DHS.

#### The Montara District OII

As directed by the Commission, Branch prepared its report on the rates and charges of the Montara District (Exhibit 29). Based on its analysis of results of operations, Branch has concluded that Citizens is not earning a rate of return in excess of the last authorized rate of return for the Montara District. Branch recommends that rates for the Montara District need not be revised. While Citizens does not accept every aspect of Branch's analysis of the results of operations, it concurs with Branch's recommendation regarding rate adjustment for the district.

As to the disputed issues regarding Branch's results of operations, Citizens and Branch believe that the issues should be addressed in the Montara District's next general rate case. We believe that since no rate adjustment is involved, consideration of other issues in the district's next general rate case will not jeopardize ratepayers' interest. Therefore, we will not address the issues in this decision.

#### Timing of Rate Changes

The decision in these proceedings is not expected until at least October 1989. Consequently, Citizens' and Francis' rate of return for the 12-month period ending September 30, 1989 will not exceed the authorized rate of return in this decision. Therefore, to simplify implementation of 1990 rates shortly after 1989 rates become effective, Citizens and Francis request a waiver from the requirement to demonstrate the need for the step increase in 1990. Branch agrees with the request. Branch also agrees that Citizens and Francis may file one advice letter for both increases.

The approach proposed by Citizens and Francis will reduce the expected rate shock because the rate increase for 1989, which

is significantly higher than the rate increase for 1990, will go into effect during the low use months of November and December. Also, the additional increase for 1990 will go into effect during the low use month of January. We will adopt the proposed method of implementing the rate changes.

Comments on ALJ's Proposed Decision

The ALJ's proposed decision was filed and mailed to the parties on September 25, 1989. Citizens filed comments on the proposed decision. Branch and Sweetwater filed replies to Citizens' comments. After reviewing the comments and replies to comments, we have corrected the clerical and technical errors in the ALJ's proposed decision. Other than correcting the errors, no changes to the ALJ's proposed decision are made.

Findings of Fact

1. On February 8, 1989, the Commission instituted an investigation on its motion into rates and charges of Citizens' Montara District.
2. On March 21, 1989, Citizens filed applications requesting rate increase for water service in its Felton, Sacramento, and Guerneville Districts. Also, on March 21, 1989, Francis filed an application requesting rate increase for water service.
3. Citizens' and Francis' applications were consolidated with the Montara District's investigation.
4. Francis is a wholly owned subsidiary of Citizens' parent Citizens Utilities Company.
5. Citizens' and Francis' cost of capital is the same for ratemaking purposes in this proceeding.
6. Citizens proposes a capital structure with 64.48% equity and 35.52% debt.
7. Citizens' proposed capital structure is based on its parent's actual consolidated equity ratio.
8. Branch proposes an imputed capital structure of 55% equity and 45% debt for ratemaking purposes.

9. Branch's proposed capital structure closely approximates the capital structure of California Class "A" water utilities and is representative of Citizens' California water operations.

10. Citizens is classified as a telecommunications utility by Value Line rating service.

11. Citizens' consolidated equity ratio though appropriate for a telecommunications utility is not appropriate for a water utility.

12. Based on Standard & Poor's rating benchmark, Citizens will be able to maintain its "AAA" rating if Branch's proposed capital structure is adopted for ratemaking purposes.

13. Citizens and Branch propose long-term debt costs of 7.95% and 8.52%, respectively. ✓

14. Citizens' proposed cost of long-term debt reflects its consolidated long-term debt cost.

15. Citizens proposes to use its consolidated long-term debt cost for its California water operations.

16. Branch's proposed cost of long-term debt is the best available approximation of the long-term debt cost associated with Citizens' California water operations.

17. Citizens requests an ROE of between 14% and 15% for 1989 and 1990.

18. Branch recommends an ROE of 11.75% for 1989 and 1990.

19. Water utilities do not face the same business risk as telecommunications and energy utilities.

20. An ROE of 11.75% would provide Citizens a pretax interest coverage of 3.82x.

21. A pretax interest coverage of 3.82x combined with 45% debt will qualify Citizens a "AAA" rating according to the benchmark definition used by Standard & Poor for water utilities. ✓

22. An ROE of 11.75% will adequately cover Citizens' risks and would improve Citizens' chances of maintaining its "AAA" rating.



23. An ROE of 11.75% will produce an overall rate of return of 10.29% for 1989 and 1990. ✓

24. Citizens proposes to add one more employee than Branch believes to be reasonable for test year 1990 in the Sacramento District.

25. Citizens requests the new employee to compensate for customer growth and the increase in workload expected as a result of new water quality requirements imposed by DHS.

26. Citizens' projected customer growth will be for flat rate service connections.

27. Flat rate customers do not require visits by service employees as the metered customers do.

28. DHS' new water quality requirements are likely to increase Citizens' capital expenditure, not its operating expenses.

29. Citizens has not justified the need for the new employee in test year 1990.

30. Branch believes that Citizens' proposed rate design is in accordance with the Commission's recommended guidelines.

31. Branch recommends that Special Condition No. 4 of tariff Schedule No. GU-1A for the Guerneville District should be revised so that:

- a. There is no time limit in which a customer may receive a refund if he/she terminates service and another customer pays for and is subsequently served at the same location for the remainder of the initial customer's annual service charge period.
- b. Under no circumstances should the utility receive payment for the same service more than once.

32. Branch recommends that new customers in the Guerneville District should be allowed to pay their annual service charge in installments.

33. It would be appropriate to allow new customers to pay their annual service charge in four equal installments paid every three months.

34. Citizens agrees with Branch's rate design recommendations.

35. The Guerneville District has serious service problems.

36. Citizens has not taken the necessary steps to address the service problems in the Guerneville District.

37. There is an immediate need to address the service problems in the Guerneville District.

38. DHS requests that Citizens be ordered to provide a master plan approved by the Commission and DHS before making any system improvements in the Guerneville District.

39. The master plan for system improvements proposed by DHS and its implementation is a necessary step to correct the service problems in the Guerneville District.

40. The steps needed to implement the master plan will have an impact on the Guerneville District's revenue requirement.

41. Even if the rate revision is deferred at this time, Citizens will continue to have a positive net revenue and rate of return in 1989 and 1990 for the Guerneville District.

42. In I.89-02-011, Branch recommends no rate adjustment for the Montara District.

43. Branch and Citizens agree that all ratemaking issues pertaining to the Montara District should be addressed in the district's next general rate case.

#### Conclusions of Law

1. Branch's proposed capital structure consisting of 55% equity and 45% debt is reasonable and should be adopted for ratemaking purposes.

2. A cost of 8.52% for Citizens' long-term debt is reasonable and should be adopted. ✓

3. An ROE of 11.75% is just and reasonable for Citizens for 1989 and 1990.

4. Citizens should be required to file a master plan for system improvements in the Guerneville District.

5. Further evidentiary hearings should be held to address the service problem in the Guerneville District and the rate revision for the District should be deferred until the hearings are completed and the Commission issues a decision.

6. The Guerneville District's tariff Schedule No. GU-1A should be modified in accordance with Findings of Fact 31 and 32 when the district's rates are revised.

7. The applications should be granted to the extent provided by the following order.

8. Because of Citizens' and Francis' immediate need for rate relief, this order should be made effective today.

9. Rates in the Montara District should not be revised.

O R D E R

IT IS ORDERED that:

1. Citizens Utilities Company of California (Citizens) is authorized to file revised tariff schedules for its Felton and Sacramento Districts attached to this decision as Appendix A and the step increase for 1990 included in Appendix B. These filings shall comply with General Order (GO) 96. The effective date of the revised schedule in Appendix A shall be 5 days after the date of filing. The effective date of the step increase included in Appendix B shall be January 1, 1990.

2. Francis Land and Water Company is authorized to file revised tariff schedules attached to this decision as Appendix A and the step increase for 1990 included in Appendix B. This filing shall comply with GO 96. The effective date of the revised schedule in Appendix A shall be 5 days after the date of filing.

The effective date of the step increase included in Appendix B shall be January 1, 1990. ✓

3. Within 120 days from the effective date of this order, Citizens shall file a report with the Commission's Docket Office including a master plan for improving service in the Guerneville District. A copy of the report shall be served to the Water Utilities Branch (Branch), the California Department of Health Services (DHS), and the Sweetwater Springs Water District (Sweetwater).

4. Branch shall review Citizens' report on the Guerneville District and, after consultation with DHS, file its response with the Commission's Docket Office to the report no later than 90 days after the report is made available.

5. DHS and Sweetwater may file their comments with the Commission's Docket Office on the report no later than 90 days after the report is made available.

6. Citizens shall notify each customer, through bill inserts, that the report on the Guerneville District will be available upon request.

7. Further hearing on Guerneville District's service problems will be held after Citizens' report and Branch's response are made available.

8. The rate revision for the Guerneville District shall be deferred until further Commission order following the hearings on the district's service problem.

9. The Guerneville District's tariff Schedule No. GU-1A shall be modified in accordance with Findings of Fact 31 and 32 when the district's rates are revised.

10. Rates in Citizens' Montara District will not be revised.

A.89-03-028 et al. ALJ/AVG/bg

11. The proceedings in A.89-03-028, A.89-03-029, and I.89-02-011 are closed. The proceedings in A.89-03-030 and A.89-03-031 shall remain open for further evidence.

This order is effective today.

Dated NOV 3 1989, at San Francisco, California.

G. MITCHELL WILK  
President  
FREDERICK R. DUDA  
STANLEY W. HULETT  
JOHN B. OHANIAN  
PATRICIA M. ECKERT  
Commissioners

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

- 45 -

*Wesley Franklin*  
WESLEY FRANKLIN, Acting Executive Director  
*DF*

APPENDIX A-1  
1 of 3

Citizens Utilities Company of California  
Felton District

Felton Tariff Area

Schedule No. FE-1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Felton and vicinity, Santa Cruz County.

RATES

Quantity Rates:

Per Meter  
Per Month

For all water delivered, per 100 cu.ft. \$ 1.610 (C) ✓

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 9.45	(I)
For 3/4-inch meter .....	13.50	
For 1-inch meter .....	18.90	
For 1 1/2-inch meter .....	32.40	
For 2-inch meter .....	51.30	
For 3-inch meter .....	97.25	
For 4-inch meter .....	132.30	(I)

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the quantity charge computed at the quantity rates.

Service Reestablishment Charge:

For each reestablishment of water service .... \$ 4.10

SPECIAL CONDITIONS

1. The service reestablishment charge is in addition to the charges calculated in accordance with this schedule and will be made each time an account is reopened for a customer at the time water service is to be restored after discontinuance at that customer's request.

(Continued)

APPENDIX A-1  
2 of 3

Citizens Utilities Company of California  
Felton District  
Schedule No. FE-4

Felton Tariff Area

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service furnished to privately owned fire protection systems.

TERRITORY

Felton and vicinity, Santa Cruz County.

(T)

RATES

Per Month

For each 4-inch diameter service connection	\$ 12.95	(I)
For each 6-inch diameter service connection	19.50	
For each 8-inch diameter service connection	26.00	
For each 10-inch diameter service connection	52.00	
For each 12-inch diameter service connection	73.10	(I)

SPECIAL CONDITIONS

1. The customer will pay without refund the entire cost of installing the service connection.
2. The maximum diameter of the service connection will not be more than the diameter of the main to which the service is connected.
3. The customer's installation must be such as to separate effectively the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check or other similar device acceptable to the utility which will indicate the use of water. Any unauthorized use will be charged for at the regular established rate for general metered service, and/or may be grounds for the utility's discontinuing the fire sprinkler service without liability to the utility.
4. There shall be no cross-connection between the fire sprinkler system supplied by water through the utility's fire sprinkler service to any other source of supply without the specific approval of the utility. This specific

(Continued).

APPENDIX A-1  
3 of 3

Citizens Utilities Company of California  
Felton District

Schedule No. FE-6M

Felton Tariff Area

METERED RESALE SERVICE

APPLICABILITY

Applicable to all metered resale service.

TERRITORY

Felton and vicinity, Santa Cruz County.

RATES

		Per Meter Per Month	
<u>Quantity Rates:</u>			
For all water delivered, per 100 cu.ft.		\$1.610	(I) ✓
<u>Service Charge:</u>			
For 5/8 x 3/4-inch meter .....	\$ 9.45		(I)
For 3/4-inch meter .....	13.50		
For 1-inch meter .....	18.90		
For 1 1/2-inch meter .....	32.40		
For 2-inch meter .....	51.30		
For 3-inch meter .....	97.25		
For 4-inch meter .....	132.30		(I)

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the quantity charge computed at the quantity rates.

Service Reestablishment Charge:

For each reestablishment of water service ..... \$ 4.10

(END OF APPENDIX A-1)



APPENDIX B-1  
1 of 3

Citizens Utilities Company of California  
Felton District

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

Effective Date  
1-1-90

SCHEDULE FE-1

Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.30
For 3/4-inch meter .....	0.45
For 1-inch meter .....	0.65
For 1 1/2-inch meter .....	1.10
For 2-inch meter .....	1.75
For 3-inch meter .....	3.30
For 4-inch meter .....	4.50

Quantity Rates:

For all water delivered, per 100 cu.ft. 0.061

APPENDIX B-1

2 of 3

Citizens Utilities Company of California  
Felton District

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

Effective Date

1-1-90

SCHEDULE FE-4

Private Fire Protection Service:

For each 4-inch diameter service connection	\$ 0.45
For each 6-inch diameter service connection	0.65
For each 8-inch diameter service connection	0.90
For each 10-inch diameter service connection	1.75
For each 12-inch diameter service connection	2.50

APPENDIX B-1  
3 of 3

Citizens Utilities Company of California  
Felton District

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

Effective Date  
1-1-90

SCHEDULE FE-6M

Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.30
For 3/4-inch meter .....	0.45
For 1-inch meter .....	0.65
For 1 1/2-inch meter .....	1.10
For 2-inch meter .....	1.75
For 3-inch meter .....	3.30
For 4-inch meter .....	4.50

Quantity Rates:

For all water delivered, per 100 cu.ft. 0.051

(END OF APPENDIX B-1)

APPENDIX C-1  
1 of 2

Citizens Utilities Company of California  
Felton District

ADOPTED QUANTITIES

Name of Company: Citizens Utilities Company of California

District: Felton

1. Net-to-Gross Multiplier: 1.68325
2. Federal Tax Rate: 34.12%
3. State Tax Rate: 9.3%
4. Uncollectibles Rate: 0.576%

<u>Offsetable Items</u>	<u>Test Years</u>	
	<u>1989</u>	<u>1990</u>
5. <u>Purchased Power</u>		
A. KWh/Ccf- Electric Pump Electric Boosters	0.98	0.98
B. KWh (Total)	183,733	184,014
C. Average Cost/KWh	\$ 0.11043	\$ 0.11043
D. Total Cost of Power	\$ 20,289	\$ 20,321
6. Ad Valorem Taxes	\$ 14,702	\$ 14,570

APPENDIX C-1  
2 of 2

Citizens Utilities Company of California  
Felton District

ADOPTED QUANTITIES

7. Number of Services - Meter Size

	1989	1990
5/8 x 3/4	1,270	1,272
3/4	2	2
1	17	17
1 1/2	6	6
2	15	15
3	1	1
4	1	1
	-----	-----
Total	1,312	1,314

8. Metered Water Sales - Ccf

Total water delivered	187,485	187,771
-----------------------	---------	---------

9. Private Fire Protection Services - Meter Size

4-inch or smaller	1	1
6-inch	6	6
	---	---
Total	7	7

(END OF APPENDIX C-1).

## APPENDIX D-1

Citizens Utilities Company of California  
Felton District

## Income Tax Calculations

	1989 (Thousands of Dollars)	1990 (Thousands of Dollars)	
Operating Revenues	489.3	506.7	✓
Deductions			
O & M Expense	156.7	168.8	
Depr charged to O & M	(5.3)	(6.7)	
A & G Expense	113.0	116.4	
Taxes other than Income	22.6	23.4	
Allocation of Interest	32.4	35.0	
Subtotal Deductions	319.4	336.9	
Taxable Income Before Tax Depreciation	169.9	169.8	✓
State Tax Depreciation	54.2	49.3	
State Taxable Income	115.7	120.5	✓
State Income Tax	10.8	11.2	✓
Taxable Income Before Tax Depreciation	169.9	169.8	✓
Federal Tax Depreciation	45.3	43.7	✓
State Income Tax	10.8	11.2	✓
Federal Taxable Income	113.8	114.9	✓
Federal Income Tax	38.8	39.2	✓
Amortization of I.T.C.	2.1	2.1	
Reversal of S. Ga. Method	.7	.7	
Net Federal Income Tax	36.0	36.4	
Total Income Taxes	46.8	47.6	✓
Income Tax Rates			
State	9.30%	9.30%	
Federal	34.12%	34.12%	

(END OF APPENDIX D-1)

## APPENDIX E-1

Citizens Utilities Company of California  
Felton District

Comparison of typical bills for residential metered customers of various usage level and average usage level at present and authorized rates for the year 1989.

General Metered Service

(5/8 x 3/4-inch meters)

-----			
: Monthly Usage :	At Present :	At Authorized :	Percent :
: Monthly Usage :	Rates :	Rates :	Increase :
-----			
(100 Cubic Feet)			
0	\$ 7.00	9.45	35.0 %
5	13.42	17.50	30.4
10	20.77	25.55	23.0
12 (Average)	23.71	28.77	21.3
20	35.47	41.65	17.4
30	50.17	57.75	15.1
50	79.57	89.95	13.0
60	94.27	106.05	12.5
70	108.97	122.15	12.1
80	123.67	138.25	11.8
90	138.37	154.35	11.6
100	153.07	170.45	11.4
200	300.07	331.45	10.5
300	447.07	492.45	10.2

(END OF APPENDIX E-1)

APPENDIX A-2  
1 of 3

Citizens Utilities Company of California  
Sacramento District

Schedule No. SAC-1

Sacramento District

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The unincorporated communities, subdivisions, and adjacent areas generally known as Cordova, Rosemont, Parkway Estates, Lindale, Foothill Farms, Arlington Heights, Linwood, Loretto Heights, Arden Highlands, Arden Estates, El Camino Terrace, El Camino Square and the City of Isleton and vicinity in Sacramento County and unincorporated areas in Placer County.

RATES

Quantity Rates:

Per Meter  
Per Month

For all water delivered, per 100 cu.ft. \$ 0.383 (C)

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 6.75	(I)
For 3/4-inch meter .....	7.55	
For 1-inch meter .....	10.20	
For 1 1/2-inch meter .....	13.80	
For 2-inch meter .....	18.70	
For 3-inch meter .....	32.75	
For 4-inch meter .....	46.80	
For 6-inch meter .....	77.25	
For 8-inch meter .....	114.70	(I)

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the monthly charge computed at the Quantity Rates.



APPENDIX A-2  
2 of 3

Citizens Utilities Company of California  
Schedule No. SAC-2R

Sacramento District

RESIDENTIAL FLAT RATE SERVICE

APPLICABILITY

Applicable to all residential water service on a flat rate basis.

TERRITORY

The unincorporated communities, subdivisions, and adjacent areas generally known as Cordova, Rosemont, Parkway Estates, Lindale, Foothill Farms, Arlington Heights, Linwood, Loretto Heights, Arden Highlands, Arden Estates, El Camino Terrace, El Camino Square and vicinity in Sacramento County and unincorporated areas in Placer County.

RATES

Per Service (T)  
Per Month

For a single-family residence, including premises, having the following areas:

4,500 sq. ft. or less .....	\$ 8.90	(I)
4,501 to 8,000 sq. ft. ....	12.00	(C)

For each additional residence on the same premises and served from the same service connection .....	8.00	(I)
--	------	-----

For each 1,000 sq. ft. or part of the area in excess of 8,000 sq. ft. ....	0.35	(I)
--	------	-----

SPECIAL CONDITIONS

1. The above residential flat rate charges apply to service connections not larger than 3/4 inch in diameter.
2. All service not covered by the above classification will be furnished only on a meter basis.
3. A meter may be installed at option of utility or customer for above classifications in which event service thereafter will be furnished only on the basis of Schedule No. 1, General Metered Service. After a meter is installed, metered service must be continued for at least 12 months before service will again be furnished at flat rates.

APPENDIX A-2  
3 of 3

Citizens Utilities Company of California  
Schedule No. SAC-4

Water District for Sacramento County  
PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service rendered for private fire protection purposes.

TERRITORY

The unincorporated communities, subdivisions, and adjacent areas generally known as Cordova, Rosemont, Parkway Estates, Lindale, Foothill Farms, Arlington Heights, Linwood, Loretto Heights, Arden Highlands, Arden Estates, El Camino Terrace, El Camino Square and the City of Isleton and vicinity in Sacramento County and the unincorporated community of Lincoln Oaks and vicinity in Sacramento and Placer Counties.

RATES

Per Month

For each 4-inch connection, or smaller .....	\$ 14.05	(I)
For each 6-inch connection .....	23.40	
For each 8-inch connection .....	32.75	
For each 10-inch connection .....	42.15	
For each 12-inch connection .....	58.50	(I)

SPECIAL CONDITIONS

1. The customer will pay without refund the entire cost of installing the service connection.
2. The maximum diameter of the service connection will not be more than the diameter of the main to which the service is connected.
3. The customer's installation must be such as to effectively separate the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check with by-pass meter or other similar device acceptable to the company which will indicate the use of water. The utility may require a bi-annual test of the detector check installation at customer cost as a condition of furnishing service. Any unauthorized use will be charged for at the regular established rate for general metered service, and/or may be grounds for the company's discontinuing the fire sprinkler service without liability to the company.
4. The company will supply only such water at such pressure as may be available from time to time as the result of its normal operation of the system.

(END OF APPENDIX A-2)

APPENDIX B-2

1 of 3

Citizens Utilities Company of California  
Sacramento District

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

Effective Date  
1-1-90

SCHEDULE SAC-1

Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.20
For 3/4-inch meter .....	0.20
For 1-inch meter .....	0.30
For 1 1/2-inch meter .....	0.40
For 2-inch meter .....	0.55
For 3-inch meter .....	0.95
For 4-inch meter .....	1.40
For 6-inch meter .....	2.30
For 8-inch meter .....	3.40

Quantity Rates:

For all water delivered, per 100 cu.ft. 0.012

APPENDIX B-2  
2 of 3

Citizens Utilities Company of California  
Sacramento District

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

Effective Date  
1-1-90

SCHEDULE SAC-2R

Residential Flat Rate Service:

For a single-family residence, including premises, having the following areas:

4,500 sq. ft. or less .....	\$ 0.25
4,501 to 8,000 sq. ft. ....	0.35

For each additional residence on the same premises and served from the same service connection ..... 0.25

For each 1,000 sq. ft. or part of the area in excess of 8,000 sq. ft. .... 0.01

APPENDIX B-2  
3 of 3

Citizens Utilities Company of California  
Sacramento District

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

Effective Date  
1-1-90

SCHEDULE SAC-4

Private Fire Protection Service:

For each 4-inch connection, or smaller .....	\$ 0.40
For each 6-inch connection .....	0.70
For each 8-inch connection .....	0.95
For each 10-inch connection .....	1.25
For each 12-inch connection .....	1.75

(END OF APPENDIX B-2)

APPENDIX C-2  
1 of 2

Citizens Utilities Company of California  
Sacramento District

ADOPTED QUANTITIES

Name of Company: Citizens Utilities Company of California

District: Sacramento

1. Net-to-Gross Multiplier: 1.67942
2. Federal Tax Rate: 34.12%
3. State Tax Rate: 9.30%
4. Uncollectibles Rate: 0.164%
5. Franchise Tax Rate: 2.0%

<u>Offsetable Items</u>	<u>Test Years</u>	
	1989	1990
6. <u>Purchased Power</u>		
A. KWh/Ccf- Electric Pump Electric Boosters	0.980	0.980
B. KWh (Total)	18,671,677	19,304,815
C. Average Cost/KWh	\$ 0.06978	\$ 0.06978
D. Total Cost of Power	\$ 1,302,895	\$ 1,347,090
7. Ad Valorem Taxes	\$ 214,850	\$ 218,647

APPENDIX C-3  
2 of 2

Citizens Utilities Company of California  
Sacramento District

ADOPTED QUANTITIES

8. Number of Services - Meter Size

	1989	1990
5/8 x 3/4	1040	1099
3/4	3	4
1	1818	1821
1 1/2	461	473
2	1250	1342
3	154	157
4	50	53
6	19	20
8	6	6
	----	----
Total	4801	4975

9. Metered Water Sales - Ccf

Total water delivered    5,194,552       5,433,618

10. Private Fire Protection Services - Meter Size

4-inch or smaller	44	48
6-inch	147	163
8-inch	194	211
10-inch	21	23
12-inch	4	4
	----	----
Total	410	449

11. Flat Rate Residential Services

4,500 sq.ft. & Less	4,427	4,696
4,501 to 8,000	25,594	26,817
8,001 to 9,000	3,428	3,485
9,001 to 10,000	1,821	1,850
10,001 to 11,000	1,272	1,293
11,001 to 12,000	626	636
12,001 to 13,000	357	365
13,001 & Larger	592	608
	-----	-----
Subtotal	38,117	39,750
Additional Units	4	4
	-----	-----
Total	38,121	39,754

(END OF APPENDIX C-2)

## APPENDIX D-2

Citizens Utilities Company of California  
Sacramento District

## Income Tax Calculations

	<u>1989</u> (Thousands of Dollars)	<u>1990</u> (Thousands of Dollars)	
Operating Revenues	8,366.3	8,988.4	✓
Deductions			
O & M Expense	2,741.5	2,912.3	
Depr charged to O & M	(65.4)	(73.4)	
A & G Expense	1,970.2	2,092.8	
Taxes other than Income	296.4	307.6	
Allocation of Interest	366.7	380.0	
Subtotal Deductions	5,309.4	5,619.3	
Taxable Income Before Tax Depreciation	3,056.9	3,369.1	✓
State Tax Depreciation	1,326.1	1,322.7	
State Taxable Income	1,730.8	2,046.4	✓
State Income Tax	161.0	190.3	✓
Taxable Income Before Tax Depreciation	3,056.9	3,369.1	✓
Federal Tax Depreciation	1,094.9	1,211.8	✓
State Income Tax	161.0	190.3	✓
Federal Taxable Income	1,801.0	1,967.0	✓
Federal Income Tax	614.5	671.2	✓
Amortization of I.T.C.	48.8	48.8	
Reversal of S. Ga. Method	15.5	15.5	
Net Federal Income Tax	550.2	606.9	✓
Total Income Taxes	711.2	797.2	✓
Income Tax Rates			
State	9.30%	9.30%	
Federal	34.12%	34.12%	

(END OF APPENDIX D-2)



## APPENDIX E-2

Citizens Utilities Company of California  
Sacramento District

Comparison of typical bills for residential metered customers of various usage level and average usage level at present and authorized rates for the year 1989.

General Metered Service

(5/8 x 3/4-inch meters)

-----			
: Monthly Usage :	At Present	At Authorized	Percent
: Rates :	Rates	Rates	Increase :
-----			
(100 Cubic Feet)			
0	\$ 5.75	6.75	17.4 %
5	7.14	8.67	21.3
10	8.79	10.58	20.4
15	10.43	12.50	19.8
20	12.08	14.41	19.3
23 (Average)	13.07	15.56	19.1
30	15.37	18.24	18.7
50	21.95	25.90	18.0
60	25.24	29.73	17.8
70	28.53	33.56	17.6
80	31.82	37.39	17.5
90	35.11	41.22	17.4
100	38.40	45.05	17.3
200	71.30	83.35	16.9
300	104.20	121.65	16.8

(END OF APPENDIX E-3)

APPENDIX A-3  
1 of 2

Francis Land & Water Company

Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The City of Ferndale and adjacent unincorporated territory,  
Humboldt County.

RATES

<u>Quantity Rates:</u>	<u>Per Meter</u> <u>Per Month</u>
For all water delivered, per 100 cu.ft.	\$ 1.981

(C) ✓

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 8.55	(I)
For 3/4-inch meter .....	10.45	
For 1-inch meter .....	13.40	
For 1 1/2-inch meter .....	17.85	
For 2-inch meter .....	23.75	
For 3-inch meter .....	44.65	
For 4-inch meter .....	60.95	
For 6-inch meter .....	102.60	
For 8-inch meter .....	153.15	(I)

The Service Charge is a readiness-to-serve charge (T)  
which is applicable to all metered service and to  
which is added the quantity charge computed at the  
Quantity Rates. (T)

APPENDIX A-3  
2 of 2

Francis Land & Water Company

Schedule No. 4

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service rendered for private fire protection purposes.

TERRITORY

The City of Ferndale and adjacent unincorporated territory, Humboldt County.

RATES

Per Month

For each 4-inch connection, or smaller .....	\$ 14.25	(I)
For each 6-inch connection .....	21.40	
For each 8-inch connection .....	28.50	
For each 10-inch connection .....	59.30	
For each 12-inch connection .....	83.10	(I)

SPECIAL CONDITIONS

1. The customer will pay without refund the entire cost of installing the service connection.
2. The maximum diameter of the service connection will not be more than the diameter of the main to which the service is connected.
3. Where service connection is 6 inches in diameter or larger and supplied from a water main within 1,000 feet of a 10- or 12-inch main, the rate will be based on the size of the main from which such connection is supplied.
4. The customer's installation must be such as to effectively separate the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check or other similar device acceptable to the company which will indicate the use of water. Any unauthorized use will be charged for at the regular established rate for general metered service, and/or may be grounds for the company's discontinuing the fire sprinkler service without liability to the company.

(continued)

APPENDIX B-3  
1 of 2

## Francis Land &amp; Water Company

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

Effective Date  
1-1-90

SCHEDULE 1

## Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.20
For 3/4-inch meter .....	0.25
For 1-inch meter .....	0.30
For 1 1/2-inch meter .....	0.40
For 2-inch meter .....	0.55
For 3-inch meter .....	1.00
For 4-inch meter .....	1.35
For 6-inch meter .....	2.30
For 8-inch meter .....	3.40

## Quantity Rates:

For all water delivered, per 100 cu.ft. 0.043

APPENDIX B-3  
2 of 2

Francis Land & Water Company

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

Effective Date  
1-1-90

SCHEDULE 4

Private Fire Protection Service:

For each 4-inch connection, or smaller .....	\$ 0.30
For each 6-inch connection .....	0.50
For each 8-inch connection .....	0.65
For each 10-inch connection .....	1.30
For each 12-inch connection .....	1.85

✓

(END OF APPENDIX B-3)

APPENDIX C-3

1 of 2

Francis Land & Water Company

ADOPTED QUANTITIES

Name of Company: Francis Land & Water Company

1. Net-to-Gross Multiplier: 1.67471
2. Federal Tax Rate: 34.12%
3. State Tax Rate: 9.3%
4. Uncollectibles Rate: 0.070%

Offsetable Items

Test Years

	<u>1989</u>	<u>1990</u>
5. <u>Purchased Power</u>		
A. KWh/Ccf- Electric Pump Electric Boosters	0.592	0.592
B. KWh (Total)	57,541	58,443
C. Average Cost/KWh	\$ 0.10726	\$ 0.10726
D. Total Cost of Power	\$ 6,172	\$ 6,269
6. Ad Valorem Taxes	\$ 7,174	\$ 5,761

APPENDIX C-3  
2 of 2

Francis Land & Water Company

ADOPTED QUANTITIES

7. Number of Services - Meter Size

	<u>1989</u>	<u>1990</u>
5/8 x 3/4	656	661
3/4	4	4
1	10	10
1 1/2	1	1
2	3	3
3	0	0
4	0	0
6	1	1
8	1	1
Total	<u>676</u>	<u>681</u>

8. Metered Water Sales - Ccf

Total water delivered	83,804	85,118
-----------------------	--------	--------

9. Private Fire Protection Services - Meter Size

4-inch or smaller	3	3
6-inch	0	0
Total	<u>3</u>	<u>3</u>

(END OF APPENDIX C-3)

## APPENDIX D-3

Francis Land & Water Company  
Income Tax Calculations

	<u>1989</u> (Thousands of Dollars)	<u>1990</u> (Thousands of Dollars)	
Operating Revenues	240.1	248.6	✓
Deductions			
O & M Expense	82.4	85.6	
Depr charged to O & M	(5.5)	(6.3)	
A & G Expense	70.0	72.4	
Taxes other than Income	11.3	10.1	
Allocation of Interest	21.7	22.2	
Subtotal Deductions	179.9	184.0	
Taxable Income Before Tax Depreciation	60.2	64.5	✓
State Tax Depreciation	16.5	15.6	
State Taxable Income	43.7	48.9	✓
State Income Tax	4.1	4.6	
Taxable Income Before Tax Depreciation	60.2	64.5	✓
Federal Tax Depreciation	21.5	22.3	
State Income Tax	4.1	4.5	
Federal Taxable Income	34.6	37.7	✓
Federal Income Tax	11.8	12.9	
Amortization of I.T.C.	1.5	1.5	
Reversal of S. Ga. Method	.4	.4	
Net Federal Income Tax	9.9	11.0	
Total Income Taxes	14.0	15.6	
Income Tax Rates			
State	9.30%	9.30%	
Federal	34.12%	34.12%	

(END OF APPENDIX D-3)



## APPENDIX E-3

## Francis Land &amp; Water Company

Comparison of typical bills for residential metered customers of various usage level and average usage level at present and authorized rates for the year 1989.

General Metered Service

(5/8 x 3/4-inch meters)

-----			
: Monthly Usage :	At Present :	At Authorized :	Percent :
: Monthly Usage :	Rates :	Rates :	Increase :
-----			
(100 Cubic Feet)			
0	\$ 5.75	8.55	48.7 %
5	11.95	18.46	54.4
10 (Average)	19.65	28.36	44.3
15	27.35	38.27	39.9
20	35.05	48.17	37.4
30	50.45	67.98	34.8
50	81.25	107.60	32.4
60	96.65	127.41	31.8
70	112.05	147.22	31.4
80	127.45	167.03	31.1
90	142.85	186.84	30.8
100	158.25	206.65	30.6
200	312.25	404.75	29.6
300	466.25	602.85	29.3

(END OF APPENDIX E-3)

Decision \_\_\_\_\_

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of )  
CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA for authority to increase )  
rates and charges for water service )  
in its Felton District (U-87-W). )

Application 89-03-028  
(Filed March 21, 1989)

In the Matter of the Application of )  
CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA for authority to increase )  
rates and charges for water service )  
in its Sacramento District (U-87-W). )

Application 89-03-029  
(Filed March 21, 1989)

In the Matter of the Application of )  
CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA for authority to increase )  
rates and charges for water service )  
in its Guerneville District (U-87-W). )

Application 89-03-030  
(Filed March 21, 1989)

In the Matter of the Application of )  
FRANCIS LAND AND WATER COMPANY for )  
authority to increase rates and )  
charges for water service in the )  
City of Ferndale and vicinity, in )  
Humboldt County (U-26-W). )

Application 89-03-031  
(Filed March 21, 1989)

Investigation on the Commission's )  
own motion into the rates and charges )  
of CITIZENS UTILITIES COMPANY OF )  
CALIFORNIA, a California corporation, )  
in its MONTARA DISTRICT. )

I-89-02-011  
(Filed February 8, 1989)

Cooper, White & Cooper, by E. Garth Black,  
Attorney at Law, and Lawrence D'Addio, for  
Francis Land and Water Company; Ronald E.  
Walsh, for Citizens Utilities Company of  
California and Francis Land and Water  
Company; applicants.

Carlos E. Benemann, for Ferndale Intervention Team; Sherwin H. Wiersig, for City Council, City of Ferndale; Messrs. Armour, St. John, Wilcox, Goodin & Schlotz, by James D. Squeri, Attorney at Law, for Sweetwater Springs Water District; and Bruce H. Burton, for California Department of Health Services, Public Water Supply Branch; interested parties.

Lawrence O. Garcia, Attorney at Law, and Arthur Jarrett, for the Commission Advisory and Compliance Division.

### O P I N I O N

#### Summary of Decision

This decision authorizes the following rate increases to Citizens Utilities Company of California (Citizens) and Francis Land and Water Company (Francis).

<u>District</u>	<u>1989</u>		<u>1990</u>	
	<u>Amount</u>	<u>Percent</u>	<u>Amount</u>	<u>Percent</u>
Felton	\$ 81,600	20.02	\$ 17,500	3.58
Sacramento	1,214,600	16.99	621,900	7.44
Francis Land & Water Company	71,600	42.52	8,600	3.58

The increases are based on rate of return of Citizens' rate base of 10.28% for each of the two years. The related return on common equity is 11.75%.

The decision also orders further evidentiary hearings to address service problems in Citizens' Guerneville District and defers the rate revision for the district until the hearings are completed and the Commission issues a decision.

In the Order Instituting Investigation (I.) 89-02-011 concerning Citizens' Montara District, this decision finds that Citizens is not earning a rate of return in excess of the last authorized rate of return for the Montara District.

Background

Citizens is an operating public utility corporation with its principal place of business located in Redding, California. Citizens provides public utility telephone and water services in various areas of California.

Francis is a wholly owned subsidiary of Citizens. Francis' principal place of business is located in Ferndale, California. Francis provides public utility water service in the City of Ferndale and vicinity in Humboldt County.

On March 21, 1989 Citizens filed applications requesting rate increases for water services in its Felton (Application (A.) 89-03-028), Sacramento (A.89-03-029), and Guerneville (A.89-03-030) Districts. Francis also filed an application (A.89-03-031) for increase in rates for water services on March 21, 1989. Citizens and Francis requested the following rate increases:

District	1989		1990	
	Amount	Percent	Amount	Percent
Felton	\$ 210,325	54.3	\$ 46,890	8.0
Sacramento	2,193,142	31.0	360,443	3.7
Guerneville	447,392	41.0	118,361	7.5
Francis Land & Water Company	223,819	135.0	7,655	2.0

The request for rate increases for both Citizens and Francis was based on a rate of return on rate base of 11.73%.

On April 10, 1989, Citizens and Francis amended their applications. In their amended applications Citizens and Francis request a rate of return on rate base of between 11.85% to 12.50% based on return on common equity of between 14% and 15%.

On February 8, 1989, the Commission issued I.89-02-011 on its own motion into the rates and charges in Citizens' Montara District.

This decision addresses these applications and I.89-02-011 which were consolidated for hearings. Following is a brief description of the three districts and Francis.

Felton District

The district serves the unincorporated area of Felton and vicinity. All of the district's operation is within Santa Cruz County.

A diversion on Fall Creek is the system's surface source of water supply. The system's ground water sources include Bennett and Bull Springs and one well equipped with a deep well turbine. Nine reservoirs and tanks of various sizes provide a total combined storage capacity of about 871,000 gallons.

As of December 31, 1987, the distribution system contained about 119,000 feet of transmission and distribution mains that varied in size from 1-1/2 inches to 10 inches in diameter. Also, as of December 31, 1987, this system had 1,301 active metered service connections, and 7 private fire hydrant connections.

The district's operation is conducted from an office in Felton by a district manager, a superintendent, two service persons, and one service clerk.

Sacramento District

The district provides water service within areas of Sacramento County commonly known as Lincoln Oaks, Royal Oaks, Arden, Suburban (Rancho Cordova and Rosemont areas), Parkway, Sunrise, City of Isleton, and vicinities.

The district's water supply is provided by 96 deep wells located strategically throughout the areas served. These wells produce approximately 10.23 billion gallons of water annually which is delivered to customers through approximately 2,500,000 feet of distribution main. These mains are primarily asbestos cement pipe, 1-1/2 inches to 20 inches in diameter.

As of December 31, 1987, the district had 44,768 customers, 36,086 of these were flat rate customers and 4,532 were

metered customers. The district also serves 359 private fire protection connections and 3,791 public fire hydrants.

The district's operations are conducted from the office at 3335 Longview Drive, North Highlands. The district manager, 12 administrative and office employees, and 21 field employees operate in or out of this office. The general manager of Citizens' California water operations, his administrative, engineering, and drafting staff also share this facility.

#### Guerneville District

The district serves the resort areas of Guerneville, Rio Nido, East Guerneville, Guerneville Park, Northwood, Monte Rio, Vacation Beach, River Meadows, and vicinity, along the Russian River.

The district obtains its primary source of water supply from several wells throughout the system. The district has nine booster pumps in the system ranging from 1 HP to 15 HP, and a total storage capacity of approximately one million gallons in tanks that are located at different elevations throughout the distribution system.

As of December 31, 1987 the system consisted of approximately 430,000 feet of transmission and distribution mains, 3,302 active metered services, and 3 private fire hydrant connections.

The district maintains an office in Guerneville where the district manager, office manager, superintendent, three clerks, and seven service persons are located.

#### Francis

Francis provides water service in the City of Ferndale and vicinity in Humboldt County.

Francis' main source of water supply is from tunnels, springs, and a well. The combined yield of all sources is estimated to be from 235 to 330 gallons per minute, depending on

the season of the year. The amount of water sold in 1987 was slightly in excess of 84,000 hundred cubic feet.

Two concrete reservoirs with a combined capacity of 1.33 million gallons provide storage for the system. In addition, the system has five small collecting tanks. Francis' total combined capacity is about 1.36 million gallons.

The distribution system in Francis' service area includes approximately 60,000 feet of main varying in size up to 10 inches.

As of December 31, 1987, Francis served 666 metered customers and 3 private fire hydrant connections.

Francis' local operations are conducted from its office in Ferndale. In addition to the local superintendent, there are two service clerks shared jointly with Citizens' telephone operations and one full-time service person.

#### Public Meetings and Hearings

As part of its investigation, the Water Utilities Branch (Branch) of the Commission Advisory and Compliance Division conducted informal public meetings in each of the service areas. In addition to the project manager from Branch, the public meetings were attended by Citizens' general manager of California water operations and local district managers.

Based on the comments received at the informal public meetings, the project manager recommended that public participation hearings (PPH) be held in all service areas. Accordingly, PPHs were held before Administrative Law Judge Garde in Felton, Sacramento, Guerneville, and Ferndale.

The PPHs in Felton, Guerneville, and Ferndale were attended by over 150 people. These customers complained about the quality and/or cost of service provided by Citizens and Francis.

Evidentiary hearings were held in San Francisco during the period July 31, 1989 to August 4, 1989. The proceedings in A.89-03-028, A.89-03-029 A.89-03-030, and I.89-02-011 were submitted upon the receipt of concurrent briefs on August 21, 1989.

Although this order addresses most of the issues in A.89-03-031, further hearings in the proceeding were held on September 19 and 20 1989 to address certain expense and rate base items.

Issues

During the hearings, Citizens stipulated to most of Branch's estimates, so only a few issues were litigated during the evidentiary hearings. There were two types of contested issues between Citizens and Branch. The first kind applied to all districts and the second kind applied to specific districts:

The disputed items common to all districts were:

1. Rate of return.
  - a. Capital structure.
  - b. Return on equity (ROE).

The disputed items in relation to individual districts were:

2. Sacramento District - The addition of one employee plus related expenses for test year 1990.
3. Francis - The addition of one-half employee plus related expenses for test years 1989 and 1990 and the unamortized legal and regulatory expense incurred in connection with continued hearings in A.60303.
4. Rate base for Francis.

In addition to Citizens and Branch, Ferndale Intervention Team (FIT), City Council of the City of Ferndale (Ferndale), the California Department of Health Services (DHS) and the Sweetwater Springs Water District (Sweetwater) were active participants in the proceeding. FIT and Ferndale are interested in Issues 3 and 4. Sweetwater recommends the following for the Guerneville District:

- o Since Citizens has pursued its main extension replacement program in an unreasonable and haphazard manner, the Commission should delete from rate base all amounts associated with main extension replacements for the years 1989 and 1990.



- o The Commission should substantially reduce Citizens' otherwise authorized rate of return because of the poor quality of water service provided by Citizens in its Guerneville District.

DHS requests that Citizens be ordered to submit a master plan detailing the deficiencies in the Guerneville system and the method of correcting the deficiencies. DHS also requests that Citizens should seek the approval of the master plan from DHS and the Commission before making any improvements to the system.

Results of Operation

Tables 1 through 6 show a comparison of Citizens' and Branch's estimate of results of operation for 1989 and 1990 for the three districts under consideration. Tables 7 and 8 show a comparison of Francis' and Branch's estimates of results of operation for 1989 and 1990. The tables also show the adopted and authorized results of operations.

The adopted quantities, tax calculation, and comparison of rates are included in Appendixes C, D, and E, respectively.

Table 1

Citizens Utilities Company of California  
Felton District  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 407.5	\$ 0.0	\$ 407.5	\$ 407.5	\$ 489.1
<u>Deductions</u>					
O&M Expenses	156.2	0.0	156.2	156.2	156.7
A&G Expenses	113.0	0.0	113.0	113.0	113.0
Taxes other than Income	22.6	0.0	22.6	22.6	22.6
Depreciation	37.2	0.0	37.2	37.2	37.2
Subtotal	329.0	0.0	329.0	329.0	329.5
<u>Net Operating Revenue</u>					
Before Income Taxes	78.5	0.0	78.5	78.5	159.6
Income Taxes	14.1	0.0	14.1	14.1	46.7
Net Operating Revenue	64.4	0.0	64.4	64.4	112.9
Rate Base	1,097.9	0.0	1,097.9	1,097.9	1,097.9
Rate of Return	5.87%	0.00%	5.87%	5.87%	10.28%
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%	10.28%	
Est. Net Oper. Revenue	128.8	15.9 <sup>a</sup>	112.9	112.9	
Net Revenue Deficiency	64.4	15.9 <sup>a</sup>	48.5	48.5	
Net to Gross Multiplier	1.68325		1.68325	1.68325	
Revenue Increase	108.4	26.8 <sup>a</sup>	81.6	81.6	

<sup>a</sup> Difference due to estimated rate of return.

Table 2

Citizens Utilities Company of California  
Felton District  
Summary of Earnings Reconciliation  
Test Year 1990  

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(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 408.1	\$ 0.0	\$ 408.1	\$ 408.1	\$ 506.6
<u>Deductions</u>					
O&M Expenses	168.2	0.0	168.2	168.2	163.8
A&G Expenses	116.4	0.0	116.4	116.4	116.4
Taxes other than Income	23.4	0.0	23.4	23.4	23.4
Depreciation	37.8	0.0	37.8	37.8	37.8
Subtotal	345.8	0.0	345.8	345.8	346.4
<u>Net Operating Revenue</u>					
Before Income Taxes	62.3	0.0	62.3	62.3	160.2
Income Taxes	8.2	0.0	8.2	8.2	47.6
Net Operating Revenue	54.1	0.0	54.1	54.1	112.6
Rate Base	1,095.5	0.0	1,095.5	1,095.5	1,095.5
Rate of Return	4.94%	0.00%	4.94%	4.94%	10.28%
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%	10.28%	
Est. Net Oper. Revenue	128.5	15.9 <sup>a</sup>	112.6	112.6	
Net Revenue Deficiency	74.4	15.9 <sup>a</sup>	58.5	58.5	
Net to Gross Multiplier	1.68325		1.68325	1.68325	
Revenue Increase	125.2	26.7 <sup>a</sup>	98.5	98.5	

<sup>a</sup> Difference due to estimated rate of return.

Table 3

Citizens Utilities Company of California  
Sacramento District  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 7,149.6	\$ 0.0	\$ 7,149.6	\$ 7,149.6	\$ 8,364.2
<u>Deductions</u>					
O&M Expenses	2,739.5	0.0	2,739.5	2,739.5	2,741.5
A&G Expenses	1,970.2	0.0	1,970.2	1,970.2	1,970.2
Taxes other than Income	294.1	0.0	294.1	294.1	296.4
Depreciation	1,298.4	0.0	1,298.4	1,298.4	1,298.4
Subtotal	6,302.2	0.0	6,302.2	6,302.2	6,306.5
<u>Net Operating Revenue</u>					
Before Income Taxes	847.4	0.0	847.4	847.4	2,057.7
Income Taxes	223.3	0.0	223.3	223.3	710.4
Net Operating Revenue	624.1	0.0	624.1	624.1	1,347.3
Rate Base	13,106.0	0.0	13,106.0	13,106.0	13,106.0
Rate of Return	4.76%	0.00%	4.76%	4.76%	10.28%
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%	10.28%	
Est. Net Oper. Revenue	1,537.3	190.0	1,347.3	1,347.3	
Net Revenue Deficiency	913.3	190.0	723.2	723.2	
Net to Gross Multiplier	1.68024		1.68024	1.67942	
Revenue Increase	1,534.5	319.3	1,215.2	1,214.6	

<sup>a</sup> Difference due to estimated rate of return.

Table 4

Citizens Utilities Company of California  
Sacramento District  
Summary of Earnings Reconciliation  
Test Year 1990  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$ 7,459.3	\$ 0.0	\$ 7,459.3	\$ 7,459.3	\$ 8,986.1
<u>Deductions</u>					
O&M Expenses	2,942.5	32.7 <sup>a</sup>	2,909.8	2,909.8	2,912.3
A&G Expenses	2,094.4	1.6 <sup>a</sup>	2,092.8	2,092.8	2,092.8
Taxes other than Income	310.7	5.9 <sup>a</sup>	304.8	304.8	307.6
Depreciation	1,459.6	0.0	1,459.6	1,459.6	1,459.6
Subtotal	6,807.2	40.2	6,767.0	6,767.0	6,772.3
<u>Net Operating Revenue</u>					
Before Income Taxes	652.1	(40.2)	692.3	692.3	2,213.8
Income Taxes	167.7	(16.2)	183.9	183.9	796.3
Net Operating Revenue	484.4	(24.0)	508.4	508.4	1,417.5
Rate Base	13,789.0	0.0	13,789.0	13,789.0	13,789.0
Rate of Return	3.51%	-0.17%	3.69%	3.69%	10.28%
Estimated Rate of Return	11.73%	1.45% <sup>b</sup>	10.28%	10.28%	
Est. Net Oper. Revenue	1,617.4	199.9	1,417.5	1,417.5	
Net Revenue Deficiency	1,133.0	224.0	909.1	909.1	
Net to Gross Multiplier	1.68024		1.68024	1.67942	
Revenue Increase	1,903.8	376.3	1,527.4	1,526.8	

(Red Figure)

<sup>a</sup> Difference due to one employee excluded by Branch.

<sup>b</sup> Difference due to estimated rate of return.

Table 5

Citizens Utilities Company of California  
Guerneville District  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$1,069.0	\$ 0.0	\$1,069.0	\$1,069.0	
<u>Deductions</u>					
O&M Expenses	534.6	0.0	534.6	534.6	
A&G Expenses	328.6	0.0	328.6	328.6	
Taxes other than Income	66.9	0.0	66.9		
Depreciation	88.3	0.0	88.3		
Subtotal	1,018.4	0.0	1,018.4		
<u>Net Operating Revenue</u>					
Before Income Taxes	50.6	0.0	50.6		
Income Taxes	(13.4)	0.0	(13.4)		
Net Operating Revenue	64.0	0.0	64.0		
Rate Base	2,669.4	0.0	2,669.4		
Rate of Return	2.40%	0.00%	2.40%		
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%		
Est. Net Oper. Revenue	313.1	38.7 <sup>a</sup>	274.4		
Net Revenue Deficiency	249.1	38.7 <sup>a</sup>	210.4		
Net to Gross Multiplier	1.68771		1.68771		
Revenue Increase	420.4	65.3 <sup>a</sup>	355.1		

(Red Figure)

<sup>a</sup> Difference due to estimated rate of return.

Note: Since we are ordering further hearings to address service problems and plant additions for the district, only revenues at present rates and expenses that are independent of plant estimates are being adopted at this time.

Table 6

Citizens Utilities Company of California  
Guerneville District  
Summary of Earnings Reconciliation  
Test Year 1990  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$1,071.5	\$ 0.0	\$1,071.5	\$1,071.5	
<u>Deductions</u>					
O&M Expenses	573.9	0.0	573.9	573.9	
A&G Expenses	351.7	0.0	351.7	351.7	
Taxes other than Income	71.8	0.0	71.8		
Depreciation	94.1	0.0	94.1		
Subtotal	1,091.5	0.0	1,091.5		
<u>Net Operating Revenue</u>					
Before Income Taxes	(20.0)	0.0	(20.0)		
Income Taxes	(43.3)	0.0	(43.3)		
Net Operating Revenue	23.3	0.0	23.3		
Rate Base	2,840.5	0.0	2,840.5		
Rate of Return	0.82%	0.00%	0.82%		
Estimated Rate of Return	11.73%	1.45% <sup>a</sup>	10.28%		
Est. Net Oper. Revenue	333.2	41.2 <sup>a</sup>	292.0		
Net Revenue Deficiency	309.9	41.2 <sup>a</sup>	268.7		
Net to Gross Multiplier	1.68771		1.68771		
Revenue Increase	523.0	69.5 <sup>a</sup>	453.5		

(Red Figure)

<sup>a</sup> Difference due to estimated rate of return.

Note: Since we are ordering further hearings to address service problems and plant additions for the district, only revenues at present rates and expenses that are independent of plant estimates are being adopted at this time.

Table 7

Francis Land and Water Company  
Summary of Earnings Reconciliation  
Test Year 1989  
(Dollars in Thousands)

<u>Item</u>	<u>Citizens</u>	<u>Dif.</u>	<u>Branch</u>	<u>Adopted at Present Rates</u>	<u>Adopted at Auth. Rates</u>
Operating Revenues	\$168.4	\$ 0.0	\$168.4	\$168.4	\$240.0
<u>Deductions</u>					
O&M Expenses	94.9	12.6 <sup>a</sup>	82.3	82.3	82.4
A&G Expenses	90.7	20.7 <sup>b</sup>	70.0	70.0	70.0
Taxes other than Income	14.3	3.0 <sup>c</sup>	11.3	11.3	11.3
Depreciation	28.4	12.6 <sup>d</sup>	15.8	15.8	15.8
Subtotal	228.3	48.9	179.4	179.4	179.5
<u>Net Operating Revenue</u>					
Before Income Taxes	(59.9)	(48.9)	(11.0)	(11.0)	60.5
Income Taxes	(36.1)	(21.3)	(14.8)	(14.8)	13.9
Net Operating Revenue	(23.8)	(27.6)	3.8	3.8	46.6
Rate Base	823.8	370.6 <sup>e</sup>	453.2	453.2	453.2
Rate of Return	-2.89%	-3.73%	0.84%	0.84%	10.28%
Estimated Rate of Return	11.73%	1.45% <sup>f</sup>	10.28%	10.28%	
Est. Net Oper. Revenue	96.6	50.0	46.6	46.6	
Net Revenue Deficiency	120.5	77.7	42.8	42.8	
Net to Gross Multiplier	1.67471		1.67471	1.67471	
Revenue Increase	201.7	130.1	71.6	71.6	

(Red Figure)

For explanation see p. 17.



Table 8

Francis Land and Water Company  
Summary of Earnings Reconciliation  
Test Year 1990  
(Dollars in Thousands)

Item	Citizens	Dif.	Branch	Adopted at Present Rates	Adopted at Auth. Rates
Operating Revenues	\$170.6	\$ 0.0	\$170.6	\$170.6	\$248.6
<u>Deductions</u>					
O&M Expenses	98.5	13.0 <sup>a</sup>	85.5	85.5	85.6
A&G Expenses	93.2	20.8 <sup>b</sup>	72.4	72.4	72.4
Taxes other than Income	15.1	5.0 <sup>c</sup>	10.1	10.1	10.1
Depreciation	29.4	13.1 <sup>d</sup>	16.3	16.3	16.3
Subtotal	236.2	51.9	184.3	184.3	184.4
<u>Net Operating Revenue</u>					
Before Income Taxes	(65.6)	(51.9)	(13.7)	(13.7)	64.2
Income Taxes	(38.2)	(22.4)	(15.8)	(15.8)	15.5
Net Operating Revenue	(27.4)	(29.5)	2.1	2.1	48.7
Rate Base	816.2	342.8 <sup>e</sup>	473.4	473.4	473.4
Rate of Return	-3.36%	-3.80%	0.44%	0.44%	10.28%
Estimated Rate of Return	11.73%	1.45% <sup>f</sup>	10.28%	10.28%	
Est. Net Oper. Revenue	95.7	47.1	48.7	48.7	
Net Revenue Deficiency	123.1	76.6	46.6	46.6	
Net to Gross Multiplier	1.67471		1.67471	1.67471	
Revenue Increase	206.2	128.2	78.0	78.0	

(Red Figure)

(Continued)

- a Difference due to one-half employee excluded by Branch.
- b Difference due to:
  - 1. One-half employee excluded by Branch.
  - 2. Amortization of deferred rate case expense of \$16,630.
- c Difference due to:
  - 1. One-half employee excluded by Branch (payroll taxes).
  - 2. Differences in plant.
- d Difference due to different plant estimates.
- e Difference due to different plant estimates.
- f Difference due to recommended rates of return.

Note:

These issues were addressed during the hearings held on September 19 and 20, 1989. Because of the limited time available since the completion of the September hearings, this order does not resolve the issues addressed during the hearings.

Rate of Return

Since Francis is a wholly owned subsidiary of Citizens, the rate of return analysis discussed below applies to Citizens as well as Francis.

Citizens' capital structure consists of two components: long-term debt and common equity. The ratio in which these two components are included is known as debt-equity ratio or equity ratio. Rate of return is a composite value of capital costs expressed as the total weighted cost of long-term debt and common equity. The determination of the cost of long-term debt is based primarily on recorded costs; however, estimates must be made for the costs associated with future debts. Determination of the ROE is more difficult because additional factors, such as business and financial risks, investor expectations, ratepayer interest, and equity ratios.

The following table shows the rate of return calculations proposed by Citizens and Branch:

Table 9

<u>Citizens</u>			
<u>Item</u>	<u>[A] Capital<sup>1</sup> Ratio</u>	<u>[B] Cost Rate</u>	<u>[C] Weighted Cost [A]*[B]</u>
Long-term Debt	35.52%	7.95% - 7.95%	2.82% - 2.82%
Common Equity	<u>64.48%</u>	14.00% - 15.00%	<u>9.03% - 9.67%</u>
Total	100.00%		11.85% 12.50%

  

<u>Branch</u>			
<u>Item</u>	<u>[A] Capital Ratio</u>	<u>[B] Cost Rate</u>	<u>[C] Weighted Cost [A]*[B]</u>
Long-term Debt	45.00%	8.48%	3.82%
Common Equity	<u>55.00%</u>	11.75%	<u>6.46%</u>
Total	100.00%		10.28%

As is evident from Table 9, Citizens and Branch recommend different equity ratios, cost of debt, and ROE. Following is a discussion of each component.

#### Capital Structure

Citizens' proposed capital structure for the two test years is based on its actual consolidated equity ratio as of December 1988. Branch believes that since Citizens' consolidated equity ratio reflects the overall company capitalization (which includes Citizens' telecommunications and energy operations), it is too high in comparison to a typical water utility. Therefore, for ratemaking purposes, Branch recommends an imputed capital structure of 55% equity and 45% debt which is more in line with California Class "A" water utilities. Citizens is opposed to the use of an imputed capital structure.

<sup>1</sup> During the hearings Citizens rounded its equity ratio to 35% debt and 65% equity.

In developing its proposed capital structure Branch examined Citizens' capitalization against the capitalization of a group of California Class "A" water utilities and a comparable group of regional water utilities listed in C.A. Turner's Utility Report of July 1989. Branch then used a computer model to develop its proposed capital structure which is based on projected balance of Citizens' business and financial risks.

Business risk is associated with the dependability of revenues based on the stability of the customer base and level of technological changes. Branch believes that water utilities face more stable and reliable revenue streams than other types of utilities because water utilities use a renewable resource, face minimal threat of bypass, and are allowed to earn a return on construction work in progress.

Financial risk is associated with the proportional level of debt to capital. Financial risk increases as the level of debt increases. This is because as the level of debt increases, the utility's contractual fixed obligation to make interest payments increases and the cost of marginal debt issues increase. Telecommunications and energy utilities attempt to offset their higher business risk by reducing their financial risk by maintaining higher equity ratios.

Debt financing is less expensive than equity financing because interest payments on debt are generally less than returns paid to common stockholders and because interest payments are tax deductible while returns on common equity are not. The tax savings generated by interest expense directly benefits ratepayers through a proportional reduction of revenue requirement needs. Therefore, Branch maintains that if Citizens' proposed capital ratio is adopted, ratepayers will have to pay excessive costs.

Branch points out that Citizens is classified as a telecommunications utility by Value Line rating service. Therefore, according to Branch, Citizens' capital structure though

appropriate for a telecommunications utility is not appropriate for a water utility. Branch opines that when Citizens applies its consolidated equity ratio to its California water operations, it is in fact imputing a hypothetical capital structure.

Citizens contends that Branch's use of a hypothetical capital structure is an unjustified departure from sound policy previously enunciated by the Commission and is based on faulty logic and a distorted view of the evidence. Citizens contends that the Commission has never adopted the large debt imputation recommended by Branch. In support of contention Citizens cites D.92604, where we declined to impute a capitalization structure for California Water Service Company:

"But this applicant has an excellent record of service and a reputation for responsible management behind it. Where, as here, the applicant proposes to proportion its total capitalization structure for the immediate future within parameters which on their face cannot be said to be unreasonable, imprudent, or insufficient, and which clearly have been shown not to be out of line with those maintained by comparable regional water utilities, we will not intervene, absent exigent circumstances not present here, to induce the utility by the drastic device of imputation to substitute Staff's judgment for its own."

Citizens maintains that the evidence in these proceedings supports the Commission's above-cited policy of eschewing hypothetical capital structure for the water districts.

According to Citizens, imputing a substantial amount of nonexistent debt would effectively prevent it from earning whatever rate of ROE is authorized by the Commission. Citizens opines that the unfairness of Branch's proposal is evident when one considers the fact that Citizens will have to convert a large amount of equity into debt very quickly in order to earn the authorized rate of return.

In addition, Citizens offers the following reasons to establish the reasonableness of its proposed capital structure.

1. Citizens' "AAA" ratings are attributable primarily to its telephone and energy operations which provide a benefit to water ratepayers by lowering the cost of debt financing.
2. Citizens' requested embedded cost of debt (7.50%) and Branch's computed cost of debt (8.48%) are substantially less than the average cost of debt (9.97%) for other Class "A" water companies.
3. The average debt ratio for California Class "A" water companies was 39.17% for the period ending December 31, 1988 and debt ratios have been trending down.

Finally, Citizens maintains that if the Commission wishes to impute numbers, then it should not stop at the equity ratio as Branch did. It should impute other numbers (i.e. debt costs and ROE) which would be more appropriate for Citizens' California water operations.

#### Discussion

Citizens' diversification into three regulated industries (telecommunications, energy, and water) makes it difficult for Citizens to develop a capital structure that is ideal for all three industries.

An increasing number of services in the telecommunications and energy industries are being deregulated. This trend towards deregulation has encouraged competition and consequently has increased the business risks for telecommunications and energy utilities. Utilities have tried to offset this increase in their business risk by reducing their financial risk by maintaining higher equity ratios.

Water utilities do not face the business risks associated with deregulation. In addition, water utilities enjoy a stable

customer base with minimal threat of bypass. Therefore, water utilities have predictable revenue streams and thus a much lower business risk than telecommunications and energy utilities. Accordingly, water utilities' customers should not be required to finance higher equity ratios which are reflected in the capital structure of diversified telecommunications and energy utilities such as Citizens.

We note that the average capital structure of the California Class "A" utilities is composed of 57.71% common equity, 39.17% long-term debt, and 3.12% preferred stock. In comparison, Citizens has a 65.5% common equity ratio and a 34.5% long-term debt ratio. Citizens does not utilize preferred stock as part of its capital structure blend, unlike some of the California water utilities. Overall, Citizens' common equity ratio of 65.5% is 7.8% percentage points higher than the 57.7% ratio for the California Class "A" utilities. Also Citizens' equity ratio far exceeds the average equity ratio of 44% for comparable group of regional water utilities included in C.A. Turner's Utility Report of July 1989. Therefore, Citizens' equity ratio is not appropriate for its California water operations. If rates are set based on Citizens' high equity ratio it would require Citizens' water customers to pay excessive rates.

Turning to Branch's proposed capital structure of 55% equity and 45% debt, we believe that it is more representative of Citizens' water operations in California. Based on Standard & Poor's rating benchmark in Table 10, Citizens will be able to maintain its "AAA" if Branch's recommended capital structure is used for setting rates in this proceeding. Therefore, we will adopt the Branch's recommended equity ratio of 55% equity and 45% debt.



Table 10

Standard & Poor's Rating Benchmark Definitions for  
Pretax Interest Coverage, Debt Leverage and  
Net Cash Flow for Water Companies

Criteria	Debt Rating			Branch Proposal For Citizens
	AAA	AA	A	
Total Debt/Capital	Less than 48%	46% - 54%	52% - 60%	45%
Pretax Int. Coverage	More than 3.75x	3x - 4.25x	2x - 3.25x	3.82x <sup>2</sup>
Net Cash Flow/Capital	More than 7%	5% - 8%	3% - 6%	14.2%

Next, we will address Citizens' claim that the Commission has not adopted such high imputed debt ratio for ratemaking purposes. Contrary to Citizens' claims, the Commission has adopted an imputed capital ratio for California Water Service Company in D.89-04-005. And more recently, in D.89-09-048 the Commission has adopted comparably higher imputed debt ratio for San Gabriel Valley Water Company. Therefore, adoption of an imputed capital structure will not be contrary to the Commission's policy.

Turning to Citizens' claim that with higher equity ratios debt financing becomes cheaper, we note that there are limits to this benefit. First, lower cost financing affects the cost of new debt issues only. Also, Citizens already enjoys a high "AAA" rating from Standard & Poor. Therefore, we believe that Citizens' California water operations will not benefit from its proposed high equity ratio.

<sup>2</sup> Based on Branch's recommended and adopted rate of return on equity of 11.75%.

Finally, we will consider Citizens' contention that if the Commission uses a hypothetical capital ratio, it should impute other numbers (i.e debt cost and ROE) which would be representative of Citizens' California water operations. As will be evident from the discussion on the issues of long-term debt and ROE, the adopted rates for long-term debt and ROE are representative of Citizens' California water operations. We find the adopted capital structure of 55% equity and 45% debt is reasonable.

Long-term Debt

Citizens' and Branch's proposed costs of long-term debt are 7.95% and 8.48%, respectively.

Citizens used the average of its recorded consolidated long-term debt as of December 31, 1988 and its projected cost of consolidated long-term debt as of December 31, 1989.

Since Branch uses a hypothetical capital structure for ratemaking purposes, its cost of long-term debt was developed to be representative of Citizens' California water operations. Branch determined its cost of long-term debt by separating the specific debt associated with Citizens' out-of-state utility operations. According to Branch's estimate approximately 57% of the long-term debt outstanding is associated with Citizens' out-of-state utility operations. Branch contends the remaining debt classified as "company nonspecific debt" is the portion of debt representative of Citizens' California operations.

According to Branch, in the absence of more precise data, it would be appropriate for ratemaking purposes to use the cost of Citizens' nonspecific long-term debt in Branch's proposed imputed capital structure.

Branch's method of isolating debt costs for Citizens' California water operations, though not precise, is the best available estimate based on the available data. Since Branch proposes to use the best available approximation of the cost of debt for Citizens' California water operations, its proposed cost

of debt will be appropriate for use in the adopted hypothetical capital structure. Therefore, we will use 8.48% as the cost of long-term debt for Citizens' California water operations.

Return on Common Equity (ROE)

This is the most difficult component of the rate of return equation to evaluate. Citizens is requesting an ROE of 14% - 15% for 1989 and 1990; while Branch recommends 11.75% as the proper return for the two years. Both Citizens and Branch support their recommendations by use of two market based financial models, the discounted cash flow (DCF) model and risk premium (RP) model. These financial models provide a range for ROE.

Branch applied its DCF and RP analysis to a group of investor-owned water utilities (the Group) which have similar investment risk as Citizens' California water operations and for which market data was readily available. Branch contends that the only market data available for Citizens was for its combined operations which include telecommunications and energy operations. Branch believes that market data for Citizens' combined operations cannot be used to assess the business risk for its water operations.

Citizens strongly disagrees with Branch's assertion that Citizens' market data for combined operations is not valid for its California water operations. Citizens asserts that Citizens is the sole source of financing for its water operations and the cost of capital for Citizens is the actual cost of capital for its California water operations.

Branch and Citizens disagree regarding certain inputs to their DCF and RP models.

Citizens also faults Branch's analysis for failing to recognize the particular risks faced by Citizens' water operations in California. Citizens contends that it will be required to make large investments for its water operations to comply with the new health standards for domestic water supply. In addition, Citizens

faces additional regulatory risk associated with disallowance of approximately \$300,000<sup>3</sup> of plant for Francis.

Discussion

Both Branch and Citizens relied on financial models in arriving at their recommendations. We believe that the results of various financial models are good starting points as well as analytical guides for establishing ROE and that the actual determination of a reasonable ROE should be tempered by judgment and examination of particular circumstances surrounding the utility.

Because these models are used only to establish a range for ROE, we do not repeat the detailed descriptions of each model contained in this record. Additionally, both parties have advanced arguments in support of their analyses and a criticism of the input assumptions used by the other party. These arguments are not addressed in this decision, given our assessment that they do not alter the model results. These models provide a reasonable range from which to choose, and we will use them as a guidepost in selecting Citizens' ROE. In the final analysis, it is the application of judgment, not the precision of these models, which is the key to our decision.

While we are not addressing the arguments in support of the analyses made by each party, we think it is important to address Citizens' concerns regarding Branch's use of the Group for its analysis. We believe that since we are adopting a hypothetical capital structure which is representative of Citizens' California water operations, it is appropriate to use the Group for making the DCF and RP analysis. Branch's recommendation for all elements of cost of capital (capital structure, cost of debt, and ROE) are

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<sup>3</sup> This disallowance is explained later under the discussion of Francis' results of operations.

intended to represent Citizens' California water operations. To this extent, Branch's use of the Group in making its DCF and RP analysis is consistent with its premise and, therefore, is reasonable.

Returning to the question of applying judgment, we must assess Citizens' arguments that it faces increased risk during the period covered by these proceedings. We recognize that Citizens may experience additional risk due to more stringent water quality standards. We also recognize the risk associated with the possibility of the plant disallowance for Francis. But we doubt whether these kinds of risks make Citizens' water operations as risky as its telecommunications and energy operations. We also doubt if these risks justify an increase in the ROE. Since we are imputing a capital structure and cost of long-term debt which are representative of Citizens' California water operations, Citizens' risks will also be similar to those of a water utility.

Branch's proposed ROE would provide Citizens a pretax interest coverage of 3.82x (see Table 10). This coverage with Citizens' adopted debt leverage of 45% would easily qualify it for a "AAA" rating according to the benchmark definition used by Standard & Poor.

While we recognize that interest coverage and debt leverage are not the only indicators used by rating agencies when assigning bond rating, an ROE of 11.75% would certainly improve Citizens' chances of maintaining its "AAA" rating. After reviewing all the evidence regarding Citizens' risk and its need for capital improvements we believe that an ROE of 11.75% is just and reasonable for Citizens for the years 1989 and 1990. It will enable Citizens to raise the necessary capital to finance its construction plan in these years. This adopted ROE produces an overall rate of return of 10.28% for 1989 and 1990. Table 11 shows the adopted capital ratio, cost factors, and weighted cost for 1989 and 1990.

Table 11

<u>Component</u>	<u>Capital Ratios</u>		<u>Cost Factor</u>	<u>Weighted Cost</u>
<u>Test Years 1989 and 1990</u>				
Long-term Debt	45.00%	x	8.48%	= 3.82%
Common Equity	<u>55.00</u>	x	11.75	= <u>6.46</u>
	100.00%			. 10.28%

Sacramento District - Salaries and Wages

Citizens proposes to add one more employee than Branch believes to be reasonable for the test year 1990 in the Sacramento District. Citizens contends that it needs the new employee to compensate for customer growth and the increase in workload expected as result of new water quality requirements imposed by DHS. According to Citizens, the need for this new position is made more critical by the fact that the growth in the Sacramento District is taking place at distant ends of the system requiring longer travel by service employees. Citizens opines that the need for the new employee is justified by the fact that traffic congestion in the Sacramento area increases the travel time for service employees.

Branch's recommendation against this new employee position is based upon a comparison of 1988 and 1990 ratios of customers per employee man-hour available. Branch contends that even with one less employee, its estimated 1990 customer per employee man-hour ratio is lower than the ratio for 1988. Branch believes that the decrease in customers per employee man-hour ratio resulted from the hiring of two new employees in 1989 and that an additional employee is not needed for 1990. Branch contends that the impact of new water quality standards on manpower requirements is unknown and thus does not justify the new position.

### Discussion

Citizens correctly states that the growth in its Sacramento system is taking place at the distant ends of the system. However, the growth to which Citizens alludes relates to flat rate customer connections. Flat rate customers do not have meters which are to be read, repaired, or maintained and thus will not require visits by service employees. In fact, this is true for most of the customers in the Sacramento District because approximately 88% of the them are on flat rates. Therefore, the need for the new employee is not justified on the basis of customer growth or traffic congestion.

Next, we will consider Citizens' claim that the new employee will be needed to meet the new water quality requirements of the DHS. The precise nature of system improvements to meet the DHS' water quality standards is not known at this time. Even if system improvements are made in 1990, they will increase Citizens' capital expenditure, not its operations and maintenance expenses. Therefore, the Citizens' claim for the new employee on this basis is not justified for test year 1990.

Since Citizens has not justified the need for the new employee, we will not allow the inclusion of the cost of the employee in test year 1990 estimates.

### Results of Operations for Francis

D.82-07-014 in Francis' last general rate case application (A.60303) authorized an interim general rate increase. It also ordered further hearings to allow Francis an opportunity to justify the inclusion of \$299,100 worth of plant improvements in its rate base.

In accordance with the interim order, further hearings in A.60303 commenced on August 3, 1983. The hearings were interrupted and postponed so that parties could more effectively participate in the investigation on the Commission's own motion (OII 83-11-09)

into Citizens' practices regarding the transfer of real property rights and management of its watershed resources.

Hearings in A.60303 had not resumed when Francis filed this general rate increase application (A.89-03-031) and the rate base issue was still unresolved. Therefore, on April 26, 1989, the Commission issued D.89-04-061 closing A.60303 and directing parties to resolve the rate base issue in A.89-03-031.

As directed by the Commission, the rate base issue will be resolved in this proceeding. However, since parties had requested additional time to prepare their testimony, further hearings were held in Ferndale on September 19 and 20, 1989 to address the issue. During the September hearings, parties also addressed other disputed issues regarding Francis' results of operations shown in Tables 7 and 8. Because of the limited time available since the completion of the September hearings, the issues addressed during the hearings will be resolved in a separate order.

As to authorizing Francis an interim rate increase in this proceeding, Francis and Branch have agreed that Francis be authorized an interim rate increase based on Branch's estimate of the results of operations for 1989 and 1990 which excludes the disputed expense and rate base items. Francis' adopted summary of earnings reflects this agreement.

#### Rate Design

There is no disagreement between Citizens or Francis and Branch regarding rate design. Branch recommends that the adopted general metered service rates incorporate the following guidelines:

1. Eliminate the lifeline consumption block and have a single quantity rate for all water used.
2. Service charges be set to recover no more than 50% of the metered customers' share of adopted fixed costs in the test years.  
(Fixed costs are gross revenue at adopted rates less purchased power, purchased



water, chemicals, income taxes, uncollectibles, and any other costs which vary with water usage).

3. Final rates should not cause any customer bill to go up more than twice the adopted system average increase.

Branch also recommends that the rates in the Private Fire Protection Service Schedule be increased by the adopted system average increase.

Following is a brief description of rate design for each service area:

Felton District

Citizens proposes to recover approximately 41% of its fixed costs through service charge.

Branch believes that Citizens' proposed rate design is in accordance with the recommended guidelines.

Sacramento District

Approximately 90% of Sacramento District customers are on flat rate service schedule. Citizens proposes to increase the flat rate service rates by the adopted system average increase for the test years.

Citizens proposes to recover approximately 35% of metered customers' fixed costs through service charge.

Branch believes that Citizens' proposed rate design is in accordance with the recommended guidelines.

Guerneville District

Citizens proposes to recover approximately 74% of its fixed costs through service charge. Although the proposed service charge exceeds Branch's recommended guidelines, Branch agrees with Citizens' proposal for the following reason:

The Guerneville District's service area is a semirural resort where a significant number of customers do not reside for the full year. Consequently, the average water use per customer per month is approximately 700 cubic feet, which is low but not

unusual for a system with part-time customers. Branch believes that if the district is not allowed to recover more than 50% of its fixed costs through service charge, the full-time customers in the district would end up subsidizing the part-time customers. Therefore, Branch recommends that Citizens be allowed to recover 74% of its fixed costs through service charge in the Guerneville District.

While Branch does not oppose Citizens' proposal for recovering 74% of the fixed cost through the service charge, it opposed to certain special conditions of tariff Schedule No. GU-1A. Schedule GU-1A requires new customers to pay their annual service charge in advance in one lump sum. Special Condition No. 4 of Schedule GU-1A exempts Citizens from refunding any portion of this initial payment to a customer who terminates service within ten months after first receiving service. Citizens does not make the refund even when another customer is subsequently served and pays for service at the same location before the previous customer's year is up. Branch believes that even though this practice does not violate Citizens' tariff rules, it is unfair because it allows Citizens to collect more than once for the same service. Therefore, Branch recommends that Special Condition No. 4 should be revised so that:

1. There is no time limit in which a customer may receive a refund if he/she terminates service and another customer pays for and is subsequently served at the same location for the remainder of the initial customer's annual service charge period.
2. Under no circumstances should the utility receive payment for the same service more than once.

Finally, Branch believes that for those new customers who may have difficulty in making the entire annual service charge payment in one lump sum, Citizens should accept payments in installments.

Francis

Francis proposes to recover 34% of its fixed costs through service charges.

Branch believes that Francis' proposed rate design follows the recommended guidelines.

Discussion

Since Citizens has agreed with Branch's rate design recommendations and Branch's recommendations follow the Commission's policy regarding rate design, we will adopt Branch's recommendations.

As to Branch's recommendation to allow new customers to pay the annual service charge in installments, we note that Branch does specify the number of payments to be made. We believe that it would be reasonable to allow new customers to pay the annual service charge in four equal payments made every three months.

Service Problems in Guerneville District

During the PPHs in Felton, Ferndale, and Guerneville, numerous customers expressed dissatisfaction with Citizens. While most speakers in Ferndale and Felton complained about the high water rates and their inability to pay such rates, customers in Guerneville complained about high rates as well as poor service. In addition to the statements made at the PPHs, the Commission has received numerous letters in expressing dissatisfaction with Citizens' service and rates.

Further, customers in Guerneville District conducted a survey of approximately 600 customers through a questionnaire. The responses to the questionnaire expressed an overwhelming dissatisfaction with the service and quality of water provided by Citizens. The problems expressed by customers related to the taste and appearance of the water and damage to clothing and plumbing from the deposits in the water. Approximately 70% of the customers surveyed have to obtain bottled drinking water.

Because of the service problems mentioned above, Sweetwater recommends that Citizens' authorized rate of return for the Guerneville District be lower than that otherwise found to be appropriate. Sweetwater and DHS also make specific recommendations regarding remedying the service problems in the Guerneville District.

All recommendations regarding service problems are addressed in the discussion of "Plant Addition" for the Guerneville District which follows.

Recommendations by DHS and Sweetwater re  
Plant additions in the Guerneville District

DHS is concerned that Citizens may be authorized a rate increase while deficiencies in the Guerneville District that pose a health hazard may be uncorrected. Therefore, DHS recommends that Citizens be ordered to submit a master plan to be approved by DHS and the Commission which details deficiencies in the system and establishes the method and order of correcting the deficiencies.

According to DHS, its request for a master plan does not imply any restriction on Citizens' ability to make emergency repairs or improvements to the system. DHS maintains that its concern is to see that the health deficiencies are corrected.

Branch supports DHS' recommendation.

Sweetwater not only supports DHS' recommendation, it recommends that Citizens' proposed plant additions for 1989 and 1990 be excluded from rate base. Sweetwater contends that Citizens had undertaken plant modifications without any comprehensive engineering study or plan which might justify the modifications. Sweetwater believes that DHS' requested master plan will require Citizens to make future modifications in accordance with an approved plan.

Sweetwater also takes issue with Branch's analysis of Citizens' estimated plant additions of \$227,000 for 1989 and \$194,000 for 1990. Branch checked the reasonableness of Citizens'

estimated plant additions by applying the linear regression analysis, with appropriate inflation factor, to the last five years of recorded plant additions. Sweetwater maintains that Branch's method is flawed in its failure to recognize that the 1986 plant addition figure of \$216,000 represents, in large measure, a one-time extraordinary main replacement cost incurred due to a once-in-a-century rainstorm. Sweetwater contends that if the 1986 data point had been properly adjusted to discount for the extraordinary plant addition cost, Branch's linear regression analysis would have provided a different conclusion regarding the reasonableness of Citizens' estimated plant additions. Therefore, Sweetwater insists that Citizens has failed to justify its plant additions, and the Commission must exclude those from Citizens' rate base.

While Citizens does not oppose DHS' recommendation regarding a master plan, it does have certain reservations about it. Citizens believes that such an order should be applicable to deferrable projects and should not restrain Citizens' ability to deal with emergencies and to undertake necessary improvements.

Citizens believes that Sweetwater's recommendation regarding exclusion of plant additions from rate base are without merit. Citizens contends that Sweetwater's recommendations were made by a lay witness who is not equipped to evaluate Citizens' main replacement program. Citizens maintains that its witness D'Addio clearly explained that the district's main replacement program over the past several years has focused on severe leaks and has not required an engineering master plan.

#### Discussion

It is evident from the testimony provided at the PPHs and the evidentiary hearings that the Guerneville District has serious service problems. Citizens needs to take prompt action to remedy the problems in the district.

We believe that customers are entitled to water which meets the generally acceptable standards of taste, smell, and

appearance, is safe to drink, and does not harm clothes and plumbing. DHS' proposed master plan will be a significant step towards achieving that goal. Therefore, we will require Citizens to submit a report containing its short-term and long-term plans to improve the water service in the Guerneville District. The plans should list the proposed improvements in order of priority and should include a schedule as well as a cost estimate for making the improvements. Citizens should submit its report containing the plans within 120 days of the effective date of this order and should provide a copy of this report to Sweetwater and DHS. Branch should prepare a response to the report, after consultation with DHS, within 90 days of its issuance. Sweetwater and DHS may also file their response to the report within 90 days of its issuance. Upon completion of the report Citizens should notify each customer in the Guerneville District, through bill inserts, that the report will be made available to individual customers upon request. We will schedule further hearings to consider the proposals contained in Citizens' report and the responses. Since the proposals made in Citizens' report will have an impact on the Guerneville District revenue requirements, we will defer the rate revision for the Guerneville District (A.89-03-030) until the hearings are completed and the Commission issues a decision. The proceeding in A.89-03-030 will remain open to receive further evidence regarding service problems in the district.

Turning to the question of the impact on Citizens' earnings resulting from deferring the rate increase for the Guerneville District, we note that by its own estimation Citizens, at current rates, will achieve rates of return of 2.40% and 0.84% with net revenues of \$64,000 and \$23,300 (Tables 5 and 6) for 1989 and 1990, respectively. It is clear that even if the rate increase for the Guerneville District is deferred, Citizens will continue to earn a positive rate of return.

Having deferred the rate increase for the Guerneville District until the service problems are addressed, we believe we have adequately addressed all concerns raised by Sweetwater and DHS.

The Montara District OII

As directed by the Commission, Branch prepared its report on the rates and charges of the Montara District (Exhibit 29). Based on its analysis of results of operations, Branch has concluded that Citizens is not earning a rate of return in excess of the last authorized rate of return for the Montara District. Branch recommends that rates for the Montara District need not be revised. While Citizens does not accept every aspect of Branch's analysis of the results of operations, it concurs with Branch's recommendation regarding rate adjustment for the district.

As to the disputed issues regarding Branch's results of operations, Citizens and Branch believe that the issues should be addressed in the Montara District's next general rate case. We believe that since no rate adjustment is involved, consideration of other issues in the district's next general rate case will not jeopardize ratepayers' interest. Therefore, we will not address the issues in this decision.

Timing of Rate Changes

The decision in these proceedings is not expected until at least October 1989. Consequently, Citizens' and Francis' rate of return for the 12-month period ending September 30, 1989 will not exceed the authorized rate of return in this decision. Therefore, to simplify implementation of 1990 rates shortly after 1989 rates become effective, Citizens and Francis request a waiver from the requirement to demonstrate the need for the step increase in 1990. Branch agrees with the request. Branch also agrees that Citizens and Francis may file one advice letter for both increases.

The approach proposed by Citizens and Francis will reduce the expected rate shock because the rate increase for 1989, which

is significantly higher than the rate increase for 1990, will go into effect during the low use months of November and December. Also, the additional increase for 1990 will go into effect during the low use month of January. We will adopt the proposed method of implementing the rate changes.

Findings of Fact

1. On February 8, 1989, the Commission instituted an investigation on its motion into rates and charges of Citizens' Montara District.
2. On March 21, 1989, Citizens filed applications requesting rate increase for water service in its Felton, Sacramento, and Guerneville Districts. Also, on March 21, 1989, Francis filed an application requesting rate increase for water service.
3. Citizens' and Francis' applications were consolidated with the Montara District's investigation.
4. Francis is a wholly owned subsidiary of Citizens.
5. Citizens' and Francis' cost of capital is the same for ratemaking purposes in this proceeding.
6. Citizens proposes a capital structure with 64.48% equity and 35.52% debt.
7. Citizens' proposed capital structure is based on its actual consolidated equity ratio.
8. Branch proposes an imputed capital structure of 55% equity and 45% debt for ratemaking purposes.
9. Branch's proposed capital structure closely approximates the capital structure of California Class "A" water utilities and is representative of Citizens' California water operations.
10. Citizens is classified as a telecommunications utility by Value Line rating service.
11. Citizens' consolidated equity ratio though appropriate for a telecommunications utility is not appropriate for a water utility.



12. Based on Standard & Poor's rating benchmark, Citizens will be able to maintain its "AAA" rating if Branch's proposed capital structure is adopted for ratemaking purposes.

13. Citizens and Branch propose long-term debt costs of 7.95% and 8.48%, respectively.

14. Citizens' proposed cost of long-term debt reflects its consolidated long-term debt cost.

15. Citizens proposes to use its consolidated long-term debt cost for its California water operations.

16. Branch's proposed cost of long-term debt is the best available approximation of the long-term debt cost associated with Citizens' California water operations.

17. Citizens requests an ROE of between 14% and 15% for 1989 and 1990.

18. Branch recommends an ROE of 11.75% for 1989 and 1990.

19. Water utilities do not face the same business risk as telecommunications and energy utilities.

20. An ROE of 11.75% would provide Citizens a pretax interest coverage of 3.82x.

21. A pretax interest coverage of 3.82x combined with 45% debt will qualify Citizens a "AAA" rating according to the benchmark definition used by Standard & Poor.

22. An ROE of 11.75% will adequately cover Citizens' risks and would improve Citizens' chances of maintaining its "AAA" rating.

23. An ROE of 11.75% will produce an overall rate of return of 10.28% for 1989 and 1990.

24. Citizens proposes to add one more employee than Branch believes to be reasonable for test year 1990 in the Sacramento District.

25. Citizens requests the new employee to compensate for customer growth and the increase in workload expected as a result of new water quality requirements imposed by DHS.

26. Citizens' projected customer growth will be for flat rate service connections.

27. Flat rate customers do not require visits by service employees as the metered customers do.

28. DHS' new water quality requirements are likely to increase Citizens' capital expenditure, not its operating expenses.

29. Citizens has not justified the need for the new employee in test year 1990.

30. Branch believes that Citizens' proposed rate design is in accordance with the Commission's recommended guidelines.

31. Branch recommends that Special Condition No. 4 of tariff Schedule No. GU-1A for the Guerneville District should be revised so that:

- a. There is no time limit in which a customer may receive a refund if he/she terminates service and another customer pays for and is subsequently served at the same location for the remainder of the initial customer's annual service charge period.
- b. Under no circumstances should the utility receive payment for the same service more than once.

32. Branch recommends that new customers in the Guerneville District should be allowed to pay their annual service charge in installments.

33. It would be appropriate to allow new customers to pay their annual service charge in four equal installments paid every three months.

34. Citizens agrees with Branch's rate design recommendations.

35. The Guerneville District has serious service problems.

36. Citizens has not taken the necessary steps to address the service problems in the Guerneville District.

37. There is an immediate need to address the service problems in the Guerneville District.

38. DHS requests that Citizens be ordered to provide a master plan approved by the Commission and DHS before making any system improvements in the Guerneville District.

39. The master plan for system improvements proposed by DHS and its implementation is a necessary step to correct the service problems in the Guerneville District.

40. The steps needed to implement the master plan will have an impact on the Guerneville District's revenue requirement.

41. Even if the rate revision is deferred at this time, Citizens will continue to have a positive net revenue and rate of return in 1989 and 1990 for the Guerneville District.

42. In I.89-02-011, Branch recommends no rate adjustment for the Montara District.

43. Branch and Citizens agree that all ratemaking issues pertaining to the Montara District should be addressed in the district's next general rate case.

#### Conclusions of Law

1. Branch's proposed capital structure consisting of 55% equity and 45% debt is reasonable and should be adopted for ratemaking purposes.

2. A cost of 8.84% for Citizens' long-term debt is reasonable and should be adopted.

3. An ROE of 11.75% is just and reasonable for Citizens for 1989 and 1990.

4. Citizens should be required to file a master plan for system improvements in the Guerneville District.

5. Further evidentiary hearings should be held to address the service problem in the Guerneville District and the rate revision for the District should be deferred until the hearings are completed and the Commission issues a decision.

6. The Guerneville District's tariff Schedule No. GU-1A should be modified in accordance with Findings of Fact 31 and 32 when the district's rates are revised.

7. The applications should be granted to the extent provided by the following order.

8. Because of Citizens' and Francis' immediate need for rate relief, this order should be made effective today.

9. Rates in the Montara District should not be revised.

ORDER

IT IS ORDERED that:

1. Citizens Utilities Company of California (Citizens) is authorized to file revised tariff schedules for its Felton and Sacramento Districts attached to this decision as Appendixes A and B. These filings shall comply with General Order (GO) 96. The effective date of the revised schedule in Appendix A shall be 5 days after the date of filing. The effective date of the revised schedule in Appendix B shall be January 1, 1990.

2. Francis Land and Water Company is authorized to file revised tariff schedules attached to this decision as Appendixes A and B. This filing shall comply with GO 96. The effective date of the revised schedule in Appendix A shall be 5 days after the date of filing. The effective date of the revised schedule in Appendix B shall be January 1, 1990.

3. Within 120 days from the effective date of this order, Citizens shall file a report with the Commission's Docket Office including a master plan for improving service in the Guerneville District. A copy of the report shall be served to the Water Utilities Branch (Branch), the California Department of Health Services (DHS), and the Sweetwater Springs Water District (Sweetwater).

4. Branch shall review Citizens' report on the Guerneville District and, after consultation with DHS, file its response with the Commission's Docket Office to the report no later than 90 days after the report is made available.

5. DHS and Sweetwater may file their comments with the Commission's Docket Office on the report no later than 90 days after the report is made available.

6. Citizens shall notify each customer, through bill inserts, that the report on the Guerneville District will be available upon request.

7. Further hearing on Guerneville District's service problems will be held after Citizens' report and Branch's response are made available.

8. The rate revision for the Guerneville District shall be deferred until further Commission order following the hearings on the district's service problem.

9. The Guerneville District's tariff Schedule No. GU-1A shall be modified in accordance with Findings of Fact 31 and 32 when the district's rates are revised.

10. Rates in Citizens' Montara District will not be revised.

11. The proceedings in A.89-03-028, A.89-03-029, and I.89-02-011 are closed. The proceedings in A.89-03-030 and A.89-03-031 shall remain open for further evidence.

This order is effective today.

Dated \_\_\_\_\_, at San Francisco, California.

APPENDIX A-1  
1 of 3

Citizens Utilities Company of California  
Felton District

Felton Tariff Area

Schedule No. FE-1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Felton and vicinity, Santa Cruz County.

RATES

Per Meter  
Per Month

Quantity Rates:

For all water delivered, per 100 cu.ft. \$ 1.609 (C)

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 9.45	(I)
For 3/4-inch meter .....	13.50	
For 1-inch meter .....	18.90	
For 1 1/2-inch meter .....	32.40	
For 2-inch meter .....	51.30	
For 3-inch meter .....	97.25	
For 4-inch meter .....	132.30	(I)

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the quantity charge computed at the quantity rates.

Service Reestablishment Charge:

For each reestablishment of water service .... \$ 4.10

SPECIAL CONDITIONS

1. The service reestablishment charge is in addition to the charges calculated in accordance with this schedule and will be made each time an account is reopened for a customer at the time water service is to be restored after discontinuance at that customer's request.

(Continued)

APPENDIX A-1  
2 of 3

Citizens Utilities Company of California  
Felton District  
Schedule No. FE-4

Felton Tariff Area

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service furnished to privately owned fire protection systems.

TERRITORY

Felton and vicinity, Santa Cruz County. (T)

RATES

Per Month

For each 4-inch diameter service connection	\$ 12.95	(I)
For each 6-inch diameter service connection	19.50	
For each 8-inch diameter service connection	26.00	
For each 10-inch diameter service connection	51.95	
For each 12-inch diameter service connection	73.10	(I)

SPECIAL CONDITIONS

1. The customer will pay without refund the entire cost of installing the service connection.
2. The maximum diameter of the service connection will not be more than the diameter of the main to which the service is connected.
3. The customer's installation must be such as to separate effectively the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check or other/similar device acceptable to the utility which will indicate the use of water. Any unauthorized use will be charged for at the regular established rate for general metered service, and/or may be grounds for the utility's discontinuing the fire sprinkler service without liability to the utility.
4. There shall be no cross-connection between the fire sprinkler system supplied by water through the utility's fire sprinkler service to any other source of supply without the specific approval of the utility. This specific

(Continued)

APPENDIX A-1  
3 of 3

Citizens Utilities Company of California  
Felton District

Schedule No. FE-6M

Felton Tariff Area

METERED RESALE SERVICE

APPLICABILITY

Applicable to all metered resale service.

TERRITORY

Felton and vicinity, Santa Cruz County.

RATES

Quantity Rates:

Per Meter  
Per Month

For all water delivered, per 100 cu.ft. \$1.609 (I)

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 9.45	(I)
For 3/4-inch meter .....	13.50	
For 1-inch meter .....	18.90	
For 1 1/2-inch meter .....	32.40	
For 2-inch meter .....	51.30	
For 3-inch meter .....	97.25	
For 4-inch meter .....	132.30	(I)

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the quantity charge computed at the quantity rates.

Service Reestablishment Charge:

For each reestablishment of water service .... \$ 4.10

(END OF APPENDIX A-1)



APPENDIX B-1  
1 of 3

Citizens Utilities Company of California  
Felton District

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

Effective Date  
1-1-90

SCHEDULE FE-1

Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.35
For 3/4-inch meter .....	0.50
For 1-inch meter .....	0.70
For 1 1/2-inch meter .....	1.15
For 2-inch meter .....	1.85
For 3-inch meter .....	3.50
For 4-inch meter .....	4.75

Quantity Rates:

For all water delivered, per 100 cu.ft. 0.057

APPENDIX B-1  
2 of 3

Citizens Utilities Company of California  
Felton District

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

Effective Date  
1-1-90

SCHEDULE FE-4

Private Fire Protection Service:

For each 4-inch diameter service connection	\$ 0.45
For each 6-inch diameter service connection	0.70
For each 8-inch diameter service connection	0.95
For each 10-inch diameter service connection	1.85
For each 12-inch diameter service connection	2.65

APPENDIX B-1  
3 of 3

Citizens Utilities Company of California  
Felton District

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

Effective Date  
1-1-90

SCHEDULE FE-6M

Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.35
For 3/4-inch meter .....	0.50
For 1-inch meter .....	0.70
For 1 1/2-inch meter .....	1.15
For 2-inch meter .....	1.85
For 3-inch meter .....	3.50
For 4-inch meter .....	4.75

Quantity Rates:

For all water delivered, per 100 cu.ft. 0.057

(END OF APPENDIX B-1)

APPENDIX C-1  
1 of 2

Citizens Utilities Company of California  
Felton District

ADOPTED QUANTITIES

Name of Company: Citizens Utilities Company of California

District: Felton

1. Net-to-Gross Multiplier: 1.68325
2. Federal Tax Rate: 34.12%
3. State Tax Rate: 9.3%
4. Uncollectibles Rate: 0.576%

Offsetable Items

Test Years

	<u>1989</u>	<u>1990</u>
5. <u>Purchased Power</u>		
A. KWh/Ccf- Electric Pump Electric Boosters	0.98	0.98
B. KWh (Total)	183,733	184,014
C. Average Cost/KWh	\$ 0.11043	\$ 0.11043
D. Total Cost of Power	\$ 20,289	\$ 20,321
6. Ad Valorem Taxes	\$ 14,702	\$ 14,570

APPENDIX C-1  
2 of 2

Citizens Utilities Company of California  
Felton District

ADOPTED QUANTITIES

7. Number of Services - Meter Size

	<u>1989</u>	<u>1990</u>
5/8 x 3/4	1,270	1,272
3/4	2	2
1	17	17
1 1/2	6	6
2	15	15
3	1	1
4	1	1
	-----	-----
Total	1,312	1,314

8. Metered Water Sales - Ccf

Total water delivered	187,485	187,771
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9. Private Fire Protection Services - Meter Size

4-inch or smaller	1	1
6-inch	6	6
	---	---
Total	7	7

(END OF APPENDIX C-1)

## APPENDIX D-1

Citizens Utilities Company of California  
Felton District

## Income Tax Calculations

	<u>1989</u> (Thousands of Dollars)	<u>1990</u> (Thousands of Dollars)
Operating Revenues	489.1	506.6
Deductions		
O & M Expense	156.7	168.8
Depr charged to O & M	(5.3)	(6.7)
A & G Expense	113.0	116.4
Taxes other than Income	22.6	23.4
Allocation of Interest	32.4	35.0
Subtotal Deductions	319.4	336.9
Taxable Income Before Tax Depreciation	169.7	169.7
State Tax Depreciation	54.2	49.3
State Taxable Income	115.5	120.4
State Income Tax	10.7	11.2
Taxable Income Before Tax Depreciation	169.7	169.7
Federal Tax Depreciation	45.3	43.7
State Income Tax	10.7	11.2
Federal Taxable Income	113.7	114.8
Federal Income Tax	38.8	39.2
Amortization of I.T.C.	2.1	2.1
Reversal of S. Ga. Method	.7	.7
Net Federal Income Tax	36.0	36.4
Total Income Taxes	46.7	47.6
Income Tax Rates		
State	9.30%	9.30%
Federal	34.12%	34.12%

(END OF APPENDIX D-1)

## APPENDIX E-1

Citizens Utilities Company of California  
Felton District

Comparison of typical bills for residential metered customers of various usage level and average usage level at present and authorized rates for the year 1989.

General Metered Service

(5/8 x 3/4-inch meters)

-----			
: Monthly Usage :	At Present :	At Authorized :	Percent :
: Monthly Usage :	Rates :	Rates :	Increase :
-----			
(100 Cubic Feet)			
0	\$ 7.00	9.45	35.0 %
5	13.42	17.50	30.4
10	20.77	25.54	23.0
12 (Average)	23.71	28.76	21.3
20	35.47	41.63	17.4
30	50.17	57.72	15.1
50	79.57	89.90	13.0
60	94.27	105.99	12.4
70	108.97	122.08	12.0
80	123.67	138.17	11.7
90	138.37	154.26	11.5
100	153.07	170.35	11.3
200	300.07	331.25	10.4
300	447.07	492.15	10.1

(END OF APPENDIX E-1)

APPENDIX A-2  
1 of 3

Citizens Utilities Company of California  
Sacramento District

Schedule No. SAC-1

Sacramento District

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The unincorporated communities, subdivisions, and adjacent areas generally known as Cordova, Rosemont, Parkway Estates, Lindale, Foothill Farms, Arlington Heights, Linwood, Loretto Heights, Arden Highlands, Arden Estates, El Camino Terrace, El Camino Square and the City of Isleton and vicinity in Sacramento County and unincorporated areas in Placer County.

RATES

Per Meter  
Per Month

Quantity Rates:

For all water delivered, per 100 cu.ft. \$ 0.383 (C)

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 6.75	(I)
For 3/4-inch meter .....	7.55	
For 1-inch meter .....	10.20	
For 1 1/2-inch meter .....	13.80	
For 2-inch meter .....	18.70	
For 3-inch meter .....	32.75	
For 4-inch meter .....	46.80	
For 6-inch meter .....	77.20	
For 8-inch meter .....	114.65	(I)

The Service Charge is a readiness-to-serve charge which is applicable to all metered service and to which is added the monthly charge computed at the Quantity Rates.



APPENDIX A-2  
2 of 3Citizens Utilities Company of California  
Schedule No. SAC-2R

## Sacramento District

RESIDENTIAL FLAT RATE SERVICEAPPLICABILITY

Applicable to all residential water service on a flat rate basis.

TERRITORY

The unincorporated communities, subdivisions, and adjacent areas generally known as Cordova, Rosemont, Parkway Estates, Lindale, Foothill Farms, Arlington Heights, Linwood, Loretto Heights, Arden Highlands, Arden Estates, El Camino Terrace, El Camino Square and vicinity in Sacramento County and unincorporated areas in Placer County.

RATES

Per Service (T)  
Per Month

For a single-family residence, including premises, having the following areas:

4,500 sq. ft. or less .....	\$ 8.90	(I)
4,501 to 8,000 sq. ft. ....	12.00	(C)

For each additional residence on the same premises and served from the same service connection .....	8.00	(I)
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For each 1,000 sq. ft. or part of the area in excess of 8,000 sq. ft. ....	0.35	(I)
--	------	-----

SPECIAL CONDITIONS

1. The above residential flat rate charges apply to service connections not larger than 3/4 inch in diameter.
2. All service not covered by the above classification will be furnished only on a meter basis.
3. A meter may be installed at option of utility or customer for above classifications in which event service thereafter will be furnished only on the basis of Schedule No. 1, General Metered Service. After a meter is installed, metered service must be continued for at least 12 months before service will again be furnished at flat rates.

APPENDIX A-2

3 of 3

Citizens Utilities Company of California  
Schedule No. SAC-4

Water District for Sacramento County  
PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service rendered for private fire protection purposes.

TERRITORY

The unincorporated communities, subdivisions, and adjacent areas generally known as Cordova, Rosemont, Parkway Estates, Lindale, Foothill Farms, Arlington Heights, Linwood, Loretto Heights, Arden Highlands, Arden Estates, El Camino Terrace, El Camino Square and the City of Isleton and vicinity in Sacramento County and the unincorporated community of Lincoln Oaks and vicinity in Sacramento and Placer Counties.

RATES

Per Month

For each 4-inch connection or smaller .....	\$ 14.25	(I)
For each 6-inch connection .....	21.40	
For each 8-inch connection .....	28.50	
For each 10-inch connection .....	59.30	
For each 12-inch connection .....	83.10	(I)

SPECIAL CONDITIONS

1. The customer will pay without refund the entire cost of installing the service connection.
2. The maximum diameter of the service connection will not be more than the diameter of the main to which the service is connected.
3. The customer's installation must be such as to effectively separate the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check with by-pass meter or other similar device acceptable to the company which will indicate the use of water. The utility may require a bi-annual test of the detector check installation at customer cost as a condition of furnishing service. Any unauthorized use will be charged for at the regular established rate for general metered service, and/or may be grounds for the company's discontinuing the fire sprinkler service without liability to the company.
4. The company will supply only such water at such pressure as may be available from time to time as the result of its normal operation of the system.

(END OF APPENDIX A-2)

APPENDIX B-2  
1 of 3Citizens Utilities Company of California  
Sacramento District

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

Effective Date  
1-1-90

SCHEDULE SAC-1

## Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.20
For 3/4-inch meter .....	0.20
For 1-inch meter .....	0.30
For 1 1/2-inch meter .....	0.40
For 2-inch meter .....	0.55
For 3-inch meter .....	0.95
For 4-inch meter .....	1.40
For 6-inch meter .....	2.30
For 8-inch meter .....	3.40

## Quantity Rates:

For all water delivered, per 100 cu.ft. 0.012

APPENDIX B-2  
2 of 3

Citizens Utilities Company of California  
Sacramento District

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

Effective Date  
1-1-90

SCHEDULE SAC-2R

Residential Flat Rate Service:

For a single-family residence, including premises, having the following areas:

4,500 sq. ft. or less .....	\$	0.25
4,501 to 8,000 sq. ft. ....		0.35

For each additional residence on the same premises and served from the same service connection .....

0.25

For each 1,000 sq. ft. or part of the area in excess of 8,000 sq. ft. ....

0.01

APPENDIX B-2  
3 of 3

Citizens Utilities Company of California  
Sacramento District

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

Effective Date  
1-1-90

SCHEDULE SAC-4

Private Fire Protection Service:

For each 4-inch connection, or smaller	...	\$ 0.40
For each 6-inch connection	.....	0.70
For each 8-inch connection	.....	0.95
For each 10-inch connection	.....	1.25
For each 12-inch connection	.....	1.75

(END OF APPENDIX B-2)

APPENDIX C-2  
1 of 2

Citizens Utilities Company of California  
Sacramento District

ADOPTED QUANTITIES

Name of Company: Citizens Utilities Company of California

District: Sacramento

1. Net-to-Gross Multiplier: 1.67942
2. Federal Tax Rate: 34.12%
3. State Tax Rate: 9.30%
4. Uncollectibles Rate: 0.164%
5. Franchise Tax Rate: 2.0%

<u>Offsetable Items</u>		<u>Test Years</u>	
		<u>1989</u>	<u>1990</u>
6. <u>Purchased Power</u>			
A. KWh/Ccf- Electric Pump		0.980	0.980
Electric Boosters			
B. KWh (Total)		18,671,677	19,304,815
C. Average Cost/KWh		\$ 0.06978	\$ 0.06978
D. Total Cost of Power		\$ 1,302,895	\$ 1,347,090
7. Ad Valorem Taxes		\$ 214,850	\$ 218,647

APPENDIX C-3  
2 of 2Citizens Utilities Company of California  
Sacramento DistrictADOPTED QUANTITIES8. Number of Services - Meter Size

	<u>1989</u>	<u>1990</u>
5/8 x 3/4	1040	1099
3/4	3	4
1	1818	1821
1 1/2	461	473
2	1250	1342
3	154	157
4	50	53
6	19	20
8	6	6
	----	----
Total	4801	4975

9. Metered Water Sales - Ccf

Total water delivered	5,194,552	5,433,618
-----------------------	-----------	-----------

10. Private Fire Protection Services - Meter Size

4-inch or smaller	44	48
6-inch	147	163
8-inch	194	211
10-inch	21	23
12-inch	4	4
	---	---
Total	410	449

11. Flat Rate Residential Services

4,500 sq. ft. & Less	4,427	4,696
4,501 to 8,000	25,594	26,817
8,001 to 9,000	3,428	3,485
9,001 to 10,000	1,821	1,850
10,001 to 11,000	1,272	1,293
11,001 to 12,000	626	636
12,001 to 13,000	357	365
13,001 & Larger	592	608
	-----	-----
Subtotal	38,117	39,750
Additional Units	4	4
	-----	-----
Total	38,121	39,754

(END OF APPENDIX C-2)

## APPENDIX D-2

Citizens Utilities Company of California  
Sacramento District

## Income Tax Calculations

	1989 (Thousands of Dollars)	1990 (Thousands of Dollars)
Operating Revenues	8,364.2	8,986.1
Deductions		
O & M Expense	2,741.5	2,912.3
Depr charged to O & M	(65.4)	(73.4)
A & G Expense	1,970.2	2,092.8
Taxes other than Income	296.4	307.6
Allocation of Interest	366.7	380.0
Subtotal Deductions	5,309.4	5,619.3
Taxable Income Before Tax Depreciation	3,054.8	3,366.8
State Tax Depreciation	1,326.1	1,322.7
State Taxable Income	1,728.7	2,044.1
State Income Tax	160.8	190.1
Taxable Income Before Tax Depreciation	3,054.8	3,366.8
Federal Tax Depreciation	1,094.9	1,211.8
State Income Tax	160.8	190.1
Federal Taxable Income	1,799.1	1,964.9
Federal Income Tax	613.9	670.4
Amortization of I.T.C.	48.8	48.8
Reversal of S. Ga. Method	15.5	15.5
Net Federal Income Tax	549.6	606.1
Total Income Taxes	710.4	796.2
Income Tax Rates		
State	9.30%	9.30%
Federal	34.12%	34.12%

(END OF APPENDIX D-2)



## APPENDIX E-2

Citizens Utilities Company of California  
Sacramento District

Comparison of typical bills for residential metered customers of various usage level and average usage level at present and authorized rates for the year 1989.

General Metered Service

(5/8 x 3/4-inch meters)

-----			
: Monthly Usage :	At Present :	At Authorized :	Percent :
: Monthly Usage :	Rates :	Rates :	Increase :
-----			
(100 Cubic Feet)			
0	\$ 5.75	6.75	17.4 %
5	7.14	8.67	21.3
10	8.79	10.58	20.4
15	10.43	12.50	19.8
20	12.08	14.41	19.3
23 (Average)	13.07	15.56	19.1
30	15.37	18.24	18.7
50	21.95	25.90	18.0
60	25.24	29.73	17.8
70	28.53	33.56	17.6
80	31.82	37.39	17.5
90	35.11	41.22	17.4
100	38.40	45.05	17.3
200	71.30	83.35	16.9
300	104.20	121.65	16.8

(END OF APPENDIX E-3)

APPENDIX A-3  
1 of 2

Francis Land & Water Company

Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

The City of Ferndale and adjacent unincorporated territory,  
Humboldt County.

RATES

Quantity Rates:

Per Meter  
Per Month

For all water delivered, per 100 cu.ft. \$ 1.980 (C)

Service Charge:

For 5/8 x 3/4-inch meter .....	\$ 8.55	(I)
For 3/4-inch meter .....	10.45	
For 1-inch meter .....	13.40	
For 1 1/2-inch meter .....	17.85	
For 2-inch meter .....	23.75	
For 3-inch meter .....	44.65	
For 4-inch meter .....	60.95	
For 6-inch meter .....	102.60	
For 8-inch meter .....	153.15	(I)

The Service Charge is a readiness-to-serve charge (T)  
which is applicable to all metered service and to  
which is added the quantity charge computed at the  
Quantity Rates. (T)

APPENDIX A-3  
2 of 2

Francis Land & Water Company

Schedule No. 4

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

Applicable to all water service rendered for private fire protection purposes.

TERRITORY

The City of Ferndale and adjacent unincorporated territory, Humboldt County.

RATES

Per Month

For each 4-inch connection, or smaller .....	\$ 14.25	(I)
For each 6-inch connection .....	21.40	
For each 8-inch connection .....	28.50	
For each 10-inch connection .....	59.30	
For each 12-inch connection .....	83.10	(I)

SPECIAL CONDITIONS

1. The customer will pay without refund the entire cost of installing the service connection.
2. The maximum diameter of the service connection will not be more than the diameter of the main to which the service is connected.
3. Where service connection is 6 inches in diameter or larger and supplied from a water main within 1,000 feet of a 10- or 12-inch main, the rate will be based on the size of the main from which such connection is supplied.
4. The customer's installation must be such as to effectively separate the fire sprinkler system from that of the customer's regular water service. As a part of the sprinkler service installation there shall be a detector check or other similar device acceptable to the company which will indicate the use of water. Any unauthorized use will be charged for at the regular established rate for general metered service, and/or may be grounds for the company's discontinuing the fire sprinkler service without liability to the company.

(continued)

APPENDIX B-3  
1 of 2

## Francis Land &amp; Water Company

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

Effective Date1-1-90SCHEDULE 1

## Service charge:

For 5/8 x 3/4-inch meter .....	\$ 0.20
For 3/4-inch meter .....	0.25
For 1-inch meter .....	0.30
For 1 1/2-inch meter .....	0.40
For 2-inch meter .....	0.55
For 3-inch meter .....	1.00
For 4-inch meter .....	1.35
For 6-inch meter .....	2.30
For 8-inch meter .....	3.45

## Quantity Rates:

For all water delivered, per 100 cu.ft. 0.044

APPENDIX B-3  
2 of 2

Francis Land & Water Company

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

Effective Date  
1-1-90

SCHEDULE 4

Private Fire Protection Service:

For each 4-inch connection, or smaller .....	\$ 0.30
For each 6-inch connection .....	0.50
For each 8-inch connection .....	0.65
For each 10-inch connection .....	1.35
For each 12-inch connection .....	1.85

(END OF APPENDIX B-3)

APPENDIX C-3  
1 of 2

Francis Land & Water Company

ADOPTED QUANTITIES

Name of Company: Francis Land & Water Company

1. Net-to-Gross Multiplier: 1.67471
2. Federal Tax Rate: 34.12%
3. State Tax Rate: 9.3%
4. Uncollectibles Rate: 0.070%

<u>Offsetable Items</u>		<u>Test Years</u>	
		<u>1989</u>	<u>1990</u>
5. <u>Purchased Power</u>			
A. KWh/Ccf- Electric Pump		0.592	0.592
	Electric Boosters		
B. KWh (Total)		57,541	58,443
C. Average Cost/KWh		\$ 0.10726	\$ 0.10726
D. Total Cost of Power		\$ 6,172	\$ 6,269
6. Ad Valorem Taxes		\$ 7,174	\$ 5,761

APPENDIX C-3  
2 of 2

Francis Land & Water Company

ADOPTED QUANTITIES

7. Number of Services - Meter Size

	<u>1989</u>	<u>1990</u>
5/8 x 3/4	656	661
3/4	4	4
1	10	10
1 1/2	1	1
2	3	3
3	0	0
4	0	0
6	1	1
8	1	1
	<u>---</u>	<u>---</u>
Total	676	681

8. Metered Water Sales - Ccf

Total water delivered	83,804	85,118
-----------------------	--------	--------

9. Private Fire Protection Services - Meter Size

4-inch or smaller	3	3
6-inch	0	0
	<u>---</u>	<u>---</u>
Total	3	3

(END OF APPENDIX C-3)

## APPENDIX D-3

Francis Land & Water Company  
Income Tax Calculations

	<u>1989</u> (Thousands of Dollars)	<u>1990</u> (Thousands of Dollars)
Operating Revenues	240.0	248.6
Deductions		
O & M Expense	82.4	85.6
Depr charged to O & M	(5.5)	(6.3)
A & G Expense	70.0	72.4
Taxes other than Income	11.3	10.1
Allocation of Interest	21.7	22.2
Subtotal Deductions	179.9	184.0
Taxable Income Before Tax Depreciation	60.1	64.5
State Tax Depreciation	16.5	15.6
State Taxable Income	43.6	48.9
State Income Tax	4.1	4.6
Taxable Income Before Tax Depreciation	60.1	64.5
Federal Tax Depreciation	21.5	22.3
State Income Tax	4.1	4.5
Federal Taxable Income	34.5	37.7
Federal Income Tax	11.8	12.9
Amortization of I.T.C.	1.5	1.5
Reversal of S. Ga. Method	.4	.4
Net Federal Income Tax	9.9	11.0
Total Income Taxes	14.0	15.6
Income Tax Rates		
State	9.30%	9.30%
Federal	34.12%	34.12%

(END OF APPENDIX D-3)



## APPENDIX E-3

## Francis Land &amp; Water Company

Comparison of typical bills for residential metered customers of various usage level and average usage level at present and authorized rates for the year 1989.

General Metered Service

(5/8 x 3/4-inch meters)

-----			
Monthly Usage	At Present Rates	At Authorized Rates	Percent Increase
-----			
(100 Cubic Feet)			
0	\$ 5.75	8.55	48.7 %
5	11.95	18.45	54.4
10 (Average)	19.65	28.35	44.3
15	27.35	38.25	39.9
20	35.05	48.15	37.4
30	50.45	67.95	34.7
50	81.25	107.55	32.4
60	96.65	127.35	31.8
70	112.05	147.15	31.3
80	127.45	166.95	31.0
90	142.85	186.75	30.7
100	158.25	206.55	30.5
200	312.25	404.55	29.6
300	466.25	602.55	29.2

(END OF APPENDIX E-3)