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Decision 90-12-069 December 19, 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ORIGINAL

In the Matter of the Application of Azusa Valley Water Company (U-325W) for authorization to increase rates and charges for water service.	Application 90-03-015 (Filed March 15, 1990)

David A. Ebershoff, Attorney at Law, and Edward R. Heck, for Azusa Valley Water Company.
Izetta Jackson, Attorney at Law, and Willem R. Van Lier, for Water Utilities Branch and Division of Ratepayer Advocates.

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O P I N I O N

Summary of Decision

This decision authorizes Azusa Valley Water Company (Azusa) to increase rates for water service provided in test years 1991 and 1992, as well as attrition year 1993. The decision authorizes a constant return on equity (ROE) of 12.25% during the three-year period, which produces rates of return of 11.12%, 11.17%, and 11.20%, respectively, during 1991, 1992, and 1993. Increases amount to $483,000 or 17.7% in 1991, and $144,000 or 4.5% in 1992. An attrition year increase in 1993 of $153,000 is authorized.

By this application Azusa seeks an order of the Commission authorizing it to increase rates and charges for water service.

The company has requested authority to increase rates which will provide increased revenues during test year 1991 of $592,442 (21.91%), during test year 1992 of $331,508 (10.03%) over 1991 revenues, and in attrition year 1993 $312,506 (8.57%) over 1992 revenues. Requested rates of return for the three respective years are 12.71%, 12.61%, and 12.70%, based upon a constant requested return on common equity of 13.80%.

Duly noticed evidentiary hearings were held in Azusa on July 16, 17, and 18, and in Los Angeles on July 26, 1990 before Administrative Law Judge (ALJ) John Lemke. A public participation hearing (PPH) was conducted in Azusa on July 9. Only a few customers appeared at the PPH, and none expressed dissatisfaction with the quality of the water or the service. A company spokesman observed during the conduct of the PPH that Azusa's rates are the lowest in the San Gabriel Valley, and, so far as he is aware, among the very lowest rates in the southern portion of the state. The matter was originally to have been submitted with the filing of concurrent briefs on August 13. However, by agreement between

Azusa and the Commission's Water Utilities Branch (Branch) the Rate Case Processing Plan schedule was amended. Under the agreement, which was confirmed by written ruling of the ALJ, the date for filing of concurrent briefs was changed to September 17, 1990.

Description of Company

Azusa's service area includes a portion of the cities of Azusa, Covina, Glendora, Irwindale, West Covina, and adjoining unincorporated territory within Los Angeles County. The area extends from the foothills of the San Gabriel Mountains on the north to the San Bernardino Freeway on the south. As of December 31, 1988 the company had 14,248 active service connections serving about 50,000 people.

The company staff of 18 employees provides the daily management of the water system. Outside services are employed for system improvement analysis requiring engineering, auditing, and legal services.

Elevation of the service area varies from 370 feet above sea level in the southwest sector to 700 feet in the northeast corner. To insure adequate service pressures, Azusa has divided its distribution system into three service zones. Automatic pressure regulating valves, pressure sustaining valves and/or check valves are installed between each service zone to permit water to flow between zones in the event that the water requirement of a specific zone is greater than its source of supply.

Sources of Supply

The company's water supply is obtained from groundwater wells located in the San Gabriel Basins, from surface run-off water diverted from the San Gabriel River, and via an interconnection with the Metropolitan Water District of Southern California (MWD). Two wells, Nos. 6 and 8, are located in the Main San Gabriel Basin, and two, Nos. 4 and 5, are located in the Intermediate San Gabriel Basin.

Surface water from the San Gabriel River is treated at the company's Canyon Filtration Plant situated at the mouth of the San Gabriel Canyon on the east side of San Gabriel Canyon Road. Supply from this source can flow by gravity to all service zones.

Under normal operating conditions, groundwater from Wells Nos. 4 and 5, as well as river water treated by the Canyon Filtration Plant, supplies the upper two service zones, Zones 1 and 2. When system demand exceeds normally available supply to these zones, water is supplied by the Griffith boosters from Griffith Reservoir. Wells Nos. 6 and 8 supply Griffith and Wilson Reservoirs, located near the upper end of Zone 2.

Well No. 8 was drilled in 1987 to replace Well No. 7, because of the drop in production from 750 gallons per minute (gpm) to less than 450 gpm and increased nitrate contamination. It was drilled to a depth of 1,230 feet, about 230 feet deeper than Well No. 7, and is currently producing 3,000 gpm. Water produced from Well No. 6 exceeds the current nitrate Maximum Contaminant Level of 45 parts per million, and the pump may be operated only as long as the water can be effectively blended with other low nitrate water supplies delivered to Wilson Reservoir. Well No. 6 has not been operated for over a year and is currently on standby status.

The company has four reservoirs within the system providing distribution and fire fighting storage. Current total storage capacity is 12.9 million gallons. These reservoirs are the Heth, with a capacity of 1.0 million gallons (mg), Griffith, capacity 5.0 mg, Wilson, capacity 6.5 mg, and Gladstone, capacity 0.4 mg.

Conservation

Azusa has an ongoing program to reinforce its customers' awareness of the beneficial effects of water and energy conservation. These include:

1. Water conservation kits distributed to all customers responding to repeated offers of the kits. The kits continue to be

available to customers desiring them and a notice offering the free kits has been posted in the company's office since 1977.

2. Bill inserts describing methods of leak detection, proper irrigation techniques for landscaping, promotion of full clothes washer and dishwasher loads and use and installation of toilet flush tank reservoirs have been distributed to all customers continuously since 1977.

3. Conservation messages are printed directly on customers' bills and payment return envelopes, and company postage meter tapes contain the message "Saving Water Saves Energy."

Azusa maintains an ongoing effort to sensitize its employees to the need for water conservation and has implemented the following program:

1. Reduced main flushing.
2. Reduced topping of its reservoirs.
3. A continuous leak detection program.
4. Minimized irrigation of company landscaping.

The company has also lowered Zone 3 distribution pressures from a range of 70 to 100 pounds per square inch (psi) to a still very acceptable pressure range of 60 to 90 psi, and installed connecting mains where feasible to eliminate deadends, thereby reducing flushing associated with noncirculating mains.

Issues

During the proceeding Azusa and Branch consulted regarding their respective test year estimates. As a result Azusa has agreed with some of Branch's estimates. A comparison exhibit (Exhibit 32) was received on August 10 and received into evidence. The issues to be addressed in the concurrent briefs are discussed as follows:

I. Cost of Capital and Rate of Return

Rate of return is a function of the cost of capital, consisting of weighted costs of debt, preferred equity, and common equity.

Evidence concerning Azusa's estimated cost of capital was presented through the testimony of Marvin Winer, Chief Economist with Brown and Caldwell. The company's revised recommendations concerning cost of capital are set forth in Exhibit 13, and are shown below:

TABLE 12-13

Rates of Return on Pro Forma
EOY Capital Structures, 1991 and 1992

Item	1991 Capital ratio	1991 Cost factor	1991 Wtd cost totals	1992 Capital ratio	1992 Cost factor	1992 Wtd cost totals
Long-term debt	33.21%	12.02%	3.99%	31.80%	12.03%	3.83%
Preferred stock	10.27%	3.29%	0.34%	9.87%	3.29%	0.32%
Common equity	56.52%	13.80%	7.80%	58.32%	13.80%	8.05%
Total	100.00%	29.11%	12.13%	100.00%	29.11%	12.20%

TABLE 12-14

Rates of Return on Pro Forma
EOY Capital Structures, 1993

Item	1993 Capital ratio	1993 Cost factor	1993 Wtd cost totals
Long-term debt	30.56%	12.03%	3.68%
Preferred stock	9.53%	3.29%	0.31%
Common equity	59.91%	13.80%	8.27%
Total	100.00%	29.12%	12.26%

Branch's evidence regarding cost of capital was presented through Division of Ratepayer Advocates witness C. B. Brooker. His recommendations concerning capital ratio, cost factors, and weighted costs are contained in Exhibit 17, and are the same for both test years 1991 and 1992, as well as for attrition year 1993:

	Capital Ratio	Cost Factor	Weighted Cost
Long-Term Debt	36.00%	11.62%	4.16%
Preferred Equity	10.00%	3.29%	0.33%
Common Equity	54.00%	12.00%	6.48%
Total	100.00%		10.99%

Capital Structure

Brooker's recommended capital structure is an imputed one, whereas the company's recommendation is based upon actual ratios, as set forth in Exhibit 13. Thus, Azusa's actual capital structure consists of 56.52% common equity, 10.27% preferred equity, and 33.21% debt in 1991; 58.32% common equity, 9.87% preferred equity, and 31.80% debt in 1992; and 59.91% common equity, 9.53% preferred equity, and 30.56% debt in 1993.

Branch believes that an imputed capital structure is necessary for ratemaking purposes in order to bring Azusa more in line with a more typical capital structure, one comparable with other utilities operating within California. It argues that Azusa's ratepayers benefit very little, if at all, from high equity ratios, and should not have to pay for an unwarranted level of equity. Brooker testified that as debt is paid down over the test period, the amount of equity capitalization increases, creating too high a level, for ratemaking purposes, of equity, and thereby causing lower ROE recommendations.

Brooker maintains that his recommendation concerning imputation of a capital structure is consistent with Commission policy. He refers us to Decision (D.) 89-09-048 (San Gabriel

Valley Water Company) and to D.90-02-045 (Apple Valley Ranchos Water Company).

Azusa argues that if adopted, the imputed capital structure will remove about $20,000 in revenues from the company during the test years and attrition year. In view of the uncertainties generally besetting the industry, Azusa has suspended dividend payments. These uncertainties include problems stemming from the continuing drought, potential water contamination, and Environmental Protection Agency/Department of Health Service regulations. The company asserts it can little afford to sustain unnecessarily reduced revenues.

After consideration, we believe there is no need to apply an imputed capital structure for purposes of this proceeding. We arrive at this conclusion because that is a "remedy" which may be applied when there is an already comparatively high average cost of water prevailing within a district. Such is not the case in this application. Azusa's rates are among the very lowest in southern California, and even in the state. While Azusa's equity ratio is quite high when compared with other utilities, we see no need to impute a lower one here. Use of an imputed structure would affect an average bill only negligibly.

Long-Term Debt

Azusa requests a cost of debt of 12.02% in 1991, and 12.03% in 1992 and 1993. Branch urges adoption of a constant debt cost of 11.62%.

Subsequent to the filing of its application and workpapers, Azusa modified its request by including a proposal to restructure its long-term debt (LTD). The company has negotiated a long-term loan through Wells Fargo Bank in the amount of $2,100,000 in 1990. The loan incorporates a variable interest rate set at the bank's prime rate, plus 75 basis points.

The bank and Azusa have forecasted 11.25% for the prime rate, added the 75 basis points and used 12.00% as an average

interest rate over the period November 1990 through 1993. Currently, the prime commercial loan rate is 10.00%.

Brooker testified that in order to ascertain whether a company can comfortably repay its debt obligations, regulators and investors rely upon the bond rating assigned to a company by bond rating agencies. He has illustrated in Table 6 of Exhibit 14 Standard and Poor's recommended coverage and capitalization ratios for "A" through "AAA" rated water, energy and telecommunications utilities, i.e. companies enjoying sound financial health. The table is reproduced below.

Table No. 6

AZUSA VALLEY WATER COMPANY

Comparison of Azusa's Debt Leverage, Pre-tax Interest Coverage and Net Cash Flow to Water, Energy and Telecommunications Companies using Standard & Poor's Rating Benchmark Definitions

Criteria	Debt Rating AAA	AA	A	Azusa
Water				
Total Debt/Capital	Less than 48%	46% -54%	52% - 60%	35.19%
Pretax Interest Coverage	More than 3.75x	3x - 4.25x	2x - 3.25x	3.55
Net Cash Flow/ Capital	More than 7%	5% - 8%	3% - 6%	9%
Energy				
Total Debt/Capital	Less than 41%	39% -46%	44% - 52%	
Pretax Interest Coverage	More than 4.5x	3.5x - 5x	2.5x - 4x	
Net Cash Flow/ Capital	More than 10%	7% - 11%	5% - 8%	
Telecommunications - "Low" Risk				
Total Debt/Capital	-	Less than 47%	45% - 57%	
Pretax Interest Coverage	-	More than 4x	3.0x - 4.5x	
Net Cash Flow/ Capital	-	More than 25%	20% - 30%	

Source: Standard & Poor's Corporation, May 1988
Azusa's Annual Report to the Commission

Azusa would compare very favorably to the water utilities. Its debt/capital ratio of 35.19% indicates that it could be considered "AAA." The pretax interest coverage of 3.55x would place it in the "AA" category, while 9% Net Cash Flow/Capital would also indicate a "AAA" rating. During the hearings the prime commercial loan rate was about 10.00%, and has continued at about that level. Azusa's request in its recent application (Application (A.) 90-09-069) to refinance debt is based upon the prime rate plus 3/4%. In the circumstances, the Branch recommendation should be adopted.

Return on Equity

Azusa requests 13.80%, and Branch urges allowance for ROE in the range of 11.75% to 12.25%. By D.89-11-068 we adopted ROE figures of approximately 13.0% for six energy utilities during 1990. In the current cost of capital proceeding (A.90-05-009, et al.) adopting ROE for 1991, the ROE figures recommended in the ALJ's proposed decision are the same as for 1990, ranging from 12.85% to 13.20%.

During the hearing, the DRA cost of capital witness testified that in arriving at a recommended ROE, he considered both quantitative and qualitative factors, including the business risks that a utility encounters, because those risks are associated with the dependability of its earnings.

Marvin Winer, Chief Economist for Brown and Caldwell, testified in support of the utility's request for allowance of 13.80% ROE. He described certain business risks faced by the company which he believes erode the predictability and dependability of its earnings. Some of these risks are: contaminated water supplies, reduced revenues caused by drought caused conservation in water use, and new stringent environmental regulations that may require costly capital investments in operations and facilities. He stated that the small revenue base of the company ($2.8 million in 1989) magnifies these general

industry risks because of Azusa's inability to withstand significant increases in costs or decreases in revenues.

Azusa's cost of water varies between $24 and $232 per acre foot, depending upon mix and availability of its three separate sources of water - surface, well, and MWD water. If Azusa's Canyon Filtration Plant fails to meet stringent new Environmental Protection Agency (EPA) and California Department of Health (DHS) surface water rules, expected to be effective by early 1991, its principal and cheapest source of water (filtered through the Canyon Filtration Plant) will be curtailed or eliminated, thereby increasing dramatically the company's expenses, and decreasing earnings. The company would be required to incur heavy capital costs if the one-year DHS monitoring program establishes that its existing filter technology must be replaced because it does not meet newly mandated standards. Company wells have been contaminated and closed. Its common stock is not liquid because there is no active market for it. Winer deems these risks significant, and combine to warrant authorization of the requested 13.80% ROE.

Winer performed a risk premium type of analysis in connection with the presentation of his recommendation. He analyzed Azusa's expected rate of return and the risk of obtaining that return, when compared with 12 other water companies (Other Companies). He evaluated the predictability of Azusa's ROE as compared with the Other Companies by using the standard deviation and semi-standard deviation analyses of Azusa's ROE for the five-year period 1984-1988. The result of Winer's analysis is shown in the table below, taken from Table 12-4 of Exhibit 1.

TABLE 12-4

Average Annual Returns on Common Equity for the 5-Year Period 1984-1988, and the Variation of those Returns as Measured by Both the Standard Deviation and Semi-Standard Deviation, for Comparable Public Water Utility Companies

Companies	Average Annual Return on Common Equity 1984-1988, percent	Standard Deviation of Return on Equity 1984-1988, percent	Semi-Standard Deviation of Return on Equity 1984-1988, percent
American Water Works	14.5	10.6	6.4
California Water Service	15.0	5.7	4.5
Connecticut Water Service	13.9	4.4	2.9
Consumers Water	15.5	11.8	6.0
El Town Corporation	12.9	2.8	1.8
The Hydraulic Company	13.8	10.0	8.0
IWC Resources	17.4	8.0	5.0
Middlesex Water Company	12.2	3.9	2.3
Philadelphia Water	10.4	4.1	2.7
Southern California Water	12.1	15.1	11.1
San Jose Water Corporation	13.8	18.7	12.7
United Water Resources	13.7	8.4	5.2
Group Average	13.8	8.6	5.7
Azusa Valley Water Co.	13.0	20.9	9.7

Winer noted that Azusa's average ROE for the five-year period (13%) was less than that for the Other Companies (13.8%),

but that the variability, or unpredictability of Azusa's ROE during this period was 2.4 times greater. Thus, he concluded that the risk of investing in Azusa is correspondingly higher because of this unpredictability in meeting investor anticipated returns.

Winer also testified that interest rates for the next three years are expected to approximate those of 1984-1988, based upon a projection of yields for Standard & Poor's AA public utility bonds and long term treasury notes by Data Resources, Inc. (DRI). He concluded that in view of the greater unpredictability of Azusa's ROE and accompanying higher risk during the five-year period, during the test years an equity investor in the company will require a risk premium at least equal to the average risk premium paid from 1984-1988 to equity investors in the Other Companies, or 13.8%.

Winer believes that water companies in general are not less risky (when measured by predictability of ROE) than other fixed utilities. His analysis of 14 non-water utilities selected at random indicated an average ROE of 14.5% for the period 1985-1989 with a standard deviation of 10.8% vs. 8.6% for the Other Companies and 20.9% for Azusa. Thus, the average ROE for the non-water utilities was 14.5%, and the risk of obtaining this return for the non-water utilities almost 100% less than the risk faced by an investor in Azusa (10.8% vs. 20.9%). Azusa believes that based on this data, an argument can be made for allowing it a 14.5% ROE.

Azusa contends that it faces greater financial and business risk than other water companies because it is small. The company earned about $2.8 million in revenue during 1989. Azusa asserts that it is a closely held company; therefore, debt is its only source of additional capital. It further argues that since it is small, it would have a difficult time obtaining debt. (However, note the filing of Azusa's A.90-09-069, wherein the company seeks authority to issue to Wells Fargo Bank a promissory note for $2.1 million bearing interest at 3/4% above the banks prime rate.

The funds will be used to redeem outstanding bonds and to retire an existing promissory note. Azusa also requests in that application a term commitment to borrow from the bank another $2.4 million, up to November 1, 1992, with interest at the same rate as the loan on the promissory note.)

Azusa also believes that its business risk is greater than that of other water utilities because of its size, and that water utilities in general face as much or more risk than energy or telecommunication utilities.

Branch maintains that the business risk a utility faces is associated principally with the dependability of its revenues. It contends that Azusa, being regulated, has a more assured revenue stream than other companies and thus faces a lesser risk than unregulated companies. Consequently, it maintains, regulated utilities can afford to take on more debt financing than unregulated companies. Furthermore, Branch alleges, water utilities face even less business risk than energy or telecommunications utilities, because they are authorized to include construction work in progress in rate base, and can recover up to 50% of fixed costs through a service charge. Moreover, the Commission's recent decision (D.90-08-055) in the Drought Investigation proceeding reduces the business risk of water utilities by protecting them from the adverse sales impact of water conservation and drought conditions.

Winer also calls our attention to the small difference between its cost of debt and DRA's recommended ROE allowance. DRA recommends adoption of a debt cost of 11.62%, compared with Azusa's 12.02%. DRA's recommended mid-point ROE of 12.00% provides equityholders with only a 38 basis point premium over its recommended debt cost, and no basis points if Azusa's debt cost turns out to be 12.00%, as expected by Winer. Winer believes an equity investor in Azusa would expect a two to two-and-a-half

percentage point differential between the cost of debt and the cost of equity.

After consideration, and based upon the evidence, we conclude that a ROE of 12.25% should be allowed for purposes of this proceeding. We base this conclusion on the following:

1. The obvious need for an appropriate disparity between the costs of debt and equity, if equity capital is to be attracted and retained. A difference of only 38 basis points is not a reasonable disparity.

2. Allowance of about 13.0% in the cost of capital proceedings for energy utilities operating within California during the past two years.

3. This Commission's allowance by water utilities of CWIP in rate base, their recovery of up to 50% of fixed costs through service charges, and our recent decision in the Drought Investigation proceeding which operates to protect water utilities from the adverse sales impact of water conservation and drought conditions.

4. Azusa's intent to borrow $2.1 million at .75% over the prime rate, which rate is currently 10.0%.

5. Suspension of Azusa's dividend payments for the first time in 25 years.

In summary, we will adopt for purposes of this proceeding the following capital structures, debt costs, and common equity, and preferred equity costs:

Capital	Cost Ratio	Weighted Factor	Cost
1991			
Long-Term Debt	33.21%	11.62%	3.86
Preferred Equity	10.27%	3.29%	.34
Common Equity	56.52%	12.25%	6.92
Total	100.00%		11.12
1992			
Long-Term Debt	31.80%	11.62%	3.70
Preferred Equity	9.88%	3.29%	.33
Common Equity	58.32%	12.25%	7.14
Total	100.00%		11.17
1993			
Long-Term Debt	30.56%	11.62%	3.55
Preferred Equity	9.53%	3.29%	.31
Common Equity	59.91%	12.25%	7.34
Total	100.00%		11.20

Our adopted capital ratios and cost factors, resulting in authorized rates of return of 11.12%, 11.17%, and 11.20%, respectively during 1991, 1992, and attrition year 1993, will provide interest coverages of 2.88x, 3.02x, and 3.15x for those same periods.

II. Operating Expenses

A. Unaccounted For Water Loss

Azusa's estimate for unaccounted water is 5.2% for both test years, as well as attrition year 1993, compared with Branch's estimate of 5%. Azusa's witnesses asserted that unaccounted for water is caused mainly by over-registration of production meters, underregistration of customers' meters, main flushing, main leaks and water used for street cleaning and fire fighting. Branch's

report on Azusa's Results of Operations indicates that the utility's unaccounted for water percentages from 1985 through 1989 range from a low of 2.54% in 1987 to a high of 6.2% in 1989. Branch believes water loss can be better controlled by prudent management. Recorded loss percentages for the most recent five-year period are as follows:

1985	1986	1987	1988	1989
5.60%	3.84%	2.54%	5.75%	6.20%

Branch infers from the above that Azusa has in recent years allowed the system to slip into an undesirable pattern concerning this subject of unaccounted for water loss.
The company witness testified that during 1987 there was an unusually large amount of purchased water, as well as over-registration of production meters, which combined to result in an unusually low unaccounted-for water calculation. Eliminating the figure reported for 1987 from average calculations will result in a figure of about 5.3%, which closely approximates the figure sought by Azusa of 5.2%. 5.2% was the figure adopted in the company's last general rate case, and is reasonable for purposes of this proceeding.

B. Purchased Water

The dispute here is over what percentage of purchased water Azusa can be expected to buy in test year 1992. Branch believes that the production factor of the filtration plant should increase from 65% to 66%, if the utility follows the recommendations by Azusa's consultant. Since purchased water is the remainder of the company's required water production, less water produced by wells and water processed by the filtration plant, the reliability of 1989 recorded data regarding well production is relevant, Branch maintains. Branch notes that Well No. 8, only recently added to Azusa's production chain, was responsible for a significant reduction in the company's need to

purchase water in 1989. Furthermore, this well's production level is expected to continue.

As mentioned, Azusa obtains water from three sources: (1) surface water that flows through its Canyon Filtration Plant, (2) four wells, and (3) purchased water from MWD. Surface water, quite naturally, is the least expensive, costing about $24 per acre-foot (AF); well water costs about $60 per AF; and MWD water about $232 per AF. Branch estimates Azusa will receive 66% of its total water supply from the Canyon Filtration Plant, and 4% will be purchased from MWD. Azusa estimates that there will be no change whatever in the water mix between 1991 and 1992; therefore the company will continue to receive 65% of its water through the Canyon Filtration Plant, and 5% will continue to be purchased from MWD. While this percentage difference is small, it results in a dollar difference of about $27,200 in 1992.

Branch's principal reason for increasing the filtration plant production is that if a more rigid preventive maintenance program were to be observed, a reduction in plant shutdown time could be accomplished. However, the plant has almost never been shut down - only once or twice for an hour or two, according to the testimony of its general manager, Mr. Heck. In the circumstances, the adopted production estimates for 1992 should be the same as for 1991: 65% through the Canyon Filtration Plant, 30% from well water, and 5% from MWD.

C. Purchased Power

Azusa and Branch disagree on the calculation of power consumption per unit of water production at the Canyon Filtration Plant. Azusa has used one year of recorded data as the indicator for its forecast; Branch has used a 5-year average. Branch calculated the power consumption ratio to be 35.06 Ccf/kWh based on recorded data for years 1984 through 1988. Azusa calculated this power consumption ratio to be 28.82 Ccf/kWh, based only on 1988.

The lower the power consumption ratio, the higher the cost to the utility.

Azusa believes it inappropriate to use a 5-year average of recorded data in this proceeding, because a new filter - the "1988 filter" - was added to the Canyon Filtration Plant in the middle of 1988. This filter added certain energy-consuming devices that were not a part of the plant prior to 1988, including an additional seven-and-a-half horsepower motor, additional security lighting and other electrical devices accompanying the filter unit.

Branch argued that data reflecting the addition of the 1988 filter was not presented to Branch in a timely manner, but the Branch witness acknowledged that he was aware of the addition. Recorded data for 1989, included in the record for illustrative purposes only, shows a power consumption ratio of 23.97 Ccf/kWh, further supporting Azusa's position that the 1988 filter had a significant impact on its consumption by reducing it even further from the 1988 figure of 28.82 Ccf/kWh. This is because in 1988 the 1988 filter operated approximately one-half of the year, while it operated during the entire year of 1989. The company's figure is more appropriate and will be adopted.

D. Employee Benefits

Employee benefits consist of Azusa's contributions to its pension plan, as well as payments for medical and dental care coverage. Branch estimates for employee benefits are lower than Azusa's by about $12,600 in test year 1991, and $18,900 in test year 1992. The differences are the result of (a) use by Azusa and Branch of different base figures for benefits to which the escalation factor was applied in order to arrive at the projected amounts for the test years, and (b) use by Branch and the company of different escalation factors in arriving at the estimates for total employee benefits for 1991 and 1992.

The company began with actual recorded data for 1990, since it had received applicable invoices for the pension contribution and health care insurance contributions which will be required for entire year 1990. Azusa believes this 1990 figure is the most appropriate one to use as a starting point for calculation of benefits for 1991 and 1992, since it is the most recent recorded data and reflects the addition of a new employee in 1990.

Branch began with benefits recorded in 1988 as its base figure. A Branch witness stated he would "have to rework my numbers" if the information set forth in Exhibit 30 is in fact the actual recorded data, as testified to by the company witness. In the circumstances, the data set forth in Exhibit 30 provides the most appropriate basis for estimating benefits, since it contains the latest information with respect to this issue. The company estimate will be adopted.

E. Water Quality Monitoring

Late-filed Exhibit 32, the Comparison Exhibit, indicates a disagreement between Branch and Azusa over whether the water quality monitoring program, estimated to cost $75,000, should be capitalized (Branch position) or amortized in expenses over 3 years (Azusa's position). Branch in its concurrent brief takes the position that this issue was neither identified nor addressed during the hearing. Azusa contends that the record contains a significant amount of testimony supporting its position that, in order to meet imminent California DHS regulations regarding standards for surface water treatment, the company will be required to perform certain testing and monitoring procedures for a one-year period on the newer of its two filtration systems (the 1988 filter) at its Canyon Filtration Plant.

These monitoring procedures are necessary in order to determine whether the 1988 filter meets the requirements of the DHS regulations. Branch agrees that the company should be allowed to recover the reasonable cost of the monitoring procedures. However,

Branch suggests in Late-Filed Exhibit 31 that, since this is a compliance issue, Azusa be allowed to file an advice letter for a rate base offset when the monitoring study is completed. Azusa, on the other hand, believes it should be entitled to expense the monitoring cost over the three-year period 1991-1993. It maintains that because the procedures are being conducted on a filtration unit already in use (the 1988 filter) and the results of the monitoring procedures will not in any way increase the capacity or operating efficiency of that unit, capitalization of the monitoring costs is neither appropriate nor in conformance with generally accepted accounting principles.

This is an unusual one-time cost and should be expensed, rather than capitalized. The three-year period 1991-1993 as suggested is a reasonable one. The estimated cost of $75,000 is supported by the three proposals Azusa has received and included in evidence as Exhibits 9 and 27.

Azusa also maintains it should be allowed to file an advice letter for a rate base offset concerning the modifications to be made to the original filter when the monitoring procedures have established that these proposed modifications will meet DHS regulations, and after the company has received reasonable proposals from contractors acceptable to Azusa for the modifications. Azusa asserts that to require it to wait until the "plant improvements are in operation" as urged by Branch in Exhibit 31 before the company can file an advice letter, would be very burdensome. It would require Azusa to incur substantial costs to make the requisite modifications prior to approval by the Commission. Thus, even if approved, Azusa's rate base offset would be delayed until sometime after the plant improvements are in operation.

It appears that the recommendations of both Branch and the utility, as well as the interests of the customers, can be best accommodated through the following procedure:

If the monitoring procedures indicate that modifications are necessary in order to meet DHS standards, Azusa should secure a communication from DHS indicating what must be done to meet those standards. The company should furnish the Commission Advisory and Compliance Division (CACD) with a copy of the DHS communication, as well as with cost estimates for meeting the DHS standards and an estimated schedule for completing the work necessary in connection therewith. If the estimated work schedule indicates that all improvements can be readily achieved within six months, and if CACD concurs with the estimated costs, Azusa should be authorized to file an advice letter seeking inclusion in rate base of the costs of the modifications, with resultant rate adjustments reflecting the improvements. If CACD disputes Azusa's proposal, the company should be required to file a rate base offset application requesting this authority.

III. Rate Base Items

1. Chlorine Scrubber

Azusa had requested that it be authorized to recover approximately $100,000 for a chlorine scrubber, to be installed at a future date. Branch's position is that such a scrubber could eventually be required under the Uniform Fire Code of 1988; however, Branch asserted it was not timely provided with work papers allowing it to properly evaluate the request, nor with more than one manufacturer's estimate or bid on the proposed cost of the scrubber. In its concurrent brief Azusa has informed us of its decision to accept Branch's recommendation in Exhibit 31 that the scrubber not be authorized for rate base treatment by this decision. We concur with this decision.

2. Reservoir

Azusa also withdrew its request for inclusion of a new reservoir in rate base, concurring with Branch that there is a need to gather more information concerning the cost of the reservoir.

Branch and Azusa agree that the company should be allowed to file an application concerning the new reservoir at such time as the company is prepared to support and justify the proposed expenditure. In Exhibit 31 Branch stated that the reservoir is not an immediate need. Azusa disagrees with this conclusion. Branch further urged that such application be evaluated, in part, based upon anticipated savings resulting from the construction and use of the reservoir - savings due to a decrease in booster pump power costs, an increase in processed surface water production due to continuous operation of filter plants, and a resultant decrease in purchased water and pumped water costs. Azusa disagrees with this second condition recommended by Branch. Finally, Branch recommends in Exhibit 31 that in response to the application and following the appropriate prudence review, Branch be allowed to recommend when and how the reservoir should be included in future rate base. Azusa disagrees also with this latter recommendation.

Azusa believes it has already demonstrated that the reservoir is an immediate need. It refers us to testimony by a consulting engineer who stated that there is no reservoir located near the Canyon Filtration Plant which can provide necessary storage capacity and holding time with respect to water which runs through the plant. Furthermore, Mr. Heck, Azusa's General Manager, testified that the additional reservoir "at the top" would provide additional storage to meet peak demands, thereby reducing the need of boosting from the company's lower reservoirs during the day. Heck also stated that the reservoir would reduce operating costs "substantially." The witness stated that Azusa currently needs additional storage capacity to meet standard engineering and utility practices for operational and emergency storage (including

critical fire storage), to consistently utilize the full capacity of the Canyon Filtration Plant, and for Azusa to meet its significantly increased water demands. He further insisted that Azusa needs additional holding time in order to allow for adequate disinfecting.

Azusa does not believe that anticipated cost savings from the construction of a reservoir should be a factor in evaluating the reasonableness thereof. It professes that the record shows a reservoir is needed to meet storage capacity and holding requirements; therefore, cost savings are not and should not be a factor in considering whether the company has demonstrated a reasonable need. Lastly, Azusa argues that once it has demonstrated reasonable need, Branch should not be allowed to further recommend when and how the reservoir should be included in future rate base. The utility believes the reservoir should simply be included in rate base after it is placed in service.

Mr. Heck testified extensively concerning the proposed new reservoir, stating essentially as follows:

1. The reservoir would have a capacity of 4 million gallons, and cost about $1.5 million to construct; land would cost about $250,000.

2. Construction would commence in late 1992 and be completed in 1993. The reservoir would be located adjacent to Azusa's filtration plant. Water from the filtration plant would go into the new reservoir. Excess water available during off-peak hours would be stored in this reservoir.

3. The company's current storage capacity is 12.5 million gallons, serving about 14,300 metered water connections. Current peak production demand on the system has been about 17.4 million gallons during a maximum day.

4. The new reservoir would provide for additional storage at the top of Azusa's system. Water from the Canyon Filtration Plant flows by gravity throughout the system. The additional storage

capacity would reduce the need of boosting from the lower reservoirs during daytime peak demands, thereby reducing operating costs "substantially."

5. There are presently four reservoirs in service:

Heth, built in 1927, 1.0 mg capacity.
Griffith, built in 1954, 5.0 mg capacity.
Wilson, reconstructed in 1962, 6.5 mg capacity.
Gladstone, built in 1951, 0.4 mg capacity.

6. Exhibit 29 shows the Heth Reservoir water level during July 24 and 25, 1990, and indicates that the level was rising for a period of about 15 hours. During every period of increasing water level, booster pumps at Griffith Reservoir are pumping water back up to Heth, at an elevation of 732 feet, a lift of about 150 feet. Much of the water at Wilson and Griffith Reservoirs was put there the previous day, because there was no place to store it up higher. During off-peak hours water will seek its level - go down to Wilson or Griffith Reservoirs. Then, when demand increases the next day, the boosters come on and push the water back where it started 24 hours earlier.

7. When water is pushed back up towards the filtration plant near Heth Reservoir, the capacity of that plant to produce water in a 24-hour period is reduced since water is flowing therefrom by gravity.

8. The addition of the proposed reservoir would make the entire system more efficient, and would be very cost effective. Furthermore, the reservoir would act as a clear well and would provide additional disinfecting time to meet upcoming surface water treatment requirements. That is, at the storage point the disinfectant that had been added to the water at the filtration plant will have time to do a better job before it enters the system. The only disinfecting time currently is the time it takes water to travel through a 30-inch pipeline a distance of 7,800 feet before entering the system.

9. The additional reservoir would improve the company's fire-fighting capacity, providing about a one-day peak storage.

10. Azusa Pacific University is a customer of Azusa. The university is planning a new five- or seven-story dormitory. The company is concerned that it may lose this customer if unable to provide the new required capacity.

11. The proposed reservoir would also serve as a backup. Heth Reservoir is 63 years old; the original wooden roof is still in place. Heth Reservoir should be taken out of service and examined to make sure it is structurally safe. It is located on a hilltop. If it failed, while only 800,000 gallons would spill, that amount of water could do much damage to the surrounding environment. But Heth cannot be taken out of service now, since its use is required.

Heck agreed with Branch that since Azusa had not furnished sufficient information concerning the cost for the new reservoir, the request would be removed from proposed rate base. Heck expected that the need could be justified during this proceeding, and permission received to file a rate base offset application, followed by an advice letter filing immediately after completion in order to get the new reservoir in rate base.

After consideration, and based upon the testimony of Azusa's General Manager, we believe that the need for the reservoir has been justified. However, we concur with Branch that since part of that justification has been based upon the alleged cost effectiveness of the new reservoir, the company should reasonably be expected to present evidence on that point. Our order will authorize Azusa to proceed with the design and planning for the reservoir and to file a rate base offset application for inclusion in rate base after completion thereof, directing that the company address the anticipated savings which will accrue due to the addition of the new reservoir.

3. Working Cash Allowance - Pension Lag Days and Expenses

The lead-lag day calculation is a method used to determine a company's working cash allowance - the cash needed by a utility to meet its daily operating needs. If the lead-lag calculation results in a lag, this indicates that the utility has had the use of revenues in excess of expenses for the days indicated. If the calculation results in a lead, it indicates that the utility has had expenses in excess of revenues for the days indicated.

Azusa derives its calculation of -45 lead days from the fact that it pays for the pension plan quarterly, on the first day of the quarter, in advance. This position, Branch argues, ignores the fact that all employees must wait a minimum of six months and a maximum of 18 months before becoming eligible to participate in the pension plan. On average, Branch maintains, an employee must be in service at least one year before he may participate in the plan. Thus, according to Branch, the company receives the money to be paid for an individual employee's pension fund at least one year in advance. Furthermore, Branch contends that advance collection of the pension payment from ratepayers continues year after year. Branch asserts it is unfair that ratepayers provide these funds on which Azusa can earn interest for a year before the company must pay it to the pension plan.

Both Azusa and Branch used the "detailed method" presented in the Commission's Determination of Working Cash Allowance - Standard Practice U-16 (U-16) in determining working cash allowance, and, consequently, in calculating lead-lag days for pension benefit costs. In presenting its argument that the utility has 315 lag days with respect to pension benefits, Branch quoted the following language from U-16, page 3-8:

> "This account represents monies which will be spent in the future for which provisions have been made through charges to operating expenses

> in prior years or which represents funds and receipts slated to be used to reduce expenses."

Azusa argues that Branch's reliance on this language is misplaced, because the company's pension costs do not represent monies derived through rates to offset a future liability which the company has not yet incurred. Therefore, pension benefit costs should not be treated as part of the "Deferred Credit" account, Azusa maintains. Instead, the utility argues, except in the unique case of a new employee who has replaced an existing one, Azusa actually incurs pension benefit costs before it receives money from ratepayers for such costs. This is because Azusa makes prepayments of pension benefits with respect to all eligible employees on a quarterly basis; hence, it expends cash for these pension benefits before it recovers the cost from ratepayers throughout the applicable quarter.

(Exhibit 6 shows that the company pays into the pension fund quarterly, by the first day of the quarter. Thus, -90/2 = -45 days.) The exhibit also contains a letter to Azusa from the company's pension fund trustee, The Prudential Insurance Company of America. The letter identifies the plan as a "Quarterly Pension Fund" and states that Azusa is being billed for the first payment due for Azusa's new plan year.

Azusa also emphasizes that U-16 supports its position that ordinarily there is a lead time with respect to pension benefit costs, stating that:

> "Utility-contributed employees' benefits are <u>ordinarily prepaid amounts</u> (emphasis added) and may be reflected in the operational cash requirements portion...If ... prepaid employees' benefits are to be included in the lag study, the number of <u>lead</u> (emphasis added) days is the time from the midpoint of the expense accrual date to the date of payment." (U-16, p. 3-12.)

Azusa asserts that it has, accordingly, calculated lead-lag days regarding pension benefit costs from the midpoint of the expense accrual date (90 days per quarter divided by 2) to the date of payment (the first day of the applicable quarter), arriving at 45 days lead time.

Branch's position in support of its calculation of 315 lag days is that, with respect to new employees only, an employee must wait an average of 12 months before becoming eligible to participate in the pension plan.

Azusa refers us in this connection to the record which indicates that historically Azusa has had an extremely low turnover ratio, and that as of the beginning of test year 1991 it is estimated that 17 of 18 total employees are and will continue to be eligible to have pension benefit contributions made on their behalf.

After consideration, we believe it would be incorrect to perceive Azusa as having received revenue from ratepayers for pension benefits an average of 12 months in advance of the utility's incurrence of the expense. We arrive at this conclusion because the plan itself provides that new employees must wait an average of 12 months before they become eligible to have pension benefit contributions made on their behalf. In any given year, the company prepays the cost of pension benefits an average of 45 days before it incurs the expense. The only exception occurs when there are new employees who replace existing ones, or when there are new employees in newly created positions previously authorized by the Commission. Azusa will be prepaying pension benefit costs for eligible employees with respect to test years 1991 and 1992, as well as attrition year 1993. The 12-month delay in pension plan eligibility is inconsequential, as it is relevant only in connection with one such new employee during those years. The new employee criterion could not be reasonably applied as a basis for

the entire lead-lag day calculation in view of the circumstances surrounding this proceeding.

IV. Rate Design

By D.86-05-064, dated May 28, 1986 in Investigation 84-11-041 (Rulemaking) the following aspects of rate design were addressed:

a. Service charges as a percentage of fixed costs
b. Number of commodity blocks
c. Phasing out lifeline
d. Seasonal rates
e. Addressing of water conservation

Branch recommends service charge and single commodity block rates. Commission policy generally proposes that service charges be set to recover up to 50% of fixed costs.

Azusa's present service charge revenue develops about 34% of fixed costs. Present and proposed rates are composed of a meter service charge and a single commodity block in compliance with D.86-05-064; however, Azusa proposes to increase the service charges by about five percent more than the average percentage rate increases. Branch has no objection to Azusa's proposed rate design since in 1992, under proposed rates, the service charge revenue will amount to about 33% of fixed costs. In the circumstances, the company's rate design proposal will be adopted.

V. Attrition

An attrition allowance is needed when increases in revenues and productivity to offset increases in expenses (including the effects of cost of capital) are insufficient, thereby causing a decline in the rate of return for the following year. Attrition consists of two factors - financial and

operational. Financial attrition occurs when there is a change in the company's cost of capital. Operational attrition is the result of changes in operating categories, e.g. revenues, expenses, and rate base. The operational attrition part is based on the attrition in the rate of return as determined by comparing the rates of return for estimated years 1991 and 1992 at present rates. Branch's estimated operational attrition was 2.38%. The financial part is based on the estimated difference in Azusa's cost of capital between 1991 and 1992. Branch's estimated financial attrition is 0.03%. Total attrition is the sum of operational and financial attrition. When applied against the 1992 estimated rate base, and using the net-to-gross ratio, the additional revenue for 1992 is obtained. Adopted attrition figures are 0.03% and 1.69%, resulting in increased revenue needs during 1993 of $153,100.

VI. Summaries of Earnings

The tables shown in the attached appendixes depict the adopted results of operations at present and proposed rates. Adopted quantities, tax calculations, and rate schedules are also shown.

Comments

In accordance with Public Utilities Code Section 311, the ALJ's proposed decision was mailed to parties on November 19, 1990. Comments were received from Branch/DRA. Reply comments were filed by Azusa on December 14.

Branch/DRA takes issue with the proposed decision with respect to the designated ROE, and with the adoption of Azusa's existing and future common equity ratios. The comments are essentially a rehash of arguments already presented. The proposed decision already addresses those arguments and provides ample reason for not adopting the imputed capital ratio urged by Branch/DRA, i.e. that such imputation may be proper in a district

where rates are already high, and where methods of preventing excessive increases are warranted. However, as already discussed, Azusa's are among the very lowest of those utilities regulated by this Commission. Azusa has been providing admittedly excellent service at very low rates. Furthermore, there are decisions involving general rate case applications of other water utilities currently circulating in which an equity ratio of 12.25% has been stipulated to by DRA and the utility. (A.90-07-060, et al.)

Reply Comments

Azusa in its comments notes that Branch/DRA concludes that it uses an imputed common equity ratio because anything higher than 54% would make the range of returns derived from the comparable utility group excessive. Azusa calls attention to its small revenue base ($2.8 million in 1989), and to its testimony that if the capital structure proposed by DRA is adopted it will result in a reduction of $20,000 annual revenue. Azusa also recites the several additional business risks which erode the predictability and dependability of its earnings, i.e. contaminated water supplies, drought conditions, water costs that can vary between $24 and $232 per acre foot depending upon availability of supply, and new environmental regulations requiring costly capital improvements. The company asserts that its small revenue base magnifies these general risks as well as the negative impact of the reduced revenues which will result from DRA's recommended imputed capital structure.

There is ample record evidence, as discussed in the proposed decision, to warrant adoption of the 12.25% ROE recommended by the ALJ, and to adopt the capital ratio estimated by the company rather than the imputed one recommended by Branch/DRA.

Findings of Fact

1. On March 15, 1990 Azusa filed application requesting rate increases for water service provided during 1991, 1992, and 1993.

2. The quality of Azusa's water service is excellent, its rates are among the very lowest in southern California, and there are no outstanding complaints against the company relating to water taste or water pressure.

3. Adoption of Azusa's actual capital structure ratios of 33.21% debt, 10.27% preferred equity, and 56.52% common equity in 1991, 31.80% debt, 9.88% preferred equity, and 58.32% common equity in 1992, and 30.56% debt, 9.53% preferred equity, and 59.91% common equity in 1993 will reflect the company's actual financial circumstances, and will not significantly affect Azusa's customers because the rates in this district are among the lowest of utilities providing water service in southern California.

4. Adoption of a long-term debt cost of 11.62% during this three-year period, as recommended by DRA, will give recognition to the current prime rate of about 10%, and to Azusa's current application for authority to borrow $2.1 million at 3/4 of one percent over the bank's prime rate, and to its further request in that application for authorization to enter into a term commitment with the bank for another $2.4 million, with interest at the same rate as on the loan.

5. Allowance of the top of DRA's recommended range concerning ROE, 12.25%, during this three-year period will afford a reasonable difference between our authorized cost of debt, 11.62%, will recognize our allowance of a ROE of about 13.0% to energy utilities operating within California during the past two years, this Commission's allowance by water utilities of CWIP in rate base, their recovery of up to 50% of fixed costs through service charges, and our recent decision in the Drought Investigation proceeding which protects water utilities from the adverse sales impact of water conservation and drought conditions.

6. Azusa has justified its request for allowance of a 5.2% unaccounted for water loss during both test years and also for attrition year 1993.

7. Authorization of a purchased water expense reflecting a mix of 65% from the Canyon Filtration Plant, 30% from well water, and 5% from MWD during both 1991 and 1992 is reasonable, and will reflect the fact that the company's filtration plant has almost never been shut down, and therefore its current preventive maintenance program is adequate.

8. Use by Azusa of actual recorded data for 1990 concerning employee benefits is reasonable, since it has received applicable invoices for the pension contributions and health care insurance contributions which have been required for the entire year 1990; therefore, the 1990 data is the most appropriate for use as a starting point for calculation of benefits for 1991 and 1992.

9. The monitoring procedures which will be required in connection with Azusa's Canyon Filtration Plant in order to determine whether the plant meets new DHS requirements, will be an unusual, one time cost performed in connection with an existing filter which will in no way increase the capacity or operating efficiency of that unit. These monitoring costs should therefore be expensed (rather than rate based) over the three-year period covered by this proceeding.

10. If the monitoring procedures described in Finding 9 indicate that modifications are necessary in order to meet DHS standards, it is reasonable that Azusa be allowed to file an advice letter requesting inclusion in rate base of the cost of modifications after they have been completed.

11. Azusa has justified the need for the new reservoir to be located near the Canyon Filtration Plant, but has not furnished Branch with adequate information concerning the cost of construction of the reservoir nor of the cost of the land where the reservoir will be located. Part of the company's justification has been based upon the alleged cost effectiveness of the reservoir.

12. Azusa will be prepaying pension benefit costs for eligible employees with respect to test years 1991 and 1992, as

well as attrition year 1993, except for one additional employee. Therefore, it is reasonable to adopt a -45 lead day calculation in connection with the company's working cash allowance concerning pension expenses.

13. The company's proposed rate design, concurred in by Branch, is consistent with Commission policy.

14. Azusa has agreed with all of Branch's recommendations except those expressly contested.

Conclusions of Law

1. The adopted Summaries of Earnings set forth in this order correctly summarize our decisions on the contested issues, as well as those not contested by Branch, and indicate the resultant revenues and expenses which would be experienced by Azusa at its present and authorized rates during 1991 and 1992.

2. Based upon our adopted Summaries of Earnings, Azusa should be authorized to increase rates for water service rendered to levels necessary to earn returns on rate base of 11.12% in 1991, 11.17% in 1992, and 11.20% in 1993.

3. If the monitoring procedures described in Finding 9 indicate that modifications are necessary to the filtration plant in order to meet DHS standards, Azusa should secure a communication from DHS stating what must be done to meet such standards. Azusa should furnish the CACD with a copy of the DHS communication, and with cost estimates for performing the work necessary to meet those standards, and an estimated schedule for performing the work necessary in connection therewith.

4. If the estimated schedule for meeting the above DHS standards indicates that all improvements can be constructed within six months, and if CACD concurs with the estimated cost, Azusa should be authorized to file an advice letter seeking inclusion in rate base of the costs of the modifications, with resultant rate adjustments reflecting the improvements, rates to become effective upon completion of the improvements. If CACD disputes the

proposal, Azusa should file a rate base offset application addressing this matter.

5. Azusa should be allowed to file an application for inclusion in rate base of the proposed new reservoir, after the design and planning of the reservoir has been completed, and after costs for land and construction thereof have been received from prospective contractors. The application should include an analysis of the cost savings anticipated when the new reservoir is completed. Rate adjustments reflecting the addition of the new reservoir should be effective upon completion of construction.

6. The increases in rates and charges authorized by this decision are justified and reasonable; present rates and charges, insofar as they differ from those prescribed by this decision, will be for the future unjust and unreasonable.

7. The application should be granted to the extent provided in the following order. Because an immediate need for rate relief has been shown, the effective date of this order should be today.

O R D E R

IT IS ORDERED that:

1. Azusa Valley Water Company (Azusa) is authorized to file on or after the effective date of this order the revised rate schedules for 1991 shown in Appendix B and canceling current Schedules Nos. 1, 4, TRA-1, and 3 ML. This filing shall comply with General Order (GO) 96-A. The effective date of the revised rate schedule shall be no sooner than January 1, 1991. The revised rate schedules shall apply only to service rendered on and after their effective date.

2. On or after November 5, 1991, Azusa is authorized to file an advice letter, with appropriate supporting workpapers, requesting the step rate increases for 1992 shown in Appendix C, attached to this order. This filing shall comply with GO 96-A.

The requested step rates shall be reviewed by the staff to determine their conformity with this order and shall go into effect upon the staff's determination of conformity. Staff shall inform the Commission if it finds that the proposed rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised schedules shall be no earlier than January 1, 1992. The revised schedules shall apply only to service rendered on and after their effective date.

3. On or after November 5, 1992, Azusa is authorized to file an advice letter, with appropriate supporting workpapers, requesting the increases for 1993 shown in Appendix C. This filing shall comply with GO 96-A. The requested step rates shall be reviewed by the staff to determine their conformity with this order and shall go into effect upon the staff's determination of conformity. Staff shall inform the Commission if it finds that the proposed rates are not in accord with this decision, and the Commission may then modify the increase. The effective date of the revised schedules shall be no earlier than January 1, 1993. The revised schedules shall apply only to service rendered on and after their effective date.

4. If the monitoring procedures described in Finding of Fact 9 of this decision indicate that modifications are necessary to Azusa's filtration plant in order to meet California Department of Health Service (DHS) standards, Azusa is authorized to secure a communication from DHS stating what must be done to meet such standards. Azusa may furnish the CACD with a copy of the DHS communication, and with cost estimates for performing the work necessary to meet those standards, and an estimated schedule for performing the work necessary in connection therewith. If the estimated schedule for meeting the above DHS standards indicates that all improvements can be constructed within six months, and if CACD concurs with the estimated cost, Azusa is authorized to file an advice letter seeking inclusion in rate base of the costs of the

modifications, with resultant rate adjustments reflecting the improvements, rates to become effective upon completion of the improvements. If CACD disputes the proposal, Azusa is authorized to file a rate base offset application addressing this matter.

5. Azusa is authorized to file an application for inclusion in rate base of a new reservoir, after the design and planning of the proposed reservoir has been completed, and after estimated costs for land and construction of the reservoir have been received from prospective contractors. The application shall include an analysis of the cost savings anticipated when the new reservoir is completed.

5. The application is granted to the extent set forth in this decision.

This order is effective today.

Dated December 19, 1990, 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 ABOVE TODAY

NEAL J. SHOEMAKER, Executive Director

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APPENDIX A
(Page 1)
Azusa Valley Water Company
1991
SUMMARY OF EARNINGS
($000)

Items	Utility Present	Utility Proposed	Branch Present	Branch Proposed	Present Rates	Adopted Rates
Oper. Revenues	$2,722.0	$3,314.7	$2,731.0	$3,325.3	$2,731.0	$3,214.3 1/
Expenses						
O & M Expenses	1,190.2	1,190.2	1,256.2	1,256.2	1,255.8	1,255.8
Uncollectibles	10.6	13.0	10.7	13.1	10.7	12.5
Subtotal O & M	1,200.8	1,203.2	1,266.9	1,269.3	1,266.5	1,268.3
A & G Expenses	658.3	658.3	640.6	640.6	678.1	678.1
Franchise	27.2	33.1	27.3	33.3	27.3	32.1
Subtotal A & G	685.5	691.4	667.9	673.8	705.4	710.2
Ad Valorem Taxes	74.8	74.8	72.6	72.6	72.6	72.6
Payroll Taxes	53.5	53.5	52.4	52.4	52.4	52.4
Depreciation	261.8	261.8	255.8	255.8	255.8	255.8
Ca. Income Tax	18.1	72.4	18.6	73.1	16.2	60.6
Federal Income Taxes	52.2	237.0	54.0	261.0	53.8	215.9
Total Expenses	3,346.8	2,594.2	2,388.2	2,657.9	2,422.7	2,635.8
Net Revenues	375.5	720.5	342.8	667.4	308.3	578.5
Rate Base	5,668.0	5,668.0	5,081.6	5,081.6	5,202.4	5,202.4
Rate of Return	6.62%	12.71%	6.75%	13.13%	5.93%	11.12%

1/ At 1991 authorized rates with 1991 adopted number of customers

APPENDIX A
(Page 2)
Azusa Valley Water Company
1992
SUMMARY OF EARNINGS
($000)

Items	Utility Present	Utility Proposed	Branch Present	Branch Proposed	Adopted at 1991 Rates	Adopted at 1992 Rates
Oper. Revenues	$2,728.7	$3,654.0	$2,744.4	$3,658.9	$3,226.0 1/	$3,370.4
Expenses						
O & M Expenses	1,395.9	1,395.9	1,408.1	1,408.1	1,426.7	1,426.7
Uncollectibles	10.7	14.3	10.8	14.4	12.6	13.1
Subtotal O & M	1,406.5	1,410.2	1,418.9	1,422.5	1,439.3	1,439.8
A & G Expenses	698.4	698.4	667.3	667.3	711.2	711.2
Franchise	27.2	36.5	27.4	36.6	32.3	33.7
Subtotal A & G	725.7	734.9	694.7	703.9	743.5	744.9
Ad Valorem Taxes	78.2	78.2	72.0	72.0	72.0	72.0
Payroll Taxes	56.4	56.4	54.6	54.6	54.6	54.6
Depreciation	284.8	284.8	259.7	259.7	259.7	259.7
Ca. Income Tax	0.0	67.9	3.6	87.5	43.7	57.0
Federal Income Taxes	0.0	222.0	5.3	295.0	145.0	187.6
Total Expenses	2,551.5	2,854.3	2,508.8	2,895.2	2,757.8	2,815.6
Net Revenues	177.2	799.7	235.5	763.7	468.2	554.7
Rate Base	6,340.2	6,340.2	4,837.6	4,837.6	4,966.3	4,966.3
Rate of Return	2.79%	12.61%	4.87%	15.79%	9.43%	11.17%

1/ At 1991 authorized rates with 1992 adopted number of customers

APPENDIX A
(Page 3)
Azusa Valley Water Company
1991
INCOME TAX
($000)

Items	Utility Present	Utility Proposed	Branch Present	Branch Proposed	Present Rates	Adopted Rates	
Total Revenues	$2,722.2	$3,314.7	$2,731.0	$3,325.3	$2,731.0	$3,214.8	
Expenses							
Operations & Maint.	$1,200.8	$1,203.2	$1,266.9	$1,269.3	1,266.5	1,268.3	
Admin. & General	685.5	691.4	667.9	673.8	705.4	710.2	
Taxes O/T Income	128.3	128.3	125.0	125.0	125.0	125.0	
Subtotal	2,014.6	2,022.9	2,059.8	2,068.1	2,096.9	2,103.5	
Deductions							
CA Tax Depreciation	264.8	264.8	258.8	258.8	258.8	258.8	
Interest	248.4	248.4	212.4	212.4	200.8	200.8	
CA Taxable Income	194.4	778.6	200.0	786.1	174.5	651.1	1/
CCFT @ 9.3%	18.1	72.4	18.6	73.1	16.2	1/ 60.6	2/
Deductions							
Fed. Tax Depreciation	264.8	264.8	258.8	258.8	258.8	258.8	
Interest	248.4	248.4	212.4	212.4	200.8	200.8	
FIT Taxable Income	176.3	706.2	181.4	767.5	158.3	634.9	1/
FIT (Before Adjustment) @ 34%	52.2	237.0	54.0	261.0	53.8	215.9	
Prorated Adjustment	0.0	0.0	0.0	0.0	0.0	0.0	
Investment Tax Credit	0.0	0.0	0.0	0.0	0.0	0.0	
Net Federal Income Tax	52.2	237.0	54.0	261.0	53.8	215.9	

(Negative)

1/ CCFT @ Present Rates non-taxable for FIT (651.1 - 16.2 = 634.9)
2/ Amount used in 1992

APPENDIX A
(Page 4)
Azusa Valley Water Company
1992
INCOME TAX
($000)

Items	Utility Present	Utility Proposed	Branch Present	Branch Proposed	Adopted at 1991 Rates	Adopted at 1992 Rates
Total Revenues	$2,728.7	$3,654.0	$2,744.4	$3,658.9	$3,226.0	$3,370.4
Expenses						
Operations & Maint.	1,406.5	1,410.2	1,418.9	1,422.5	1,439.3	1,439.8
Admin. & General	725.7	734.9	694.7	703.9	743.5	744.9
Taxes O/T Income	134.5	134.5	126.6	126.6	126.6	126.6
Subtotal	2,266.7	2,279.6	2,240.2	2,253.0	2,309.4	2,311.3
Deductions						
CA Tax Depreciation	288.1	288.1	262.8	262.8	262.8	262.8
Interest	356.4	356.4	202.2	202.2	183.8	183.8
CA Taxable Income	(182.5)	729.9	(39.1)	940.9	470.0	612.5 1/
CCFT @ 9.3%	0.0	67.9	3.6	87.5	43.7	57.0
Deductions						
Fed. Tax Depreciation	288.1	288.1	262.8	262.8	262.8	262.8
Interest	356.4	356.4	202.2	202.2	183.8	183.8
FIT Taxable Income	(182.5)	662.0	(35.5)	867.7	426.3	551.9 1/
FIT (Before Adjustment) @ 34%	0.0	222.0	5.3	295.0	144.9	187.6
Prorated Adjustment	0.0	0.0	0.0	0.0	0.0	0.0
Investment Tax Credit	0.0	0.0	0.0	0.0	0.0	0.0
Net Federal Income Tax	0.0	222.0	5.3	295.0	144.9	187.6

(Negative)

1/ CCFT @ 1991 Authorized Rates Non-Taxable for FIT (612.5 - 60.6 = 551.9)

APPENDIX A
(Page 5)
Azusa Valley Water Company
1991
RATE BASE
($000)

Items	Utility	Branch	Adopted
Utility Plant-in-Service	$12,345.8	$12,116.9	$12,116.9
CWIP	10.0	10.0	10.0
Total Utility Plant	12,355.8	12,126.9	12,126.9
Add:			
Working Capital			
Materials and Supplies	32.8	32.8	32.8
Working Cash	120.3	(212.9)	(92.1)
Total Working Capital	153.1	(180.1)	(59.3)
Less:			
Adjustments			
Customer Adv. for Contr.	966.5	978.8	978.8
Contribution	792.6	791.9	791.9
Deferred Fed. Tax Res.	493.6	487.9	487.9
Total Adjustments	2,252.7	2,258.6	2,258.6
Less:			
Depreciation Reserve	4,588.3	4,606.7	4,606.7
Avg. Depreciated Rate Base	5,668.0	5,081.6	5,202.4

(Negative)

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APPENDIX A
(Page 6)
Azusa Valley Water Company
1992
RATE BASE
($000)

Items	Utility	Branch	Adopted
Utility Plant-in-Service	$13,407.2	$12,297.0	$12,297.0
CWIP	10.0	10.0	10.0
Total Utility Plant	13,417.2	12,307.0	12,307.0
Add:			
Working Capital			
Materials and Supplies	32.8	32.8	32.8
Working Cash	45.8	(309.5)	(180.8)
Total Working Capital	78.6	(276.7)	(148.0)
Less:			
Adjustments			
Customer Adv. for Contr.	964.6	977.7	977.7
Contribution	791.9	791.1	791.1
Deferred Fed. Tax Res.	575.8	551.6	551.6
Total Adjustments	2,332.3	2,320.5	2,320.4
Less:			
Depreciation Reserve	4,823.3	4,872.4	4,872.4
Avg. Depreciated Rate Base	6,340.2	4,837.6	4,966.3

(Negative)

(End of Appendix A)

APPENDIX B
(Page 1)

Azusa Valley Water Company

Schedule No. 1

GENERAL METERED SERVICE

APPLICABILITY

Applicable to all metered water service.

TERRITORY

Portions of Azusa, Covina, Glendora, Irwindale, West Covina and vicinity, Los Angeles County.

RATES

Quantity Rates:

For all water delivered, per 100 cu.ft. ..... $0.456 (I)

Service Charge:	Per Meter Per Month	
For 5/8 x 3/4-inch meter	$ 4.45	(I)
For 3/4-inch meter	6.35	|
For 1-inch meter	11.15	|
For 1-1/2-inch meter	20.00	|
For 2-inch meter	32.00	|
For 3-inch meter	61.00	|
For 4-inch meter	98.50	|
For 6-inch meter	167.50	|
For 8-inch meter	245.00	(I)

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

SPECIAL CONDITION

1. All bills are subject to the reimbursement fee set forth on schedule No. UF. (T)

APPENDIX B
(Page 2)

Azusa Valley Water Company

Schedule No. 4

PRIVATE FIRE PROTECTION SERVICE

APPLICABILITY

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

TERRITORY

Portions of Azusa, Covina, Glendora, Irwindale, West Covina and vicinity, Los Angeles County.

RATES

	Per Month	
For each inch of diameter of service connection	$4.33	(I)

SPECIAL CONDITIONS

1. The fire protection service connection shall be installed by the utility and the cost paid by the applicant. Such payment shall not be subject to refund.

2. The minimum diameter for fire protection service shall be four inches, and the minimum diameter shall be not more than the diameter of the main to which the service is connected.

3. If a distribution main of adequate size to serve a private fire protection system in addition to all other normal service does not exist in the street or alley adjacent to the premises to be served, then a service main from the nearest existing main of adequate capacity shall be installed by the utility and the cost paid by the applicant. Such payment shall not be subject to refund.

4. Service hereunder is for private fire protection systems to which no connections for other than fire protection purposes are allowed and which are regularly inspected by the underwriters having jurisdiction, are installed according to specifications of the utility, and are maintained to the satisfaction of the utility. The utility may install the standard detector type meter approved by the Board of Fire Underwriters for protection against theft, leakage or waste of water and the cost paid by the applicant. Such payment shall not be subject to refund.

5. The utility will supply only such water at such pressure as may be available from time to time as a result of its normal operation of the system.

6. All bills are subject to the reimbursement fee set forth on Schedule No. UF. (T)

(END OF APPENDIX B)

APPENDIX C

Azusa Valley 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 tht date.

	Effective Dates 1-1-92	1-1-93
Schedule No. 1 General Metered Service		
Quantity Rates:		
For all wter delivered, per 100 cu.ft.	$ 0.011	$0.022
Service Charge:	Per Meter Per Month	
For 5/8 x 3/4-inch meter	$ 0.40	$0.20
For 3/4-inch meter	0.65	0.25
For 1-inch meter	1.05	0.55
For 1-1/2-inch meter	2.00	0.95
For 2-inch meter	3.10	1.45
For 3-inch meter	6.00	2.60
For 4-inch meter	9.50	4.50
For 6-inch meter	16.50	7.30
For 8-inch meter	23.50	14.20
Schedule No. 4 Private Fire Protection Service		
Rates:		
For each inch of diameter of connection	$0.20	$0.20

(End of Appendix C)

APPENDIX D
(Page 1)

Azusa Valley Water Company

ADOPTED QUANTITIES

		1991	1992
Water Production	KCcf	5,040.29	5,063.95
Wells Water	KCcf	1,512.09	1,519.18
Filtration Plant	KCcf	3,276.19	3,291.57
Water Assessment			
Adm. Assessment (AF)		10,936.36	11,018.16
$6.00/AF (7-1-89)		$65,618	$66,109
Make up Water (AF)		9,964.94	9,120.40
$3.00/AF (7-1-90)		$29,895	$27,361
Replenishment Water (AF)		971.42	1,897.76
$158.00/AF (7-1-90)		$153,484	$299,847
Special Assessment (AF)		10,936.36	11,018.16
$3.00/AF (7-1-89)		$32,809	$33,055
In Lieu Assessment (AF)		10,936.36	11,018.16
$0.60/AF (7-1-89)		$6,562	$6,611
U.S.G.V. Assessment (AF)		10,936.36	11,018.16
$0.08/AF (1-1-88)		$875	$881
San Gabriel River Water ($)		$13,300	$13,300
Water Assessment Cost		$302,543	$447,164
Purchased Water			
Purchased Water	KCcf	252.01	253.20
Purchased Water	AF	578.54	581.26
MWD (7-1-90) $/AF		$232.30	$232.30
Purchased Water Cost		$134,396.0	$135,027.0
Water Quality Testing		$2,726.0	$2,876.0

(Continued)

APPENDIX D
(Page 2)

Azusa Valley Water Company

ADOPTED QUANTITIES

	1991	1992
Purchased Power (kWh)		
Well #4 G-2	266,549	267,800
Well #5 G-2	437,963	440,019
Well #6 TOU-GS	38,075	38,253
Well #8 PA-2	1,161,273	1,166,725
Booster Heth G-2	207,334	208,307
Booster Griffith PA-1 & GS SP	264,120	265,359
Booster Rockvale G-2	71,834	72,172
Filteration Plant PA-1 & GS 2	114,532	115,067
Total Purchased Power (kWh)	2,561,680	2,573,702
Purchased Power (Cost)		
Well #4 City of Azusa	$ 32,859	$ 32,945
Well #5 City of Azusa	40,105	40,245
Well #6 SCE	10,099	10,108
Well #8 SCE	110,965	111,415
Booster Heth City of Azusa	19,176	19,242
Booster Griffith SCE	24,613	24,721
Booster Rockvale City of Azusa	8,603	8,626
Filteration Plant SCE	11,921	11,967
Total Purchased Power (Cost)	$258,340	$259,269

Schedule No. G-2
Effective Date: 11-1-83

		Well #4	Well #5	Booster Heth	Booster Rockvale
Demand (KW)		185.0	123.2	51.9	33.4
Energy (KWh)	91	266,522	437,857	207,334	71,834
	92	267,773	439,913	208,307	72,172

Schedule No. G-1	Well #4
Effective Date: 11-1-83	
Energy (kWh)	27

(Continued)

APPENDIX D
(Page 3)

Azusa Valley Water Company

ADOPTED QUANTITIES

Schedule No. TOU-GS
Effective Date 2-1-90

Well #6

Reactive Power (Kvar) 1022

		Demand(kw)	Energy(kwh) 1991	Energy(kwh) 1992
Winter	ON	0	0	0
	Mid	2	0	0
	Off	1,976	37,714	37,488
Summr	ON	4	3	3
	Mid	36	20	20
	Off	505	739	742

Schedule No. PA-1 Effective Date 7-1-89		Filteration Plant	Booster Griffith
Load (HP)		15	100
Energy (kWh)	91	61,836	263,917
	92	61,674	265,156

Schedule No. PA-2 Effective Date 7-1-89		Well #8
Demand (kw)	Winter	2,864
	Summer	1,432
Energy (kwh)	1st Block 91	859,342
	2nd Block 91	301,931
	1st Block 92	863,376
	2nd Block 92	303,348

Schedule No. GS-2 Effective Date 7-1-89		Filteration Plant
Demand (kw)	Summer	583
	Winter	365
Energy (kwh)	1st Block 91	49,487
	2nd Block 91	3,159
	1st Block 92	49,719
	2nd Block 92	3,174

Schedule No. GS-SP Effective Date 7-1-89		Filteration Plant
Energy (kWh)	91	500
	92	500

APPENDIX D
(Page 4)

Azusa Valley Water Company

ADOPTED QUANTITIES

Number of Bills (Services x 12)	1991	1992
Meter Size:		
5/8 x 3/4	159,485	160,341
3/4	5,600	5,640
1	2,715	2,729
1-1/2	1,874	1,882
2	3,152	3,167
3	525	526
4	343	343
6	42	42
8	121	121
Total	173,760	174,684

Number of Service

	No. of Service 1990	No. of Service 1991	Usage-KCcf 1990	Usage-KCcf 1991	Avg. Usage Ccf/ 1990 or 1991
Residential	13,403	13,475	3,049.0	3,065.5	227.5
Commercial	913	918	1,081.0	1,089.9	1,187.9
Industrial	34	34	110.4	110.4	3,247.7
Public Auth.	130	130	530.3	530.3	4,079.2
Other			4.5	4.5	
Sub Total	14,480	14,557	4,778.2	4,800.6	
Pub.Fire	1,373	1,383			
Private Fire	103	105			
Total	15,956	16,045			
Water Loss	5.2%		262.1	263.3	
Total Water Produced			5,050.3	5,063.9	

(End of Appendix D)

APPENDIX E

Azusa Valley Water Company

AT PRESENT AND ADOPTED RATES

FOR A 5/8 x 3/4-INCH METER

1991

Usage Ccf	Present Rates	Adopted Rates	Amount Increase	Percent Increase
0	$ 3.60	$ 4.45	$ 0.85	23.61
3	4.78	5.82	1.04	21.66
5	5.57	6.73	1.16	20.83
10	7.54	9.01	1.47	19.50
20	11.48	13.57	2.09	18.21
27.3 Avg.	14.36	16.90	2.54	17.71
30	15.42	18.13	2.71	17.57
50	23.30	27.25	3.95	16.95
100	43.00	50.05	7.05	16.40

1992

0	4.45	4.85	0.40	8.99
3	5.82	6.25	0.43	7.44
5	6.73	7.19	0.45	6.76
10	9.01	9.52	0.51	5.66
20	13.57	14.19	0.62	4.57
27.3 Avg.	16.90	17.60	0.70	4.14
30	18.13	18.86	0.73	4.03
50	27.25	28.20	0.95	3.49
100	50.05	51.55	1.50	3.00

1993

0	4.85	5.05	0.20	4.12
3	6.25	6.52	0.27	4.26
5	7.19	7.50	0.31	4.31
10	9.52	9.94	0.42	4.41
20	14.19	14.83	0.64	4.51
27.3 Avg.	17.60	18.40	0.80	4.55
30	18.86	19.72	0.86	4.56
50	28.20	29.50	1.30	4.61
100	51.55	53.95	2.40	4.66

(End of Appendix E)