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Decision 90 06 015 JUN 06 1990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application of of Contel of California, Inc. for a review of its cost of capital and capital structure for 1990.	Application 89-10-004 (Filed October 2, 1989)
In the Matter of the Application of Citizens Utilities Company of California, constituting its compliance filing for financial attrition review.	Application 89-10-007 (Filed October 2, 1989)
In the Matter of the Application of Roseville Telephone Company for a review of its cost of capital and capital structure.	Application 89-10-008 (Filed October 2, 1989)

Davis, Young, Beck & Mendelson, by Jeffrey F. Beck, Attorney at Law, and A. J. Smithson, for Citizens Utilities Company of California; Cooper, White & Cooper, by E. Garth Black, and Mark P. Schreiber, Attorneys at Law; Ernst & Young, by John J. Nokleberg, Attorney at Law, and Mark B. Shull, for Roseville Telephone Company; Orrick, Herrington & Sutcliffe, by Robert J. Gloistein, Attorney at Law, and Jeffrey B. Cutherell, for Contel of California, Inc.; applicants.

Eugene M. Graczyk, for AT&T, interested party.

Janice Grau, Attorney at Law, Terry R. Mowrey, and Christopher J. Blunt, for the Division of Ratepayer Advocates.

Kevin P. Coughlan, for the Commission Advisory and Compliance Division.

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O P I N I O N

This decision addresses the applications of Roseville Telephone Company (Roseville), Contel of California, Inc. (Contel), and Citizens Utilities Company of California (Citizens) for review of their costs of capital and capital structures. The applications were filed pursuant to requirements set forth in Decision (D.) 89-05-059 in which we addressed financial attrition for the applicants during the 1989 test period.

The applications of Contel and Citizens seek changes to authorized rates of return and capital structures, but no corresponding change in revenue requirement. Roseville seeks no change in capital costs, capital structure, or revenue requirement. The Division of Ratepayer Advocates (DRA) also presented testimony in this proceeding showing that returns on equity should be lowered. DRA, however, recommended no changes in authorized capital costs, capital structures, or revenue requirements.

One day of hearing was held in these proceedings. The utilities and DRA presented their respective witnesses but did not cross examine each other's witnesses. The Administrative Law Judge did ask questions of each of the witnesses. The matter was submitted at the end of the hearing because no briefs were filed.

In summary, this decision authorizes an overall rate of return of 10.75% for all three applicants. The authorized rate of return results in revenue requirement reductions for Citizens and Roseville of $457,000 and $1.051 million, respectively. We decline to establish authorized returns on equity or changes in authorized capital structures.

I. Background Issues

A. Business and Regulatory Risk

The parties to this proceeding reach different conclusions about appropriate capital costs but agree that the Commission should not make any changes to revenue requirements. DRA's position is premised on its view that future regulatory and technological changes may increase the utilities' business risk.

We do not agree that we should forego any action at this time on this basis. Our reconsideration of certain regulatory rules and policies in Investigation (I.) 87-11-033 does not distinguish this period from any other over the past few years. The telecommunications industry has been in a state of flux for some time because of the divestiture of American Telephone and Telegraph Co. and the introduction of competition in certain markets, among other things.

DRA's recommendation to retain the status quo on the grounds that regulatory change may be imminent is not supportable under the circumstances. We do not anticipate the implementation of changes in regulation which would affect Contel, Citizens, or Roseville before 1991. Whether the regulatory changes under consideration for Pacific Bell and GTEC of California, Inc. (GTEC) will significantly affect the smaller telephone companies is unclear. Changes to the settlements process could affect small utility risk. No changes to settlements, however, have been adopted and the timing of any changes which may be made is uncertain.

The utilities and DRA comment that technological change has increased business risk and argue therefore that the Commission should retain the status quo. Although technological change may, as DRA states, require unanticipated or more frequent capital

outlays, it has also improved utility productivity and competitiveness. Moreover, technological change has been a part of the utilities' business climate for many years. No party argues that technological change will impose more risk over the next year than it has in previous years.

In response to questioning during the hearing, DRA's witness testified that its financial analyses recognize the effects of business and regulatory risk on investor expectations. Consequently, we should not, as DRA suggests, discount DRA's analyses on the grounds that business risk and regulatory risk present uncertainy. If we did, we would "double count" the effects of those risks.

The parties have not convinced us that regulatory risk or technological risk has increased over levels experienced in recent years for these companies. Moreover, business and regulatory risks are recognized in the parties' financial analyses. We therefore proceed to review whether the applicants' costs of capital are reasonable under existing circumstances.

B. Proposed Change to Regulatory Cycle

DRA recommends that the Commission change the regulatory cycle for the financial attrition reviews of Contel, Citizens, and Roseville. All three utilities concur with this proposed change. Currently, the Commission requires the utilities to file on or before October 1. Under this schedule, DRA states, new rates are not effective near the beginning of each year. DRA proposes that the utilities file by July 2, 1990, with new rates effective February 1, 1991. This schedule, according to DRA, will better accomodate outstanding regulatory issues such as intraLATA competition, intraLATA access charges, and settlements, all of which may affect utility risk.

Because its proposed schedule will require another cost-of-capital review for the applicant utilities soon, DRA is

recommending no changes to existing authorized costs of capital or capital structures for Contel, Citizens, and Roseville.

DRA's proposed schedule change is unlikely to obtain the result DRA seeks. Outstanding regulatory issues under consideration in I.87-11-033 will probably not be resolved before Fall 1990, well after the utilities would have filed their financial attrition applications under DRA's proposal. The existing schedule, in fact, is timed better to address any changes which may result from a decision in Phase III of I.87-11-033.

We therefore decline to adopt DRA's proposed procedural schedule for the financial attrition filings of the three applicants. Contel, Citizens, and Roseville should file 1991 financial attrition applications on October 1, 1990.

II. Contel's Financial Attrition Request

Contel seeks increases in its authorized return on equity, cost of long term debt, and common equity ratio:

1990 Request

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	39.3%	8.86%	3.48%
Preferred Equity	.7	5.56	0.04
Common Equity	60.0	13.95	8.37
Total	100.0		11.89%

Authorized for 1989

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	44.0%	8.36%	3.68%
Preferred Equity	3.0	5.54	0.17
Common Equity	53.0	13.00	6.89
Total	100.0%		10.74%

Under Contel's request, its overall rate of return would increase from 10.74% to 11.89%. Contel does not request any change in rates or revenue requirement.

A. Return on Equity

1. Contel

Contel asks that its authorized return on equity be increased from 13% to 13.95% on the basis of several analyses. Generally, Contel states that the determination of a fair rate of return should recognize that investors evaluate historical information and couple that information with expected changes which could affect the required rate of return.

Contel performed a discounted cash flow (DCF) analysis. Contel describes the DCF as a method which uses present value to estimate how much an investment is worth today given expected future cash flows. In the case of common stock, market prices are determined by finding the present value of all future expected cash flows associated with the ownership of the share of the stock. Such cash flows include periodic cash dividends and a future stock price upon sale.

Contel applied the DCF model to several sample telephone companies rather than to its own operations alone. Contel believes this practice mitigates distortions in historical dividend and/or earnings growth that might occur. As a result of its calculations, Contel arrived at a composite return on equity for the sample companies of 13.46%. To this, Contel added a premium of 49 basis points to reflect the difference between Contel's bond rating of A+ and sample companies' bond ratings of AA-. This premium was derived from the historical difference in returns required for investors purchasing AA rated bonds and those purchasing A rated bonds. Contel's recommended return on equity is therefore 13.95%.

Contel also applied the Capital Asset Pricing Model (CAPM) to estimate equity costs. CAPM assumes that an equity investor's market return on equity equates to the return an

investor could expect to receive on a risk-free investment plus an expected premium that is proportional to the level of risk the investor is assuming. The CAPM model measures market risk by reviewing the degree an individual equity security has moved historically with changes in the equity market. The measure of this risk is called a beta coefficient.

Contel conducted its CAPM analysis by averaging the CAPM results for each of several sample telephone companies applying 3-month Treasury Bill and 30-year government bond yield projections as a proxy for the expected risk-free return components of the analysis. Using a DRI estimate, Contel projected Treasury Bill returns to be 6.64% in 1990 and projected 30-year government bond yields to be 7.71% in 1990.

Contel derived the risk premium component of the analysis by using historical equity risk premiums between common stock returns and Treasury Bill returns and long-term government bond yields from 1926 to 1988. The premiums are respectively 8.4% and 6.8%. Calculating the CAPM for sample telephone companies, Contel estimates a range of 13.60% to 13.92% return on equity for those companies. To these amounts, it adds the 49 basis points used in the DCF model to account for Contel's A+ bond rating for a final range of 14.09% to 14.41%.

As part of its CAPM analysis, Contel employed a "risk premium" methodology to determine the historical spread between debt and expected equity returns. It adds the spread to the current debt yield to arrive at the required return on equity. Using both historical returns on S&P utility stocks from 1940 to 1988 and historical expected returns on equity for sample telephone companies from 1984 to 1989, Contel estimates an average spread of 382 basis points. Adding this amount to the average AA utility debt rate, plus the 49 basis point premium for A rated debt, Contel projects the cost of equity capital to be 12.96%.

Averaging the results of its three methodologies, Contel recommends a 13.72% required rate of return before flotation costs. Flotation costs are those associated with underwriting a stock issuance. Contel estimates flotation costs to be 4.32%. Contel multiplies a flotation cost adjustment factor of 1.0432 by 13.72% to arrive at a final average book requirement of 13.95% on common equity.

Contel states it expects the economy will slow in 1990, with lower rates of inflation and interest.

2. DRA

Like the utility, DRA used several methodologies for estimating a return on equity for Contel. It selected a comparable group of telecommunications companies for comparing applicants' circumstances to those of utilities in similar circumstances. Its comparable group of telecommunications companies all have a Value Line financial strength of at least B, a Value Line beta of between .70 and 1.0, and a Value Line safety rating of 1, 2, or 3. DRA eliminated several firms from the group because these companies provide services which are substantially different from applicants' services.

DRA presented actual average equity ratios, rates of return, and returns on equity for the comparable companies and for Contel:

Return on equity	
Comparable companies	13.8%
Contel	17.0
Rate of return	
Comparable companies	11.7%
Contel	12.0
Equity ratio	
Comparable companies	51.0%
Contel	63.0

DRA performed a DCF analysis for Contel, using an 8.5% to 9% rate of growth for Contel. The resulting range of returns on

equity for comparable companies is 12.09% to 12.72%. The range for Contel is between 12.07% and 12.62%.

DRA also used the CAPM methodology to estimate returns for Contel. DRA used the 3-month Treasury Bill rate, the 4-year Treasury Note rate and the 30-year Treasury Bond rate to establish a proxy for a risk-free investment. Applied to Contel, the CAPM produced a range of expected returns on equity for Contel of 13% to 13.43%. DRA comments, however, that it did not weigh the results of the CAPM as heavily as the DCF results, but used it as a check on other analyses.

DRA believes the required return on equity for Contel, as well as the other two applicants, is in the range of 12.25%-12.75%, but does not recommend any changes at this time.

B. Cost of Debt

Contel recommends its cost of debt be increased from 8.36% to 8.86%. This recommendation is made because of debt retirements and a financing made in the fourth quarter of 1989 at an interest rate of 9.41%. DRA believes Contel's embedded cost of debt is reasonable.

C. Capital Structure

1. Contel

Contel's California operations do not have a directly identifiable capital structure. Contel believes the Commission should use the capital structure of the total company (which has operations in parts of Nevada and Arizona as well as California) in determining the captial structure of Contel's California operations. California operations constitute 92% of total revenues for Contel.

Contel estimated a reasonable capital structure by analyzing those of fifteen sample telephone companies. The industry average for those companies is 55% to 58% equity for the period 1984 through 1989.

Contel submits its operations are riskier than those of the sample companies because Contel has fewer access lines and a greater reliance on toll revenues. This additional business risk, according to Contel, must be offset by a higher percentage of equity capital because equity capital is, from the company's standpoint, a lower risk form of capital than long-term debt. It therefore recommends a 60% equity ratio for 1990. Contel believes if its current authorized equity ratio had been closer to the actual level, it would have received a higher upgrading by Standard and Poor's than it did in 1989 when the rating was raised from A to A+.

2. DRA

DRA comments that Contel's requested 60% equity ratio would substantially reduce Contel's financial risk while increasing its revenue requirement without corresponding benefits to its ratepayers. DRA states that Contel's current authorized equity ratio of 53% is below those currently authorized for the other California telecommunications companies, but recommends no change at this time.

D. Discussion

Using similar resources, Contel and DRA arrive at different conclusions about investor expectations of returns for Contel and comparable companies. Without venturing into a detailed comparison, we observe that Contel's DCF analysis exaggerates expected dividend yields by factoring in investor expectations twice. Different results for DRA and Contel are also attributable to differing growth rates, comparable company groups, and risk free rates, among other things.

We have consistently found in recent years that the models used by the parties offer guidance to our determination of appropriate rates of return, but that because of the variations in their results, do not provide absolute answers to questions regarding appropriate capital costs. We reaffirmed our view in

D.89-10-031, which established rates of return for GTEC and Pacific Bell, that we continue to view these models with considerable skepticism. Consistent with our past application of financial models in determining costs of capital, we will consider the models put forth by the parties, but use our judgment in determining appropriate capital costs for the utilities.

In setting returns, we have traditionally imputed a capital structure where we believe a utility's actual equity ratio is too high or too low. A utility's capital ratio affects its return on equity: the more equity in the capital structure, the lower the return. This is logical because the more equity in a capital structure, the lower the risk to shareholders. If the utility wishes to increase its return on equity, it may do so by issuing lower cost long-term debt.

The utilities argue that we should adopt high equity ratios to recognize increased risk to shareholders in recent years. We agree that the trend among telecommunications utilities is for higher equity ratios. The record in this case, however, does not justify higher equity ratios: those of the applicant utilities are already well above industry averages.

In D.89-10-031, we stated our view that adopting a rate of return without reference to an adopted capital structure provides the utilities with an incentive to manage their capital structures efficiently. This principle applies equally well to Contel, Roseville, and Citizens. We therefore decline to adopt new capital ratios or returns on equity and will focus instead on an appropriate rate of return.

D.89-10-031 adopted a market-based rate of return for GTEC and Pacific Bell of 11.5%.[1]

We have not adopted an incentive-based regulatory program for Contel. Contel's regulatory risk is therefore lower than Pacific Bell's or GTEC's. Contel argues its business risk may be higher than other, more urban, telecommunications companies because of its reliance on toll revenues. Contel's reliance on toll revenues, however, does not necessarily make its operations riskier than Pacific Bell's under existing circumstances. To the contrary, the settlements process and the High Cost Fund protect Contel from revenue losses.

Further, as a more rural utility, Contel probably faces less risk than Pacific and GTEC because Contel's risk of bypass by large customers is likely to be lower.

With these observations in mind, and based on the financial analyses presented by the parties, we believe a reasonable rate of return for Contel is 10.75%. The amount is lower than the rate adopted for Pacific and GTEC in D.89-10-031 to recognize the lower business and regulatory risks faced by Contel. Using Contel's requested capital structure, the resulting return on equity is 12.05%:

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	39.3%	8.86%	3.48%
Preferred Equity	.7	5.56	0.04
Equity	60.0	12.05	7.23
Total	100.0		10.75%

1 To this we added 150 basis points to establish a "benchmark" rate of return. The purpose of that additional amount is to determine revenues which would be shared by ratepayers and shareholders. This increase in the utilities' rates of return over the authorized rates from the previous period recognized that "Pacific's and GTEC's regulatory risk will be slightly higher under the adopted incentive-based regulatory framework."

Applying the 1989 adopted rate of return to Contel's authorized capital structure, and adopted debt and preferred equity cost, the resulting return on equity is 13.0%:

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	44.0%	8.36%	3.68%
Preferred Equity	3.0	5.54%	0.17
Equity	53.0	13.00	6.90
Total	100.0%		10.75%

This return on equity and rate of return is adequate to allow Contel to maintain its credit worthiness and to attract capital at a reasonable cost. Contel's revenue requirement would change slightly with our adopted rate of return, but since Contel did not seek an increase, the Commission will not increase rates. We comment that under the existing revenue requirement, Contel realized a return on equity of over 17% during 1989, an amount which is well in excess of a return required for a comparably situated utility.

III. Citizens' Financial Attrition Request

Citizens recommends that the Commission increase its equity ratio and its return on equity for 1990 over 1989 levels and reduce long-term debt cost.

Authorized for 1989

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	38.0%	8.00%	3.04%
Common Equity	62.0	13.00	8.06
Total	100.0%		11.10%

Requested for 1990

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	35.8%	7.79%	2.79%
Common Equity	64.2	13.50	8.67
Total	100.0%		11.46%

Although Citizens requests changes in its costs, it requests no change to its revenue requirement.

A. Return on Equity

1. Citizens

Citizens recommends an increase in its return on equity from 13.0% to 13.5% for 1990. Citizens used the DCF model and a CAPM analysis in developing its recommendation.

For its CAPM analysis, Citizens compared Treasury Bonds to common stocks and Treasury Bonds to small stocks. The risk-free rate applied to the Treasury Bonds is 8.4%, derived from rates posted in September 1989 for 1990 issues. Averaging the results for common stocks and small stocks, Citizens estimates a required return of 16.58%.

Citizens also used a DCF applying six different growth rates between 8% and about 12% in the analysis. Its DCF analysis provided a range of returns between 12% and 15.97%, with an average of 14.27%. For comparison purposes, it used the same analysis to project the returns for 17 operating telephone companies and also for 19 companies with ratings comparable to Citizens'. The range for telephone companies is 9.56 to 12.79%. The range for comparably rated companies is 13.22% to 13.77%.

2. DRA

DRA performed the standard analyses for Citizens. As with Contel, DRA presented Citizens' financial indicators and compared them with those of comparable companies:

Return on Equity	
Comparable Companies	13.8%
Citizens	18.1%
Rate of Return	
Comparable Companies	11.7%
Citizens	14.7%
Equity Ratio	
Comparable Companies	51%
Citizens	64%

For its DCF calculation, DRA used forecasted growth rates of 8% and 8.5% for earnings and dividends respectively, arguing that Citizens' historical growth rates are excessively high and not sustainable in the future. DRA states its projected growth rates are within the range projected by analysts for the next five years. Using these growth rates, DRA estimates a required return in the range of 12% to 12.55%.

DRA also performed a CAPM analysis, estimating a range of expected returns on equity of between 12.4% and 12.7%.

B. Cost of Debt

Citizens recommends use of its estimated embedded cost of debt for 1990, a rate of 7.79%. DRA believes Citizens cost of embedded debt is reasonable.

C. Capital Structure

1. Citizens

Citizens requests an increase in equity ratio from 62% to 64.2%. Citizens uses the same capital structure for its California operations as the actual structure for its total company operations. Citizens' California operations are financed by the total company, which receives lower cost debt than a smaller company could realize. Citizens argues against the use of a hypothetical capital structure to avoid controversy and apply known and measureable costs.

Citizens provided information to show that average debt ratios for ten independent telephone companies were about 48% in

1989. For the regional Bell companies, the debt ratio is about 40% for 1989.

2. DRA

DRA believes Citizens currently authorized equity ratio of 62% is reasonable and should not be increased.

D. Discussion

We reiterate our comments in the discussion for Contel. We believe that setting a rate of return without reference to a capital structure or return on equity provides the appropriate incentive for Citizens to manage its capital costs and capital structure efficiently. We will adopt a 10.75% rate of return for Citizens for the same reasons it was adopted for Contel. Citizens faces less regulatory risk than Pacific Bell or GTEC because it is not subject to the same type of incentive-based regulation. Citizens faces less business risk than the larger companies because of the High Cost Fund. The financial analyses presented in this proceeding supports this rate of return.

Applying the adopted rate of return to Citizens' requested capital structure and embedded debt cost, the resulting return on equity is 12.40%:

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	35.8%	7.79%	2.79%
Equity	64.2%	12.40	7.96
Total	100.0%		10.75%

Applying the 1989 adopted rate of return of Citizens' authorized capital structure, and 1989 adopted debt cost the resulting return on equity is 12.44%:

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	38.0%	8.00%	3.04%
Equity	62.0	12.44	7.71
Total	100.0%		10.75%

We cannot reduce a utility's authorized rate of return but decline to reduce revenue requirement. That would be tantamount to abandoning our role of protecting ratepayers from overpriced services. This adopted rate of return therefore requires a slight decrease to Citizens' revenue requirement. Citizens' existing revenue requirement allowed it to realize an 18.1% return on equity in 1989. The rate of return adopted will allow Citizens to attract reasonably priced capital and provides its shareholders with a fair return on equity. The resulting return on equity is well within the range of DRA's recommended returns on equity of 12.25% to 12.75%.

Although the return on equity is slightly lower than the average realized by comparable companies in 1989, Citizens' equity ratio is currently well above the industry average of 51-54%. That higher equity ratio imposes lower risk on shareholders, justifying a somewhat lower return on equity.

IV. Roseville's Financial Attrition Request

Roseville recommends no changes to its capital structure or its capital costs. It does, however, provide a financial analysis in support of its current authorized financial costs.

Authorized for 1989

	Capital Ratios	Cost Factor	Weighted Cost
Long Term Debt	30%	10.19%	3.06%
Common Equity	70	12.80%	8.96
Total	100		12.02%

A. Return on Equity

1. Roseville

Roseville employed a CAPM analysis, a comparable book returns analysis, and the DCF model in arriving at its cost of equity recommendation.

For the risk premium analysis, Roseville used long-term government bonds for the risk-free investment. Roseville projected a 9% return for those bonds. Using stock premiums from 1926 to 1987, Roseville estimates that the average measure of market risk premium is 7.4%. Since Roseville is not highly traded, it applied the betas of other telephone companies. With this data, Roseville estimates a range of equity betas for it to be between .7685 to .8624. These numbers are based on the average total asset beta and the highest total asset beta for the sample telephone companies. Using them, Roseville states the resulting cost of equity for Roseville is between 14.69% and 15.38%.

Roseville's comparable book returns analysis used telephone companies that have capital structures consisting of at least 60 percent equity. The average achieved returns are 18.37% for 1985, 17.91% for 1986, and 18.82% for 1987. Roseville comments that because these are book returns on total equity, it is difficult to draw strong conclusions from the data.

Roseville also used the DCF model, described above. It used stocks which are widely traded. The average required return for those companies, according to Roseville's analysis is 12.46%, using the average return and adjusting for Roseville's adopted capital structure. Using the highest of the returns, Roseville's required return would be 14.44%.

2. DRA

As with the other two companies, DRA presented actual data comparing Roseville's financial indicators with those of comparable companies:

Return on equity	
Comparable Companies	13.8%
Roseville	14.1
Rate of Return	
Comparable Companies	11.7%
Roseville	12.9%
Equity Ratio	
Comparable Companies	51%
Roseville	92%

DRA did not perform a DCF analysis for Roseville. A risk premium analysis was performed for comparable companies, however, resulting in an expected return on equity of between 12.36% and 12.55% for the group.

When DRA applied the CAPM model to Roseville, it incorporated Roseville's estimated range for the company's beta since its stock is not traded widely. Using that range, and in view of Roseville's high equity ratio, DRA believes the equity range for Roseville would be similar to Citizen's, between 12.4% and 12.7%.

B. Cost of Debt

Roseville's adopted cost of embedded debt is 10.19%. Adjusting this for its incremental cost of debt, according to Roseville, results in an overall cost of 10.23%, although it does not request any change to its authorized cost of debt. Roseville's cost of new debt is 10.5% because under the terms of an existing indenture, it may only borrow short term funds. DRA does not object to Roseville's embedded cost of debt.

C. Capital Structure

1. Roseville

Roseville states its equity ratio has risen since 1982 from 72% to a high of 91% in 1988. It anticipates reducing that equity ratio to about 87% percent by the end of 1990. Roseville explains its high equity ratio results because it is not part of a large, highly-diversified holding company, because it does not have any Rural Electricification Administration (REA) debt, and because "it is difficult to justify borrowing for the sake of borrowing."

Roseville states its capital structure has evolved "naturally" as a result of an indenture entered into during the early 1980s when interest rates were high. That indenture is very restrictive, requiring Roseville to use internally-generated funds to finance its capital programs during the 1980s.

Imputing a lower equity ratio than actually exists, according to Roseville, is unfair because such a practice creates an unfunded tax liability that the company is prevented from collecting. Nevertheless, Roseville is not recommending a change in the adopted equity ratio of 70% for 1990.

2. DRA

DRA expresses concern with Roseville's authorized and actual equity ratios. It recommends, however, that no adjustment be made at this time assuming DRA's proposal to change the regulatory cycle is adopted.

D. Discussion

Before discussing Roseville's capital structure and capital costs, we address some glaring biases in Roseville's financial analyses which merit comment. All of these biases exaggerate Roseville's estimated cost of capital. First, Roseville's estimates of comparable betas and comparable earnings are based on the average of the sample's average value and the sample's highest value. The result, of course, is that Roseville's estimates of risk and return using the CAPM and risk premium models are significantly higher than they should be. We cannot seriously consider a methodology which is so biased to produce high results.

Second, Roseville has not presented any analysis as to why the "comparable" companies, selected for its comparable earnings analysis are in fact comparable except to say that all have equity ratios over 60%. This in itself does not make a company comparable.[2] Contel, Citizens, and DRA's methods for selecting comparable companies is superior. DRA, for example, selected comparable companies by considering financial strength,

2 For reasons which are not explained, Roseville then uses a different group of comparable companies in its DCF analysis.

safety ratings, lines of business, and betas. Because Roseville does not explain the basis on which it chose its comparable companies, its comparable earnings analysis does not provide any useful information.

Third, Roseville explains it used an imputed beta which is higher than those for other companies because its risks are higher. Roseville asserts its risk is higher than other companies because it does not have diversified operations, because 25 per cent of its revenues are generated from business customers, and because its market is highly concentrated geographically. This "comparison" is unsupported by any information about the other companies. Neither does Roseville support its view that geographic concentration or diversification necessarily reduce risk. Roseville's risk premium analysis is therefore likely to overstate required returns.

Finally, Roseville adjusted its DCF for flotation costs and capital structure. Both of these adjustments are unsupported by Roseville's analysis and financial theory. Both exaggerate Roseville's estimated cost of capital.

The analytical shortcomings aside, we are most concerned with Roseville's financial circumstances. Roseville's equity ratio is well above that of any other California telecommunications company subject to rate of return regulation. To explain this, Roseville testified that it entered into a very restrictive indenture in the late 1970s. The indenture constrains it from issuing long-term debt and provides for high penalties for pre-payment. Roseville's witness called this indenture "one of the most severe I have seen."

Because of this indenture, Roseville has generally used internally generated funds for capital needs, and has twice issued stock in the past ten years. Because the indenture constrains Roseville from issuing long-term debt, it must use a line of short-term credit, costing 10.5% in 1990. As a result, the

embedded cost of debt for Roseville is 10.19%, well above that of Contel and Citizens, which are similarly-situated companies.

During the hearings for Roseville's 1989 financial attrition proceeding, DRA's witness testified that Roseville would be able to achieve a 78% equity ratio by the end of 1989. For reasons which are not explained in its application, Roseville's year end equity ratio is 86%, well above the projected ratio.

All of these circumstances result in high cost debt for Roseville and a high proportion of expensive equity in Roseville's capital structure. Even though its 1989 return on equity was slightly lower than that for Citizens and Contel, its rate of return was much higher. Roseville seeks to have its ratepayers continue to pay for these high capital costs. We are not convinced, however, that Roseville's financial decisions were prudent. In the past, Roseville's ratepayers have shouldered the costs of the utility's questionable financing decisions. Going forward, Roseville, not its ratepayers, will be at risk for its capital structure and the costs associated with it.

We have adopted a rate of return of 10.75% for Contel and Citizens. Our discussion of Contel's request applies equally to Roseville and we need not restate it here. We will adopt a rate of return for Roseville of 10.75% without changing Roseville's capital structure or setting a separate return on equity. Of all three applicants, Roseville's circumstances are most suited to our adopted rate of return and methodology which places the utility, rather than its ratepayers, at risk for capital structure and financial management decisions and which provides shareholders with an offsetting reward for good financial management.

Applying a 10.75% rate of return to Roseville's actual estimated capital structure and embedded debt cost, the return on equity is 10.83%:

	Capital Ratios	Cost Factor	Weighted Cost
Debt	13.0%	10.19%	1.33%
Equity	87.0%	10.83	9.42
Total	100.0%		10.75%

Applying a 10.75% rate of return to Roseville's capital structure and embedded debt cost authorized for 1989, the return on equity is 10.98%:

	Capital Ratios	Cost Factor	Weighted Cost
Debt	30.0%	10.19%	3.06%
Equity	70.0%	10.98	7.69
Total	100.0%		10.75%

These returns on equity are below those recommended by DRA. They are, however, reasonable in light of Roseville's capital structure, which is well above that of any California regulated utility and about 35 percentage points higher than industry averages. Because Roseville's equity ratio is so high, its investors face correspondingly less risk than other telephone utilities. They should, accordingly, realize a lower return on their investment. Roseville's own analysis shows that the unlevered cost of capital for comparable telephone companies is less than 12%, well below the levered cost of 12.76% estimated in Roseville's DCF analysis.

The estimated returns on equity for Roseville are lower than they would be if Roseville's cost of debt were lower. For example, if Roseville's cost of debt were 8%, slightly higher than Citizens', its return would be 11.93% using its 1989 authorized capital structure.

Our adopted rate of return for Roseville is the same we apply to Citizens and Contel, which are similarly situated companies in terms of the regulatory and business risks they face. We see no reason to apply a different rate of return to Roseville and thereby impose on its ratepayers capital costs which are higher

than what would be expected for Roseville, and which are within the control of the utility. Moreover, if we were to adopt a higher return for Roseville than for Citizens and Contel, we would be sending a message to Citizens and Contel that we do not recognize their efforts to keep capital costs low.

Our decision today provides a reasonable return to shareholders, considering Roseville's capital structure, and the appropriate incentive to develop a capital structure which will be most beneficial to its shareholders and more efficient. We also note that Roseville's shareholders realized a 14% return on equity in 1989. That return is significantly higher than the average return of about 13.1% for telephone utilities with much lower equity ratios. The rate of return adopted in this decision will permit Roseville to realize a fair return on equity in 1990.

Our adopted rate of return for Roseville requires a reduction in revenue requirement in the amount of $1.051 million. That revenue reduction will be applied to Roseville's existing surcharge.

Comments to ALJ Proposed Decision

Roseville and Citizens filed comments to the proposed decision of the ALJ, issued pursuant to Section 311. Generally, they are concerned that the proposed decision reaches conclusions which differ from those reached by the parties to the proceeding. The comments imply that the Commission should not interfere with the stipulation entered into between DRA and the applicants.

Citizens and Roseville raise these broader claims in the context of various issues. For example, they argue that the proposed decision makes a significant change in the way cost of capital is determined without an adequate record. They believe that by setting a rate of return rather than a return on equity, the decision improperly adopts a "new regulatory structure." The change is improper, according to Roseville and Citizens, because it was not sponsored by any party or subject to cross-examination.

The utilities appear to misunderstand the proposed decision. It does not adopt a "new regulatory structure" or even a new method for determining cost of capital. The proposed decision merely changes emphasis in the cost of capital discussion from return on equity to rate of return. The proposed decision still imputes a capital structure and implicitly adopts a return on equity. The results are derived from the financial analyses put forth by the utilities and DRA. We therefore do not agree that any new or unsupportable methodology is set forth in the proposed decision.

Citizens argues that it was denied a fair hearing because the decision compares applicants' business risks with those of Pacific and GTEC rather than relying upon traditional financial market analysis. To the contrary, however, the decision relies entirely upon the type of analysis traditionally used in cost of capital proceedings. Citizens itself compared its cost of capital and risks to those of Pacific and GTEC.

More generally, the utilities have not, as they suggest, been denied an opportunity to present their cases. Each sponsored several witnesses who were subject to cross-examination and whose testimony is part of the record in this proceeding. That no party challenged the utilities' analyses or requests does not constrain the Commission from reaching a decision which differs from the requests as long as the evidence supports the Commission's findings.

We have modified the decision to address Roseville's concern that the decision mischaracterizes the reasons Roseville does not have any low cost REA debt. The record supports a conclusion that Roseville might have declined REA funding in order to preserve the independence of its operations. The matter, however, is not critical to the decision's findings and we therefore eliminate reference to the subject.

Findings of Fact

1. Contel and Citizens recommend changes in their authorized capital costs and capital structures, but recommend no associated change in revenue requirement.

2. Roseville recommends no change to its authorized capital costs or capital structure, and no change in revenue requirement.

3. DRA recommends changes in the applicants' authorized capital costs but no change in revenue requirement at this time because of regulatory uncertainty and rapid changes in technologies.

4. The parties did not show that regulatory uncertainty is greater in 1990 than it has been in recent years.

5. The parties did not show that technological change during 1990 will impose greater risks than it has in recent years.

6. The parties' financial analyses recognize the effects of business risk and regulatory risk on investor expectations. Accordingly, discounting DRA's financial studies on the basis that the utilities will face regulatory and business risks during 1990 would overestimate the effects of those risks on investor perceptions.

7. Changes to settlements arrangements could affect applicants' risk. It is unlikely that changes to the process will be implemented during 1990 in ways that will negatively affect applicants' revenues.

8. DRA's proposed schedule change may require that testimony is submitted and hearings are complete prior to a Commission decision in Phase III of I.87-11-033.

9. The more equity in a utility's capital structure, the lower the required return because risk to shareholders decreases as the proportion of debt falls.

10. Contel's requested equity ratio is significantly higher than the average of comparable telecommunications companies used in DRA's analysis.

11. Citizens' requested and authorized equity ratios are significantly higher than the average of comparable telecommunications companies used in DRA's analysis.

12. Roseville's authorized and actual equity ratios are significantly higher than the average of comparable telecommunications companies used in DRA's analysis.

13. D.89-10-031 found that adopting a rate of return rather than a return on equity provides the utilities with an incentive to efficiently manage their capital costs and capital structures.

14. D.89-10-031 increased the rates of return of Pacific Bell and GTEC to recognize higher levels of risk presented by the regulatory program adopted for them in that decision.

15. Contel, Citizens, and Roseville are not subject to the regulatory program changes adopted in D.89-10-031.

16. The settlements process protects Citizens, Roseville, and Contel from revenue losses due to variations in toll revenues. Applicant utilities, but not Pacific, benefit from participation in the High Cost Fund.

17. No evidence in this proceeding suggests that applicant utilities face more risk than GTEC and Pacific Bell.

18. A rate of return for applicant utilities of 10.75% will provide utility shareholders with a reasonable return on investment and permit the utilities to attract capital.

19. Applying a 10.75% rate of return to Contel's existing authorized capital structure provides a 13% return on equity to shareholders, and results in a slight increase to Contel's revenue requirement.

20. Applying a 10.75% rate of return to Citizens' existing authorized capital structure provides a 12.44% return on equity, requiring a revenue requirement adjustment of $(457,000).

21. Roseville's equity ratio is much higher than the equity ratios of Citizens, Contel, and the industry average for comparable companies. That high equity ratio results in part from an

indenture agreement which restricts Roseville's ability to issue long term debt.

22. Roseville's embedded cost of debt is significantly higher than that of Citizens or Contel in part because Roseville uses a short term line of credit rather than long term debt to finance capital needs.

23. Roseville did not demonstrate in the proceeding that its capital structure or embedded cost of debt resulted from prudent management decisions.

24. Applying a rate of return of 10.75% to Roseville's existing authorized capital structure results in a return on equity of 10.98% and a revenue requirement reduction of $(1.051) million.

25. Roseville's estimated return on equity would increase if Roseville were to reduce its equity ratio or secure less expensive forms of embedded debt.

26. The adopted rate of return for Roseville is the same as that adopted for Contel and Citizens which are similarly situated companies.

27. If the Commission adopted a higher rate of return for Roseville than for Contel or Citizens, and assuming the companies are comparably situated, the Commission would not properly recognize the efforts of Contel and Citizens to keep their capital costs low.

Conclusions of Law

1. The Commission should not defer consideration of financial attrition issues because of regulatory or technological uncertainty.

2. The applicants should file 1991 financial attrition applications on October 1, 1990.

3. A rate of return of 10.75% for Contel, Roseville, and Citizens is reasonable because it appropriately recognizes utility risk and provides a fair return on shareholder investment.

4. It is reasonable to set a rate of return rather than a new capital structure and return on equity because the utilities may determine appropriate returns on equity by establishing the capital structures which will be most beneficial to their shareholders.

5. Roseville's ratepayers should not have to pay for the costs associated with Roseville's extraordinary cost of debt and high equity ratios until and unless Roseville can demonstrate that those costs are reasonable and were prudently incurred.

6. The Commission should order Citizens to reduce its revenue requirement by $457,000 to reflect a reduced rate of return. The revenue reduction should be made by reducing Citizens' surcharge.

7. The Commission should order Roseville to reduce its revenue requirement by $1.051 million to reflect a reduced rate of return. The revenue reduction should be made by reducing Roseville's surcharge.

8. The Commission should not increase Contel's rates.

O R D E R

IT IS ORDERED that:

1. Citizens Utilities Company of California shall file advice letters within 10 days after the effective date of this decision to flow through the revenue reductions ordered in this decision. Citizens shall reduce the surcharge currently applied to intrastate access, intralata toll and local exchange services and be calculated on an estimated 1990 billing base developed using the same methodology adopted in the 1989 cost of capital proceeding. The revenue reduction shall be on a bill-and-keep basis and shall become effective 14 days after filing of the advice letters.

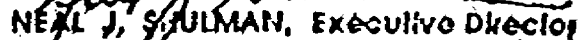
2. Roseville Telephone Company shall file advice letters within 10 days after the effective date of this decision to flow through the revenue reductions ordered in this decision. Roseville shall reduce the surcharge currently applied to intrastate access, intralata toll and local exchange services and be calculated on an estimated 1990 billing base developed using the same methodology adopted in the 1989 cost of capital proceeding. The revenue reduction shall be on a bill-and-keep basis and shall become effective 14 days after filing of the advice letters.

This order is effective today.

Dated JUN 06 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 BY THE ABOVE
COMMISSIONERS TODAY



NEAL J. SHULMAN, Executive Director