

Decision 89 05 059 MAY 26 1989

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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

In the Matter of the Application)
of the Commission's Division of)
Ratepayer Advocates for Modification)
of Resolution No. T-12079 Re Revenue)
Requirement Impact of 1988 Attrition)
for Pacific Bell.)

MAY 30 1989

Application 88-05-009
(Filed May 6, 1988)

In the Matter of the Application)
of CITIZENS UTILITIES COMPANY OF)
CALIFORNIA (U 87 C), constituting)
its compliance filing for financial)
attrition review.)

Application 89-01-043
(Filed January 31, 1989)

In the Matter of the Application)
of ROSEVILLE TELEPHONE COMPANY)
(U 1015 C), for review of its cost)
of capital and capital structure.)

Application 89-02-001
(Filed February 1, 1989)

Orrick, Herrington & Sutcliffe, by Robert J. Gloistein, Attorney at Law, for Contel of California, Inc.; Davis, Young, Beck & Mendelson, by Jeffrey F. Beck, Attorney at Law, John H. Engel, Attorney at Law, and A. J. Smithson, for Citizens Utilities Company of California; and Cooper, White & Cooper, by E. Garth Black and Mark P. Schreiber, Attorneys at Law, for Roseville Telephone Company; applicants.
Mark Baxmore, Attorney at Law, for Toward Utility Rate Normalization (TURN); Randolph Deutsch, Attorney at Law, for AT&T Communications of California; Graham & James, by Martin Mattes, Attorney at Law, for California Cable Television Association; Sidney J. Webb, for himself; and Thomas J. Ballo, Attorney at Law, for Pacific Bell; interested parties.
Helen Mickiewicz, Attorney at Law, and Kevin P. Coughlan, for Division of Ratepayer Advocates.

**OPINION ON SETTLEMENT AGREEMENTS
REGARDING 1989 FINANCIAL ATTRITION**

I. Procedural Background

On May 6, 1988 the Division of Ratepayer Advocates (DRA) filed an application seeking certain modifications of Commission Resolution T-12079, our order relating to Pacific Bell's (Pacific) 1988 attrition year revenue requirement. DRA raised several procedural issues concerning the Commission's prospective 1989 attrition reviews for Pacific, GTE California Incorporated (GTEC), and the three mid-sized local exchange telephone companies, Contel of California, Inc. (Contel), Citizens Utilities Company of California (Citizens or CUCC), and Roseville Telephone Company (Roseville). DRA requested that we issue an order requiring the three mid-sized companies to file financial attrition applications by February 1, 1989. Citizens and Roseville protested DRA's application on both procedural and substantive grounds. Contel filed a response which expressed its desire for a comprehensive determination of its outstanding revenue requirements changes, and proposed several changes. By a motion filed October 21, 1988 Contel supplemented its proposal to reflect lengthy informal discussions with DRA.

In Decision (D.) 88-11-050 we rejected the protests of Citizens and Roseville and ordered them to file financial attrition applications for capital structure and cost of capital review by February 1, 1989, using the approach suggested by Contel in its

proposal,¹ but using their own respective adopted test year results of operations. Further, we accepted Contel's proposal on a provisional basis, but required Contel to submit testimony, also by February 1, 1989, fully justifying the reasonableness of the cost of capital aspect of its proposal.

The parties timely complied with these requirements. Roseville's application was docketed as Application (A.) 89-02-001 and Citizens' as A.89-01-043. By a Ruling of the Administrative Law Judge these two dockets were consolidated with A.88-05-009, the docket in which Contel's proposal and testimony were filed, and a prehearing conference (PHC) was set for February 15, 1989. All three of the parties indicated their desire to resolve the outstanding financial attrition issues through the procedure for stipulations and settlements set out in Article 13.5 of the Commission's Rules of Practice and Procedure (Title 20, California Code of Regulations, Section 51 et seq.). To that end they provided timely notice to all parties pursuant to Rule 51.1(b) regarding their intent to hold settlement conferences. The PHC established both filing dates for stipulated settlements and a hearing schedule to be utilized in the event settlements were not reached or we were to find that further hearings were needed. Each of the parties filed settlement agreements by the March 8, 1989 filing date. The terms of the applications (in the case of Contel it was actually by motion) and the settlement agreements of each of these three mid-sized telephone companies are set out below. It is

1 Contel suggested that the 1989 cost of capital adjustment be applied to its adopted 1985 test year results of operations (adjusted for the change in the net-to-gross multiplier) to determine the percentage change in test year revenue requirement. The resulting percentage was to be applied to updated 1989 estimated billings to calculate the gross revenue requirement change. The decision also left the way open for Citizens and Roseville to propose alternative approaches in their applications.

the purpose of this decision to determine whether these settlements are "reasonable in light of the whole record, consistent with law, and in the public interest", the basis for Commission approval under Rule 51.1(e).

II. Contel's Financial Attrition Request

A. The Proposal and Testimony

The terms of Contel's proposal, as set out in its motion of October 21, 1988, are described in D.88-11-050, in which we accepted the proposal, except that the financial attrition adjustment portion of the overall proposal was accepted on an interim basis subject to our review of testimony and exhibits supporting its continuation for the 1989 attrition year. At Ordering Paragraph 3 of that decision we said: "Any adjustments following hearing, either upward or downward, depending upon the evidence, shall be made prospectively."

We accepted Contel's assertion that the overall reduction in annual revenues in its proposal (\$12,327,000) is only possible when the three major portions of its proposal are netted together. These are the reduction in authorized return on common equity which we review here, netted against the negative amounts of its TRA and interest synchronization memoranda accounts for 1989 and the positive USOA revenue impact for that year, as well as Contel's withdrawal of its Advice Letter 847 which sought California high cost fund relief of just over \$11 million for 1989.

Briefly, Contel's financial attrition proposal reduces its authorized return on common equity from 15.5% to 13%, based on a capital structure consisting of 53% common equity, 3% preferred stock, and 44% debt. This results in a reduction in the return on total capital from 12.72% to 10.74%. Contel calculates that this financial attrition adjustment will reduce its revenue requirement

by approximately \$10,290,000 on an annual basis, commencing January 1, 1989.

Contel's February 1, 1989 filing includes the written testimony and exhibits of Jeffrey B. Cutherell, Assistant Vice President - Revenue, for the Western Region of Contel Service Corporation, and Thomas J. Burke, Coordinator - Revenue, for the Western Region of Contel Service Corporation. Cutherell's testimony explains that Contel Service Corporation and Contel of California, Inc. (the entity which we refer to as Contel here) are both wholly-owned subsidiaries of Contel Corporation, and that Contel Service Corporation provides expertise to the operating companies "in such areas as planning, financing, connecting company settlements, plant and revenue accounting, marketing and regulatory activities." His testimony presents a rationale for the financial attrition adjustment presented in Contel's October 21, 1988 motion. Burke's testimony addresses the appropriate capital structure, cost of debt, cost of preferred stock, and cost of common equity for Contel's 1989 operations.

In his testimony Cutherell states that Contel filed its motion in response to DRA's request for a 1989 financial attrition adjustment for mid-sized telephone companies so that it could resolve several outstanding revenue requirement issues, including financial attrition, and thereby effect one net rate reduction on January 1, 1989. Otherwise, he points out, the effect of the Commission's outstanding order to replace the USOAR balancing account with a positive surcharge would have resulted in a rate increase on January 1, followed by a rate decrease sometime later in the same year.

Cutherell asserts that Contel's "appropriate" capital structure is 60% equity, 0.7% preferred equity, and 39.3% long-term debt, resulting in a cost of common equity of between 13.88% and 14.53% and a rate of return on capital of between 11.69% and 12.08% (with a midpoint of 11.89%). He goes on to explain that the 53%

common equity and the 13% return on common equity which Contel proposes in its motion is proposed "in order to secure a prompt resolution of all pending revenue issues...as well as to avoid the necessity of protracted hearings on financial attrition", and to "minimize confusion to [Contel's] customers". He also points out that Contel is prepared to forego further debate on the issue for 1989 since this question is to be reviewed shortly for 1990 financial attrition.

Burke's testimony, detailed below, explains the basis for Contel's assertion that a rate of return on total capital of 11.69% to 12.08% utilizing 60% common equity in the capital structure and a return on common equity of 13.88% to 14.53% is appropriate (or at least, would be appropriate but for the settlement proposal).

B. Capital Structure

In his testimony Burke states that Contel's California operations do not have a directly identifiable capital structure, since Contel has telephone operations in Nevada and Arizona in addition to California, and financing has traditionally been done for overall operations. However, Burke asserts that it is reasonable to conclude that the total capital structure of Contel mirrors its California operations since the California operations constitute 92% of total revenues and 91% of total plant.

Burke's determination of appropriate capital structure is based on a sample from the Value Line Investment Survey. The 15-company sample includes telephone companies with common stock publicly traded on the New York Stock Exchange, from which Burke eliminated companies that provide primarily interstate long distance services, those whose business was not primarily telecommunications, and those whose business "had virtually no similarity to [that of Contel]."

Burke acknowledges that the sample companies have a lower average amount of common equity in their capital structures than Contel (54% versus 64% in 1987), but concludes that it is

appropriate for Contel to have a higher proportion of equity because Contel's greater reliance on toll revenues, and the potential for more competition, bill and keep access charges and deaveraged toll rates in California will be perceived by investors as increasing the business risk. Based on these factors he recommends a capital structure consisting of 58% to 60% common equity, 0.7% preferred stock, and 41.3 to 39.3% long-term debt.

He also acknowledges that the 66% common equity in Contel's 1988 capital structure is inappropriately high and asserts that the company's management is "pursuing relief from [the] dividend restrictions" which he says have, to some extent, caused this capital structure. On the other hand he adds that "actually moving the company's capital structure to the levels proposed in Contel's motion of October 21, 1988 [53% common equity] would not be prudent and could jeopardize the company's current bond ratings" and would put "upward pressure on the company's cost of capital".

C. Cost of Debt and of Preferred Stock

Burke sets the embedded cost of long-term debt at 8.44%. It was calculated by dividing the annual interest cost plus the projected amortization of long-term debt expense by the debt balance outstanding on December 31, 1988. It includes a quarter of one year's interest for a financing of \$20 million at 10.87%, which Contel projects it will issue during the fourth quarter of 1989.

This 10.87% projected interest rate is the average of two forecasts, the Blue Chip Financial forecast for new A utility bonds in 1989 of 10.45%, (Burke notes that Contel is currently ranked for credit purposes as A1 by Moody's and as A by Standard and Poor's), and 11.28%, a figure based on Data Resources Incorporated (DRI) estimates for new AA utility bonds in 1989 adjusted by 52 basis points (the average historic utility bond differential in yield between AA and A rated utility bonds over eight years).

Burke sets the embedded cost of preferred stock at 5.54%, by dividing the projected 1989 dividends by the actual December 31, 1988 outstanding balance of preferred stock.

D. Cost of Equity

Burke's testimony and exhibits include two analyses of the appropriate rate of return on common equity, that is, the amount, expressed as a percentage of the investment, which an investor will expect to receive in the future for investing her or his capital in the company. The first methodology used to calculate the return on equity is the Discounted Cash Flow (DCF). The second is risk premium analysis.

1. DCF

The DCF model calculates the next expected annual dividend using the historical indicated dividend, the expected future dividend growth and the current stock price, and uses these figures in an equation which its proponents, including Burke, believe is a reasonable measure of the "present value of all future expected cash flows associated with the ownership of [a] share of common stock", i.e., the investors' expected rate of return on equity.

Explaining the DCF model Burke states that, consistent with concepts of fair rate of return expressed in the Hope and Bluefield cases,² it is inappropriate to rest an equity rate of return determination on the performance of one company (in this case Contel's parent company since Contel's stock is not separately traded), and adds that using the averages of a sample also mitigates any distortions in historical dividend and/or earning growth and any odd or abnormal conditions particular to any one

2 These are the two seminal cases setting forth the legal criteria for determining appropriate rates of return. "Hope" refers to EPC v. Hope Natural Gas (1944) 320 U.S. 591. "Bluefield" refers to Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n of W. Va. (1923) 262 U.S. 679.

utility. He therefore performed the DCF calculation using the 15 sample telephone companies he chose for his comparison of capital structure.

His testimony estimates expected future dividend growth for the DCF equation by looking at historical data reported by the Value Line Investment Survey between 1976 and 1987 for three factors: past dividend growth, earnings growth, and book value per share growth. For the several Regional Bell holding companies in his sample no data was available prior to 1984, so he used what was available. He finds that the past average annual dividend growth rate was 7.18%, the past average annual earnings growth rate was 5.83%, and the trend rate of book value growth was 4.92%. Asserting that future book value growth should not be used as a proxy for future dividend growth because the resulting DCF estimate would be a "downward biased estimate of investors' actual, required market rate of return", he eliminates that figure and averages the dividend growth figure and the earnings growth figures from his historical survey with the future dividend growth and earnings growth rates estimated by Merrill Lynch and Value Line to arrive at an average annual expected dividend growth of 7.24%.

Burke explains that the dividend yield used in the DCF model is the "average dividend yield that is likely to prevail in 1989." To determine it for each of the sample companies he adds the indicated next four quarterly dividends, adjusted for stock splits, and divides the sum by the average monthly price for each quarter-ending month beginning in March 1988. In order to determine 1989 expected dividend yields he then adjusts the resultant 1988 dividend yields by the average annual expected growth rate he had calculated. His average future dividend yield for the sample companies thus derived is 5.89%.

Burke calculates the stockholders' required return on equity by adding the calculated future dividend yield and the calculated future dividend growth for each company and then

averaging the results for all sample companies. The average is 13.13%. To that he adds a risk differential of .52% for a final return on equity, based on the DCF model, of 13.65%.

Burke explains that the risk differential reflects that the investment risk of the sample companies is less than the investment risk for Contel. Fifty-two basis points is the historical risk differential reported in Moody's Corporate Bond Record for 1981 through 1988 between AA and A utility bonds. The sample companies have an average Moody's and Standard & Poor's rating of AA3 and AA-, respectively, while Contel averages A. Burke claims that risk differentials that manifest themselves in debt ratings would also be inherent in the risk measurement of equity and, therefore, if AA bonds yield more than A bonds, then the equity holder would also require a higher return on capital invested in an A rated company than for an AA rated company.

2. Risk Premium Analysis

As Burke explains in his testimony, risk premium analysis methodology assumes there is a higher level of risk associated with common equity investments (thus requiring a higher rate of return) than with debt investments in the same company at the same period of time. This analysis determines the historical spread between debt and expected equity returns and adds the spread to the current debt yield to arrive at the required rate of return on equity.

In order to establish the historical differential between the cost rate for common equity as compared to debt capital, Burke conducted two studies. The first compares historical returns on the Standard and Poor's utility stocks from 1948 to 1987 to the public utility AA bond yields. It shows an average spread of 454 basis points. The second study uses historical Value Line Investment Survey projections for the sample companies used in the DCF analysis. This study, using data for 1984 through 1988, adds dividend yield projections to an average of historical projections of long-term earnings and dividend growth as reported in the Value

Line Investment Survey at the beginning and middle of the year, and then averages these returns for the sample companies. The rate spread derived from this study is 2.32%.

Burke averages the projected rate spreads from these two studies to get an average risk premium of 3.43%. He adds that premium to the projected cost of AA utility bonds of 10.34% (10.87% minus .52%) resulting in a cost of equity capital of 13.77% before being adjusted by the risk adjustment factor previously discussed. The 52 basis point is then added to reach a risk premium analysis cost of equity capital of 14.29%.

E. Burke's Recommendation

Burke recommends adopting the midpoint between the results of his DCF analysis of 13.65% and the results of his risk premium analysis of 14.29% for a final recommended rate of return on common equity of 13.97% before application of the adjustment factor for "flotation costs". He then adjusts this rate of return upward to recognize flotation costs, that is, the costs associated with issuing new securities. He determines this factor to be 4.32% based upon Contel's parent company's four most recent common stock offerings, and goes on to apply this factor to the 39.18% of Contel's total common equity capital which is derived from equity markets and not from retained earnings. This yields an average book requirement of 13.88% to 14.53%, the range which Burke recommends as the appropriate one for return on total common equity.

When this common equity cost range is multiplied by the 60% weighting factor discussed above and added to the weighted costs of long-term debt and preferred stock the resulting total cost of capital which Burke recommends is between 11.69% and 12.08%.

F. The Settlement Agreement

On February 16, 1989 Contel held a noticed settlement conference pursuant to the requirements of Rule 51.1 (b). On

March 8, a Motion to Adopt Settlement Agreement and Stipulation, signed by representatives of Contel and DRA was filed. No party has contested the settlement agreement and stipulation. The document includes three appendixes. Appendix B is a copy of the testimony and exhibits Contel filed on February 1, 1989. Appendix C is the prepared testimony of Terry R. Mowrey, Principal Financial Examiner in charge of the Financial and Economic Analysis Branch of the DRA. Mowrey's testimony urges the adoption of Contel's financial attrition settlement proposal on the basis that it is reasonable for the entire 1989 attrition year and in the public interest.

Mowrey points out that DRA had already prepared its cost of capital studies for GTEC and Pacific at the time it entered into discussions with Contel concerning its rate of return for 1989. DRA was recommending a return on common equity of 12.25% to 12.75% based on a common equity ratio of 55% for both GTEC and Pacific, and these recommendations "formed the basis for discussions with Contel on an acceptable rate of return for inclusion in its motion."

Mowrey also points out that under the schedule proposed by DRA in A.88-05-009 Contel would not have been required to file its 1989 financial attrition case until February 1, 1989, probably resulting in adoption by the Commission no earlier than mid-1989, whereas the agreement reached with DRA, and provisionally adopted in D.88-11-050, became effective January 1, 1989. This agreement included a common equity ratio of 53%. We eventually found 55% and 56.25% to be reasonable for Pacific and GTEC, respectively. The Contel proposal also includes the same 13% return on common equity that we adopted for Pacific and GTEC.

Addressing the testimony of Thomas J. Burke which Contel filed with its application, Mowrey notes that "rate of return is a very contentious topic, often marked by sharp differences of opinion among rate of return experts." Mowrey asserts that it is

likely that DRA would have presented a study which differed from Burke's if this matter had been litigated. He therefore concludes that "[t]hat debate should wait until Contel's next financial attrition review."

F. Discussion

It is difficult to evaluate the reasonableness of settlement proposal when we have no detailed recommendation from all parties setting forth its version of the costs of capital and the appropriate ratios of debt and equity. DRA's Mowrey's testimony seems to imply that if DRA had made a recommendation regarding the three mid-sized telephone companies that recommendation would have incorporated the same 12.25% to 12.75% return on common equity based on a common equity ratio of 55% that it recommended for Pacific and GTEC in their recent attrition proceeding. We do not know, however, why that would be the case, and nor do we know what factors DRA would take into account in making such a recommendation. In the future, we believe settlement proposals such as the present one ought to include the position, and the workpapers or calculations to support it, that each party would take if the matter were to go to hearing. Our Settlement Rules provide that in cases where a comparison exhibit would ordinarily be filed, if participating staff supports the settlement, it shall prepare an exhibit indicating the impact of the settlement in relation to the issues it contested or would have contested in a hearing. We think attrition proceedings lend themselves equally well to this requirement and will, for the future, expect to see such a showing if DRA supports a settlement in attrition proceeding.

Nevertheless, the record before us is adequate to support a determination that the settlement is in the public interest. We also note that each of the telephone companies which is a party to the present proceeding has agreed that it will file for review of its cost of capital and capital structure before the end of this year, and that the customers of each of these companies will

benefit during 1989 to an extent that might not be possible if we were to proceed to hearing on each of these companies now. We set out below our analysis of the available evidence and information.

The ratio of debt and preferred stock to equity in Burke's testimony and in the Contel settlement proposal differ markedly. Burke claims that the ratio in the settlement proposal cannot actually be achieved in 1989. Nonetheless he is willing to base Contel's revenue requirement for 1989 on the settlement figures, and indicates that this is justified by beneficial tradeoffs in the settlement proposal, primarily the need for only a single rate change in 1989 to fully offset the revenue changes required by a variety of Commission orders.

We have recently expressed our concern with capital structures which lean too heavily on more expensive equity funding and thereby detrimentally impact ratepayers. The 53% equity ratio proposed in the settlement is in the range of those we most recently adopted for Pacific and GTEC, which fact, together with Mowrey's supporting testimony, indicates that this ratio range is also reasonable for Contel. Therefore, we will maintain the debt to equity ratio provisionally adopted in D.88-11-050.

Turning to cost, we note that there is little discussion of the cost of long-term debt or the cost of preferred stock. We assume that this is due to the fact that there is much less room for variability in the input upon which the calculations of these costs are based, leading the parties to concentrate their efforts on the cost of equity where more variability in input is possible. The methods used by Burke to calculate the cost of debt and the cost of preferred stock seem reasonable and acceptable.

Burke calculates a return on equity between 13.88% and 14.53%, while the stipulated settlement sets it at the same 13% which we adopted recently for Pacific and GTEC. When we look at the derivation of Burke's estimate, it is clear that slight

modification to one or more of the inputs in Burke's DCF and risk premium analyses (e.g., the selection of companies in the sample group used to calculate dividend growth rates and dividend yields, a decision not to apply the risk differential to the calculated figure, a decision not to use the Standard and Poor's figures in the risk premium analysis) could substantially alter the results in such a way that Burke's range would incorporate the settled figure. Thus, while we do not have any comparison cost of equity input from DRA based on actual data, and while it is clear that there are many plausible ways of conducting DCF and risk premium analyses that would produce results different from those obtained by Burke, it appears that the calculations presented by Burke are internally consistent and based on accurate data. In light of the parties' comments about the settlement agreement it also appears that the resultant 10.74% rate of return on capital proposed in the settlement agreement will not be detrimental to the economic health of Contel.

Further, considered in light of all the information available on this record and specifically the fact that Contel's capital structure and cost of capital will be reviewed before the 1990 attrition year and the fact that the settlement agreement allows the proposed rate reduction to be retroactive to January 1, 1989, we believe that the terms of the settlement agreement will be beneficial to Contel's ratepayers in the 1989 attrition year. We therefore conclude that the settlement proposal as set forth in Contel's motion filed October 21, 1988 and renewed February 1, 1989 is reasonable and in the public interest and should remain in effect for the remainder of attrition year 1989. Appendix A to this order sets out the stipulation which we adopt for Contel.

III. Citizens' Financial Attrition Request

A. The Application and Testimony

Citizens' proposal was presented in the written testimony of Edward W. Schwartz, the Assistant Vice President, Revenue Requirements, of both its parent company, Citizens Utilities Company, and Citizens Utilities Company of California, which he distinguishes from the parent company with the acronym CUCC, which we sometimes use below. The testimony accompanies Citizens' application.

Schwartz recommends a debt to equity ratio of 34.67% long-term debt to 65.33% equity for attrition year 1989. He finds the cost of debt for 1989 to be 8.08%. Using this ratio and cost of debt he recommends that Citizens' consolidated cost of equity be between 14% and 15%, resulting in a total cost of capital for consolidated operations of between 11.95% and 12.6%. However, because in his opinion telephone operations are riskier than total operations he recommends a return on equity for the telephone operations in the range of 14.5% to 15.5%, resulting in a total weighted cost of capital for telephone operations in the range of 12.27% to 12.93%. Since the presently authorized total cost of capital is 12.41% he recommends no change in the rate of return for attrition year 1989.

B. Capital Structure

Schedule No. 1 to Schwartz' testimony shows that Citizens' capital structure as of December 31, 1988 was 34.4% long-term debt and 65.6% common equity. He projected the ratio to be 34.9% debt and 65.1% equity by the end of 1989. He averaged these two years' figures together to reach the estimated average of 34.67% debt to 65.33% equity which he recommends as an appropriate capital structure. Schwartz takes the position that it is appropriate to base the attrition calculation on the cost of capital to the parent company because Citizens telephone operations

do not raise funds independently, because this method provides lower debt costs to the telephone company ratepayers since it includes certain low cost debt which would not otherwise be attributable to the telephone operations, because this method avoids "hypothetical and arbitrary costs", and provides a triple A rating which could not generally be attained by a telephone company the size of Citizens, and because it allows for the use of company specific market-determined cost of equity procedures such as the DCF model which require use of actual capital structure since the risk factor portion of the market price of a stock is based upon the actual capital structure of the company.

C. Cost of Common Equity

Schwartz' testimony, like that of Contel, bases its determination of the recommended rate of return on common equity on a DCF and a risk premium analysis. For the risk premium analysis Schwartz used the Capital Asset Pricing Model (CAPM). In addition to the DCF and CAPM risk premium calculations he performed for Citizens' parent company, Schwartz also performed DCF calculations for two "barometer samples" as a check on the reasonableness of his calculations and conclusions. One barometer sample is a group of all of the operating telephone companies reported on by Value Line Investment Survey, excluding those with "significant revenues in other than telephone service or providing independent long distance services." This exclusion left ten companies.

The second barometer sample is "a group of 17 companies with Value Line ratings comparable to Citizens." ("Citizens" here refers to the parent company.) This sample was selected from the 1590 stocks included in the January 1989 Data Disk of Value/Screen Plus published by Value Line by first screening to retain only those stocks with a Value Line Timeliness Rank equal to or greater than Citizens' parent company, then screening to eliminate those with a Value Line Safety Rank below 1, which is the parent company's rank, then screening to retain only those with a Value

Line Financial Strength Rank of A or greater, and finally screening to select only those stocks with a Value Line Beta between .65 and .85 (the parent company's Beta is .75).

Schwartz' DCF analysis for Citizens' parent company uses six different growth factors, with the results adjusted to reflect quarterly dividend payments. The results thus obtained were then checked for reasonableness by comparing them to the various risk premium calculations for the parent company and DCFs for each of the barometer samples. Schwartz also performed risk premium calculations for each of these barometer samples.

1. DCF Analysis

Three of the growth factors used in Schwartz' DCF analyses are based on historical growth and three on projected growth in earnings and dividends per share. The historical growth factors are: a 5-year log linear growth rate of dividends per share for the 10 barometer telephone companies, a 5-year log linear growth rate of earnings per share for these same companies, and a 5-year average internal growth rate for Citizens' parent company. (This latter rate is an average of the sums of the parent company's retention ratio multiplied by its return on equity, and its book-to-fair value ratio multiplied by its stock dividend financing for 1984 through 1987 plus 1988 estimated.) The three expectational growth factors are projections of Value/Screen Plus Data Disk for dividends per share and earnings per share for these same companies, and an extrapolation for the Citizens parent company's internal growth based on Value Line data.

2. Risk Premium Analysis

Schwartz' calculations for the historical CAPM risk premium cost of equity compare treasury bonds with common stocks and with small stocks. They show the required rate of return to be 14.84% for common stocks, and 19.12% for small stocks. Schwartz averages these results to obtain his historic risk premium result of 16.98%. His expected future risk premium calculations only

compare treasury bonds to common stocks. They show the future required rate of return (i.e., cost of equity) to be 17.19% when the Value Line DCF using earnings per share expected growth rate is used for the risk premium, and 14.40% when the Value Line DCF using dividends per share expected growth rate is used for the risk premium. The average of these two figures is 15.79%. These calculations use (1) a risk free rate of 9.295% based on the Wall Street Journal "Future Options, Treasury Bonds" averaged quarterly projections for 1989 and 1990 as reported on January 3, 1989, (2) a Beta of .75, the Beta for Citizens' parent company reported in Value Line on January 1, 1989, and (3) market returns for common stocks, small stocks, and long-term government bonds based on the 1988 Yearbook of Stocks, Bonds, Bills and Inflation (SBBI) published by Ibbotson Associates.

3. Support of DCF and Risk Premium Calculations

Based on the six DCF calculations which range between 12.01% and 16.46% with an average of 14.65% and the four CAPM risk premium calculations ranging from 14.40% to 19.12% with an average of 16.39%, Schwartz recommends a minimum cost of equity for Citizens' parent company in the range of 14% to 15%. He states that the reasonableness of this recommendation is supported by DCF and CAPM risk premium calculations which he conducted for the two barometer sample groups. He did four DCFs for the barometer telephone companies resulting in cost of equity figures ranging between 12.95% and 13.85% and averaging 13.41%. His three CAPM calculations for these companies range between 15.08% and 18.24% and average 16.30%.

Additionally, Schwartz testimony shows that he has analyzed the earned return on average equity (1984-1987), the return on year-end equity (1988, 1989, and 1991-1993 estimated), payout ratios (1984-1987, 1988, 1989, and 1991-1993 estimated), and capitalizations ratios (1984-1987, 1988, 1989, and 1991-1993 estimated).

Schwartz also calculated DCF and CAPM risk premium calculations for his 17 non-utility "comparable companies" barometer sample. The DCFs, using forecasted growth rates ranged from 13.77% to 15.57% with an average of 14.67%. The CAPM calculations, which used three of the four risk premium rates used in the Citizens' parent company risk premium analysis, resulted in cost of equity figures between 14.58% and 17.46%, averaging 15.70%.

D. Schwartz' Recommendations

Using this range of 14% to 15% capital return on equity for Citizens' parent company Schwartz recommends a total cost of capital of 11.95% to 12.60%. However, he believes that the cost of capital for the California telephone operations should be higher because "[a]s a stand-alone company, CUCC's Telephone operations are riskier than the consolidated operations of Citizens Utilities Company." He goes on to state that the telephone operations "are at least as risky as the barometer telephone companies sample, and in my opinion, are riskier than that sample." This opinion has to do with Citizens' smaller size, rural nature, and lower local service revenues as a percent of total service revenues, when compared with the barometer telephone companies sample.

For these reasons Schwartz recommends a capital return on equity for the telephone operations in the range of 14.5% to 15.5%, which results in a total cost of capital of 12.27% to 12.93%. Since Citizens' presently authorized rate of return is 12.41%, Schwartz proposes that no change be made in the rate of return for attrition year 1989.

E. The Proposed Settlement

With its application Citizens (or CUCC) also filed a proposed settlement as described in the testimony of Robert L. O'Brien. Unlike Schwartz' recommendation for no change, O'Brien proposes reducing the rate of return on the total cost of capital from 12.41% to 11.1%, thereby reducing revenues by approximately \$3.034 million, effective January 1, 1989. O'Brien proposes that

the reduction be applied to reduce the current 24% surcharge from interLATA and intraLATA service, completely eliminating the interLATA surcharge and reducing the intraLATA surcharge to 13.84%

This proposal sets the return on common equity at 13% with an 8% rate for the cost of debt, calculated using a ratio of 62% equity and 38% debt and using the procedures Contel used, except that CUCC begins with a 1983 test year. The equity to debt ratio recommended by O'Brien is down from the 1983 authorized 70% equity and 30% debt, and a return on equity of 14.1%. At the equity to debt ratio recommended by O'Brien, he calculates that the annual revenue reduction would be \$3,034,000.

O'Brien explains that this proposal allows the use of the actual capital structure of CUCC's parent company in that the 62% equity ratio is "Citizens' best estimate of the equity ratio that will result from its consolidated operations in 1989 if certain Industrial Development Revenue Bonds ('IDRB') are included as part of its capital structure at the gross authorized level rather than at the net amounts which reflect only the portions of the authorized amounts that have been drawn down." In other words, CUCC's settlement proposal includes the authorized amount of the parent company's IDRBs which, O'Brien notes, "eliminates some of the controversy that would result from a proposal to use a hypothetical capital structure."

In his testimony O'Brien asserts that CUCC's return on equity requirement has not actually decreased to 13%, but he states that it is "a reasonable settlement level to be used only in connection with the overall settlement proposed herein." He states that the actual required return on equity and the resulting rate of return requirement based on current capital structure of CUCC's parent company are as Schwartz' testimony describes them. He adds that meeting this requirement would require a revenue increase of \$195,000 using Contel's calculation procedures.

O'Brien says that his proposal "represents a matching of the needs of the Company and the interests of its customers for the year 1989" which is, in his opinion, "fair and reasonable" to customers, to CUCC and to its shareholders. He points out that the 62% equity ratio addresses the Commission's concern about the level of equity ratios in that it allows CUCC a higher equity ratio than the other telephone companies in A.88-05-009 in order to reflect CUCC's greater business risk, while still recognizing the unique cost savings to CUCC's California customers such as the low cost IDRFB financing which is included in calculating this ratio only because it is based on the capital structure of CUCC's parent company. He adds that the capital structure and costs of equity and debt in his recommended settlement proposal would result in a revenue decrease of \$3,034,000 in 1989.

By contrast, the capital structure and return on equity recommended by DRA in the Pacific and GTEC proceeding (55% equity, 45% debt) would result in a revenue decrease of about \$4,158,000.

F. The Stipulation

On February 2, 1989, pursuant to our Rule 51.1, Citizens noticed a settlement conference for February 15, 1989. Following the settlement conference, on March 8, 1989, Citizens and DRA filed a stipulation for "settlement of all issues regarding Citizens' 1989 Financial Attrition Review." In the document Citizens and DRA agree that (1) the calculations underlying the settlement will follow the basic procedures used by Contel for its financial attrition proposal; (2) Citizens' rate of return on its telephone operations will be adjusted to 11.10% for 1989, based upon a ratio of 38% long-term debt at a cost of 8.0% and 62% common equity at a cost of 13.0%; (3) application of the agreed-upon rate of return results in a revenue reduction of \$3,034,000; (4) the revenue reduction will be effective January 1, 1989, and will be used to eliminate Citizen's present 24% bill and keep surcharge on interLATA toll (effective on approval of the settlement), and will

be used to reduce the present 24% bill and keep surcharge on ~~intra~~LATA toll calls to 13.84% (effective on approval of the settlement), with a refund to current subscribers of the amount of these reductions from January 1, 1989 to the effective date of the settlement approval; and (5) Citizens will file an application for 1990 financial attrition review on or before October 1, 1989.

Explaining the details of the refund, the stipulation states that it is to be made within 60 days after the date of the surcharge reduction and elimination and is to be afforded to "customers of record during the refund month in direct proportion to the amount of surcharges being eliminated and reduced which such customers have paid during the period between January 1, 1989 and the Commission's approval of the elimination/reduction in the surcharge." The refunds may be made by bill credits and may be made over two successive months if necessary, but must be completed within 120 days of the effective date of the Commission's authorizing order.

The parties cite Rule 51.8 for the proposition that adoption of this settlement "shall not constitute approval of, or precedent regarding, any principle or issue in this proceeding or in any future proceeding", and Rule 51.9 for the proposition that the terms of the stipulation and proposed settlement "shall not be admissible in any future evidentiary hearings in this or in any other Commission proceeding."

The stipulation asserts that the testimony of Robert L. O'Brien, and the testimony of DRA's Terry R. Mowrey, both of which are appended to it, illustrate that the proposed settlement is "reasonable in light of the whole record, consistent with law, and in the public interest" as required by Rule 51.1(e). O'Brien's testimony is described above.

Mowrey's testimony points out that the revenue reduction negotiated in this settlement will be effective January 1, 1989, while it is likely that a litigated financial attrition decision

would not be reached before mid-1989, thereby possibly depriving Citizens' customers of several months of reduced rates. Further, he notes that the settlement is only for 1989, with a review of capital costs, capital structure, and rate of return for 1990. He points out that prior to this Citizens has not had its cost of capital reviewed since 1983. Thus, the proposed settlement provides protection to both ratepayers and shareholders in this period of stock and bond markets and telephone industry flux.

Mowrey also states that the 62% common equity ratio included in the settlement recognizes both the concern the Commission has expressed recently about the level of common equity in utilities' capital structures and the fact that unlike most telephone utilities whose capital structure the Commission has reviewed in the last year, Citizens' equity ratio is trending downward. He states that Citizens' actual equity ratio was approximately 66% on December 31, 1988 (70% is the present authorization), and adds that the settled equity ratio imputes substantial debt financing in 1989, thus continuing the decline trend and also reducing the embedded debt cost contained in the settlement.

Mowrey asserts that the 13% return on common equity contained in the settlement "was arrived at after extensive discussion between DRA and Citizens", and recognizes that even though Citizens' financial and business risks are "not exactly the same" as those facing Pacific and GTEC, this Commission's adoption of a 13% return for those companies in D.88-12-092, considered in light of Citizens' proposed range of 14.5% to 15.5% and the 12.5% which DRA recommended in the Pacific and GTEC proceeding make this 13% figure a reasonable compromise when considered in the context of the entire settlement.

G. Discussion

We will not here repeat the concerns we expressed in the first paragraph of our Contel attrition discussion. However, those

same concerns apply equally to Citizens' application and stipulated settlement. As is the case with Contel, Citizens' stipulated settlement chooses the same 13% return on equity that we recently adopted for Pacific and GTEC. At 11.10% the rate of return on capital in the proposed settlement is also very close to that adopted for Pacific and GTEC. The equity ratio, however, at 62%, is considerably higher than the 56.25% and 55% equity ratios authorized respectively for Pacific and GTEC. However, it is a large reduction from the last authorized equity ratio of 70%. We cannot be absolutely certain from this record that it is reasonable to adopt the capital structure of the parent company since there is no evidence about the reasonableness of the parent company's equity level. Nonetheless, for the reasons we stated in our Contel discussion, above, we will rely on Mowrey's position that the ratio should be accepted because it responds to this Commission's concern with equity levels in that it is trending downward.

Assuming the reasonableness of basing an attrition year capital structure on that of the parent company there is some rationale for the 62% equity figure in the stipulated settlement since, according to O'Brien it reflects actual capital structure if IDRB bonds are included as if fully drawn down.

As for the 13% return on equity in the proposed settlement, it is clearly curious that so many companies should have the same equity cost. On the other hand, it is also clear that basing capital structure strictly on that of the parent company brings the return on equity down from Schwartz' recommended range of 14% to 15%. Further, relying only on the projected 1989 debt to equity ratio rather than an average would also reduce this range. Considering the range of variables which can affect the calculation of a return on equity, we therefore find the stipulated return on equity to be a reasonable. That being the case, it follows that the stipulated rate of return on capital is also

reasonable. Furthermore, the terms of the settlement will benefit Citizens' ratepayers by reducing their rates.

For these reasons we will adopt the terms of the settlement agreement reached by Citizens and DRA in the stipulation filed in this matter on March 8, 1989. The terms of the settlement and the changes in capital structure and cost of capital which we hereby adopt are set forth in Appendix B to this order.

IV. Roseville's Financial Attrition Request

A. The Application and Testimony

Roseville's 1989 financial attrition application proposes an overall rate of return of 13.5% based upon a return on equity of 14.5% and a cost of debt of 9.9%. Roseville urges the Commission to recognize as reasonable a "capital structure objective...in a narrow range with midpoints of 30 percent debt and 70 percent equity", but, adds Roseville, this ratio would be "impossible to attain prudently" sooner than 1990, so it asks that we authorize 22% debt and 78% equity for 1989 only. The rationale for Roseville's 1989 proposal is presented in the written testimony of Timothy R. Crichfield, a management consultant in the Roseville's employ, and Mark B. Shull, Roseville's Controller. Crichfield's testimony recommends a rate of return for Roseville, while Shull's testimony describes the company's view of the revenue impacts of the recommended financial attrition recommendation and presents its position on rate design. The testimony of both Shull and Crichfield is appended to Roseville's application.

B. Capital Structure

Addressing the propriety of Roseville's equity ratio, Crichfield states that there are several reasons why it is higher than those of other telephone companies. First, he says, unlike many other telephone companies Roseville is not part of a larger telecommunications company or a diversified holding company. Thus,

it "does not have the ability to borrow on the creditworthiness of a diversified portfolio of businesses." Second, Roseville does not have any federally subsidized REA debt like many of the other independent companies with higher debt ratios. And, third, he says there are "significant prepayment penalties for refinancing Roseville's existing indebtedness" and he adds that Roseville's debt indenture agreements "inflexibly limit" the borrowing of funds with intermediate dates of maturity, by requiring existing creditors to approve additional borrowings of this type. Partly for these reasons, says Crichfield, Roseville's present capital structure (which was 60% equity and 40% debt in the last test year, 1982, and which was 89.3% equity and 10.7% debt by year-end 1987) is appropriate.

He also points out that "[p]rior to its recent use of line of credit funds, Roseville had not undertaken any borrowings for several years" and adds that Roseville now "finds itself in the situation in which the company will need to seek funds from outside sources." However, in apparent anticipation of DRA's concern about too-high equity ratios, he argues that Roseville should not be criticized "for managing its resources well and avoiding raising capital from external sources" over the last few years by financing its capital programs with internally generated funds since this policy meant that Roseville was able to avoid loading its capital structure with long-term high cost debt during the early 1980's when interest rates were "soaring in the high teens".

Further Crichfield notes, Roseville has not raised equity funds in the past few years by selling additional common stock and its dividend policy has remained "relatively constant". Thus, he concludes that the increase in the equity ratio is due to the maturing of previous borrowings.

For these reasons Crichfield asserts that returns should be computed on actual capital structure, not an imputed capital structure. He adds that Roseville does not have a capital program

that could justify borrowing large amounts of funds and argues that such borrowing therefore cannot be encouraged.

The capital structure on which Crichfield proposes computing returns, however, is not the year-end 1987 figure. He points out that since that time Roseville has borrowed an additional \$3 million on its existing line of credit and will borrow further funds on it in 1989. Since the company has the potential of drawing up to \$8 million more by year-end 1989, which would give Roseville a capital structure of about 78% equity and 22% debt, Crichfield proposes this ratio as the maximum reasonable one for computing cost of capital. This is the figure that the application proposes for 1989 only.

Crichfield argues that this capital structure is not unusual when compared to other investor owned independent telephone companies with net income exceeding \$1 million. In support of this position he cites data compiled from United States Telephone Association Statistical Reports of Class A & B Telephone Companies for 1985 through 1987, from which he found, for 1987, 41 companies which had capital structures exceeding 60% equity. (Only 9 of these companies, however, had equity ratios of 78% or higher, and there is no indication of the size of the group of companies from which Crichfield selected this subgroup.)

C. Cost of Debt

Crichfield states that Roseville's embedded cost of debt as of December 31, 1987 is "approximately 9%". However, he states that that rate is only applicable to an actual capital structure and that further borrowing would need to be based on current market rates. He explains that Roseville's indenture provisions allow only \$5 million in additional intermediate debt, so that any debt borrowing beyond that amount would have to be accomplished by refunding older debt which was obtained at "favorable rates" and would also result in "significant prepayment penalties". Based on the recent yield of long-term public utility bonds, which he states

to be around 11% as shown in the Federal Reserve Bulletin and Moody's Corporate Bond Record, and based upon Roseville's indenture provisions and the fact that Roseville is currently paying 10.5% for revolving funds, Crichfield recommends that any debt projected beyond a capital structure of 12% debt and 88% equity (approximately the year-end 1987 ratio), be priced at 11%. This would result in a weighted average cost of debt of 9.9% when calculated for a capital structure of 22% debt.

D. Cost of Equity

Crichfield based his cost of equity determination on three analyses; a risk premium analysis using the CAPM, a DCF analysis, and a comparison of book returns between Roseville and a group of sample telephone companies.

1. Comparable Book Returns Analysis

Exhibit VIII to Crichfield's testimony displays the equity returns achieved for 1985, 1986, and 1987 for the same telephone companies he chose to illustrate the reasonableness of Roseville's capital structure, that is, companies with over \$1 million in net income and capital structures exceeding 60% equity. He has calculated the equity return averages for these companies for each of the three years to be 18.37%, 17.91%, and 18.82%, respectively. He admits that because these are book returns on total equity for the companies it is difficult to draw "strong conclusions" from the data, but he contends that these calculations are useful because they "provide an indication of the information available for investors regarding independent telephone companies."

2. Risk Premium Analysis

Like the testimonies for Contel and Citizens, Crichfield uses the rate of return on long-term government bonds as a proxy for the risk-free rate of return on equity.

Crichfield also employs the CAPM model for measuring relative risk in establishing a market risk premium, and sets it at the same 7.4%, which Citizens' Schwartz uses to represent the

average premium of common stocks over long-term government bonds as reported by Value Line. Unlike Schwartz, however, Crichfield does not determine a separate risk premium for small stocks and then use it in a second set of risk premium calculations which are averaged with the figures derived using the common stock risk premium.

Further, Crichfield did not determine the beta for Roseville the way Schwartz determined the beta for Citizens. Crichfield points out that it is not possible to get a direct measure of Roseville's beta since Roseville's stock is not widely traded. Therefore, he examined measured betas for the equity of other telephone companies. He chose companies traded on the New York Stock Exchange that are reported in Value Line and for which he had complete information available for all his analyses. He chose ten companies. They are shown in his Exhibit VI. In order to make the figures comparable and remove the variability introduced by an individual company's capital structure he calculated the "total asset beta", or "unlevered beta", for each of these companies. He explains that these are the betas that would result if the companies were all equity. He then purports to set forth the largest of these total asset betas and the average for all of them. He says that Roseville's total asset should be at least as high as the range between these two figures.

He reasons that this range is appropriate because Roseville is not part of a diversified holding company with diversified risks, because 25% of Roseville's revenues come from business customers and business customers are "prime targets for competitors' service offerings which would result in bypass of Roseville facilities", and because Roseville is further subject to competitive pressures by virtue of being highly concentrated geographically. Further, he asserts that this view tends to be confirmed from a comparison of Roseville's standard deviation of return on total capital using book numbers with that of the other companies in the comparison group. (Roseville's is higher.)

Using the total asset beta range he proposes for the companies in the comparison group Crichfield then calculates the effect of an adjustment for his recommended 22% debt to 78% equity ratio and concludes that Roseville's total asset beta should be in the range of 0.7106 and 0.8117.

Using the three inputs described above Crichfield's risk premium analysis results in a cost of equity between 14.55% and 15.3%.

3. DCF Analysis

While acknowledging that it can only be used directly where a company's stock is widely traded, Crichfield attempts to apply the DCF analysis to Roseville by first applying the model to companies whose stock is widely traded (in this case the 10 telephone companies used in his various exhibits for comparison purposes) and then drawing inferences about Roseville from these results, after adjusting them to account for the effects of leverage.

Specifically, using an annual version of the DCF model, Crichfield adds the current dividend yield for each company to its expected dividend growth rate and multiplies the result by 105% to account for 5% flotation costs (that is, the transaction costs associated with paying commissions and various administrative services for issuing equity). Although he states that the effect of quarterly dividend payments may result in the annual DCF model understating the cost of equity "by as much as over half a percentage point in many cases" he does not adjust for that contingency. He does, however, adjust the estimated cost of equity by the debt to equity ratio for each company to derive the unlevered cost of capital. Then, after determining that two of cost of equity results are "outliers" he averages the remaining eight and finds it to be 13.14%. Using that as a basis for Roseville's total cost of capital estimate and adjusting to his recommended 78% equity capital structure, Roseville's estimated

cost of equity capital becomes 13.14%. Using the highest of the non-outlier estimates as the basis, Roseville's estimated cost of equity capital becomes 15.21%. Crichfield points out that both these figures are understated because they are not adjusted for the effects of quarterly dividends.

E. Crichfield's Recommendation

Crichfield asserts that the risk premium analysis approach is the most sound. He recommends a rate of return on equity of 14.5% because it is "approximately the low end of the range produced" using that approach, and because it "lies within the range produced using the DCF methodology". He adds that he recommends a capital structure ratio which imputes debt to Roseville that is not currently in its capital structure, and which therefore "benefits Roseville's ratepayers significantly", because Roseville will be able to achieve such a capital structure "in a reasonable period of time", thereby protecting the financial integrity of the company.

F. Rate Design

Shull's prepared testimony states that Roseville projects a \$1,340,000 increase in revenue requirement from its proposed changes in the cost of equity and debt capital. He recommends that any revenue change resulting from this proceeding be reflected in Roseville's high cost fund amount for 1989.

The projected revenue requirement increase is based on Shull's calculation of a net-to-gross multiplier of 1.6739, which was then applied to the projected equity return on Roseville's intrastate rate base. He then added that result to the return on debt rate base and adjusted the sum to reflect the difference between the last test year total return on equity and debt and the estimated 1989 intrastate revenues.

G. The Proposed Settlement Agreement

On February 8, 1989 Roseville filed further testimony of Mark B. Shull regarding a proposed settlement agreement Roseville

had reached with DRA. Shull states that Roseville's actual capital structure as of December 31, 1988 was 84.97% equity and 15.03% debt and adds that the settlement agreement imputes a capital structure of 70% equity and 30% debt. Further, by applying the calculations used by Crichfield in his recommendation to this imputed equity to debt ratio, the settlement derives an imputed weighted cost of debt of 10.19% and a return on equity of 12.8% (down from Crichfield's recommended 14.5% and the presently authorized 15%). These changes result in a return on total capital of 12.02% and an estimated revenue requirement reduction for the 1989 attrition year of \$724,000 which, because it will give maximum benefit to the ratepayers, Roseville agrees to implement as of February 1, 1989, by reducing the present 8.57% intraLATA surcharge rather than reducing the distribution from the California high cost fund.

Shull's testimony explains that Roseville believes the terms of the settlement agreement are acceptable and in the interest of its shareholders and ratepayers because the settlement will avoid the expense of further litigation, and will provide the benefit of an earlier implementation date than ratepayers could have received if there had been litigation, as well as a guaranteed rate benefit. He also asserts that Roseville expects to continue to need debt financing "to meet the demands of its construction program related to its rapidly expanding subscriber base." Nonetheless, Shull clearly states that the settled capital structure is only to be used in connection with this Commission's adoption of the overall settlement, and only for 1989. The parties agree that they will meet regarding Roseville's 1990 attrition during the fourth quarter of 1989.

It should also be noted that Shull's February 8, 1989 testimony reduces the figures used in his earlier testimony for 1982 test year intrastate revenue and 1989 estimated intrastate revenues to remove amounts associated with intraLATA access and coin revenue pursuant to DRA's request.

H. The Motion to Adopt Settlement Agreement and Stipulation

1. Terms of the Settlement Agreement

On February 16, 1989 Roseville held a noticed settlement conference complying with the requirements of Article 13.5 of our Rules of Practice and Procedure. Thereafter on March 8, 1989 Roseville and DRA filed a document entitled "Proposed Settlement Agreement, Motion to Accept Settlement and Waiver of Comment". According to the two signatories none of the other parties attending the settlement conference objected to the proposed settlement. It is meant to be a "complete and total settlement of Roseville's Application."

Like Shull's February 8, 1989 testimony the settlement agreement set forth in this document sets a return on common equity for attrition year 1989 at 12.8%, an average cost of debt of 10.19%, a capital structure of 30% debt and 70% equity for purposes of setting rates, and a rate of return on total capital of 12.02%. Further, the agreement states that this stipulated capital structure and costs of debt and equity produce a revenue decrease in the annualized amount of \$724,000 or \$60,333.33 per month, which will be reflected in a reduction of Roseville's 8.57% surcharge on intraLATA services to 5.3% effective February 1, 1989 and remaining in effect until further order of this Commission.

The agreement notes that it is unlikely that Roseville will be able to adopt this rate change before July 1, 1989, and therefore states that as of that date it will be necessary for Roseville to reduce the intraLATA surcharge for the remainder of 1989 to 2.572% to ensure that Roseville's ratepayers realize the entire benefit of the 1989 surcharge reduction. Further, assuming July 1, 1989 implementation of this change, the agreement authorizes Roseville to increase the surcharge from 2.572% back to 5.3% effective January 1, 1990. Finally, it is agreed that Roseville will file an application for review of its cost of

capital and capital structure for 1990 no later than October 1, 1989.

The agreement states that Shull's testimony of February 8, 1989, which is attached as Exhibit C, sets forth Roseville's reasons for modifying its position. That document is detailed above. The agreement also notes that DRA's analysis of Roseville's application and the reasons why it believes the proposed settlement is in the interest of Roseville's ratepayers and shareholders are set forth in the testimony of DRA's Mowrey, which is attached as Exhibit A.

The parties add that they enter into the agreement on the basis that all of the elements of it will be adopted without modification and that, consistent with Rule 51.8 that adoption of this agreement not be construed as precedent regarding any principle or issue in any current or future proceeding.

Further, the document notes that since Roseville's application did not request any change in a rate or charge, it was not covered by the customer notice requirements of Public Utilities Code §454 or the Commission's rules, but that this settlement, if adopted, does involve a rate decrease, and therefore Roseville will notify its customers of this settlement proposal within the time limits specified in Rule 24.

The document ends with a motion requesting the Commission to adopt the settlement agreement and stipulation contained therein. It is signed by counsel for the DRA and Roseville.

2. DRA's Position

The testimony of DRA's Mowrey, attached as Exhibit A to this settlement agreement recapitulates the elements of the agreement and sets forth his view of why the settlement is fair and reasonable and in the ratepayers' interest. In this regard, he states that the February 1, 1989 effective date provides "immediate quantifiable benefits to Roseville's customers" which would not have been likely had this application proceeded to litigation. He

also states that the fact that the settlement is only for the 1989 attrition year and will be reviewed again for 1990 ensures that the effects of rapid changes in the telecommunications industry and in economic conditions will be accounted for, thus protecting Roseville's ratepayers and shareholders.

On the issue of the imputed capital structure of 30% debt and 70% equity Mowrey asserts that both DRA and the Commission have recently expressed concern about the level of common equity in a utility's capital structure, and notes that DRA's review of the 60% equity ratio authorized in Roseville's last (1982) rate proceeding was an imputed equity ratio, while the actual ratio was about 70% at the time. Since that time the equity ratio has continued to increase as a result of the retirement of maturing debt issues. Mowrey adds, however, that Roseville began issuing new debt in 1988 to meet its capital requirements and DRA projects that if Roseville were to "maximize its debt financings in 1989 to meet its [sic] capital budget requirements, its equity ratio would approximate 78% at year-end 1989." He agrees with Crichfield that the 70% equity ratio in the settlement is beyond what Roseville is expected to achieve in 1989, but claims that the imputed ratio benefits the ratepayers and "signals to Roseville that its equity ratio is still excessive" and should be reduced in the future.

As for the settled 12.8% return on common equity, Mowrey asserts that DRA "undoubtedly would arrive at sharply contrasting conclusions from [the 14.5% figure] reached by Roseville", and explains that the return contained in the settlement was arrived at after "extensive discussions between DRA and Roseville". He also states that the figure takes into account the 13% return on equity adopted for Pacific and GTEC for 1989 though both had lower equity ratios than Roseville, and adds that while both parties agree that the business and financial risks facing Roseville are not the same as those facing Pacific and GTEC, they recognize that DRA had recommended a 12.5% return on common equity for those companies.

He concludes that in light of these factors DRA takes the position that the 12.8% return on equity is acceptable "when viewed in the context of the entire settlement".

I. Discussion

We again emphasize the concerns we expressed in the first paragraph of our Contel attrition discussion. Nonetheless the record is adequate for us to adopt the stipulated settlement reached by Roseville and DRA.

Our concern about the Roseville data is related to Crichfield's testimony which clearly shows that it is difficult to apply the conventional cost of equity tests to a company whose stock is not widely traded. We agree with Crichfield that his risk premium analysis is more likely to be accurate than his DCF analysis which is based upon the behavior of the stock of other companies, but we note that there are several possibilities for error in his risk premium analysis as well. For one, the risk premium analysis requires determining a beta, but since Roseville's stock is not widely traded Roseville has no published beta. Thus, Crichfield had to determine a proxy beta thereby adding one more possible inaccuracy to the ultimate cost of equity projection. Besides, the risk premium analysis tends to produce results which are significantly higher than the DCF analysis, and in this case no reliable comparison of the two analyses can be made to determine the size of the discrepancy. In spite of these reservations, we recognize that the stipulated settlement proposes the only capital structure of the five large and mid-sized local exchange companies which has either recently been adopted or is recommended for adoption and which does not set the return on equity at 13%. It appears that the parties agree that the lower 12.8% return is a fair compromise for the 70% equity ratio, and on this basis we will adopt it.

As for the appropriate debt to equity ratio, we do find compelling the fact that the change in Roseville's ratio has not been the result of Roseville selling additional stock or changing its dividend policy, but rather has been primarily the result of the maturing of previous debt. We are further persuaded to rely on a larger equity ratio by Mowrey's reminder that the ratio we adopted in 1982 was also an imputed one, with an actual ratio at about the same 30% debt to 70% equity ratio that the stipulation before us proposes.

We are also encouraged by Mowrey's claim that while Roseville may not achieve a 70% equity ratio by year-end 1989, it can achieve a 78% ratio in that time, and will be encouraged to further reduce its equity ratio in the future by the adoption of the imputed 30% debt to 70% equity ratio proposed in the stipulated settlement. For these reasons we believe it is reasonable to adopt the compromise debt to equity ratio.

Adoption of the stipulated figures for the debt/equity ratio and for the return on equity result in a rate of return on capital which is higher than what we have adopted for any of the other four companies by a minimum of over two-thirds of a percentage point. However, the net effect of these changes will be a rate reduction for Roseville's customers, effective from February 1, 1989. Such a reduction coupled with the other stipulated terms of the settlement leads us to conclude that the stipulated settlement reached by Roseville and DRA is reasonable in light of the whole record before us and in the public interest. The terms of the stipulation are set forth in Appendix C to this order.

Findings of Fact

1. Although the record before this Commission provides no detailed recommendation from DRA regarding cost of capital and capital structure for the 1989 attrition year for Contel, Citizens,

and Roseville, the record is adequate to determine the reasonableness of the settlement presented for our approval. ✓

2. The financial models which the witnesses for Contel, Citizens, and Roseville used to determine the cost of capital are standard models which this Commission has traditionally accepted as fair indicators of probable trends when properly applied.

3. No party disputes the capital structure proposed in Contel's stipulated settlement of 44% long-term debt, 3% preferred stock, and 53% equity.

4. No party disputes Contel's stipulated 8.36% cost of debt, its stipulated 5.54% cost of preferred stock, its stipulated 13% cost of equity, or its stipulated rate of return on capital of 10.74% for attrition year 1989.

5. No party disputes the capital structure proposed in Citizens' stipulated settlement of 38% long-term debt and 62% equity.

6. No party disputes Citizens' stipulated 8% cost of debt, its stipulated 13% cost of equity, or its stipulated rate of return on capital of 11.10% for attrition year 1989.

7. No party disputes the capital structure proposed in Roseville's stipulated settlement of 30% long-term debt and 70% equity.

8. No party disputes Roseville's stipulated 10.19% cost of debt, its stipulated 12.8% cost of equity, or its stipulated rate of return on capital of 12.02% for attrition year 1989.

Conclusions of Law

1. The provisions in the settlement agreements of the three telephone utilities in this proceeding which require filing for review of 1990 capital structure during the latter part of 1989, and the consequence of higher rates which would otherwise be in effect, make it reasonable to proceed with an assessment of these settlement proposals. ✓

2. The capital structure and capital costs for Contel set out in its stipulated settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest. ✓

3. The capital structure and capital costs for Citizens set out in its stipulated settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest. ✓

4. The capital structure and capital costs for Roseville set out in its stipulated settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest. ✓

ORDER

IT IS ORDERED that:

1. Contel of California, Inc.'s stipulated settlement agreement as described in Appendix A to this decision, and as provisionally adopted in D.88-11-050, is hereby made final for the 1989 attrition year.

2. Citizens Utilities Company of California's (Citizens) stipulated settlement agreement as set forth in Appendix B to this decision is adopted.

3. Roseville Telephone Company's (Roseville) stipulated settlement agreement as set forth in Appendix C to this decision is adopted.

4. Within 14 days of the effective date of this decision, Citizens shall file an advice letter to reflect the tariff revisions adopted in this decision as consistent with the terms of the settlement agreement set forth in Appendix B of this decision. The effective date of the ordered tariff revisions shall be 5 days after the advice letter filing. Such advice letter filing shall comply with General Order 96-A.

5. Within 14 days of the effective date of this decision, Roseville shall file an advice letter to reflect the tariff revisions adopted in this decision as consistent with the terms of

the settlement agreement set forth in Appendix C of this decision. The effective date of the ordered tariff revisions shall be 5 days after the advice letter filing. Such advice letter filing shall comply with General Order 96-A. The incremental billing surcredit reflected in the settlement agreement should be revised to reflect the timing of the effective date of the tariff revisions.

This order is effective today.

Dated MAY 26 1989, at San Francisco, California.

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

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


Victor Weissert, Executive Director

APPENDIX A

TERMS OF AGREEMENT ADOPTED FOR 1989 ATTRITION YEAR
FOR CONTEL OF CALIFORNIA, INC.

1. The 10.74% rate of return adopted for Contel by the Commission on an interim basis in D.88-11-050 and the related rate changes authorized therein shall be made final for 1989.

2. On or before October 1, 1989, Contel will file an application for a review of capital structure and cost of capital for 1990.

3. Contel and DRA intend by their settlement to resolve all issues relating to financial attrition for Contel for 1989. Contel and DRA believe the settlement is reasonable in light of the prepared testimony attached thereto and the Commission's action in D.88-12-092, consistent with law, and in the public interest.

4. Contel and DRA acknowledge that their stipulation shall not constitute approval of, or precedent regarding, any principle or issue in this proceeding or in any future proceeding. The settlement is made on the basis that it be adopted without modification.

(END OF APPENDIX A)

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TERMS OF AGREEMENT ADOPTED FOR 1989 ATTRITION YEAR
FOR CITIZENS UTILITIES COMPANY OF CALIFORNIA

1. The calculations underlying the settlement follow the basic procedures used by Contel for its financial attrition, as required by D.88-11-050.

2. Using these procedures, Citizens' overall rate of return on its telephone operations will be adjusted to 11.10% for 1989. This rate of return is based upon the following capital structure and capital costs:

	<u>Ratio</u>	<u>Cost</u>	<u>Weighted Cost</u>
Long-term Debt	38.0%	8.0%	3.04%
Common Equity	<u>62.0</u>	13.0	<u>8.06</u>
Total	100.0%		11.10%

3. Application of this 11.10% rate of return results in a revenue reduction of \$3,034,000, which will be effective as of January 1, 1989, as shown on the schedule attached to the testimony of Robert L. O'Brien which was filed as an attachment to the stipulation on February 6, 1989.

4. The \$3,034,000 revenue reduction will be effected as follows:

- a. \$2,302,500 from elimination of Citizens' present 24% bill and keep surcharge on interLATA toll calls effective with this order of the Commission approving this settlement;
- b. \$731,500 from the reduction of the present 24% bill and keep surcharge on intraLATA toll calls. The new bill and keep surcharge for intraLATA toll calls will be 13.84% effective with this Order of the Commission approving this settlement;

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c. Refunding to Citizens' current subscribers the amount resulting from 4a and 4b for the period from January 1, 1989, to the date when the surcharge elimination and reduction are put into effect pursuant to this order of the Commission approving this settlement agreement. The refund shall be made to customers of record during the refund month in direct proportion to the amount of surcharges being eliminated and reduced which such customers have paid during the period between January 1, 1989, and the Commission's approval of the elimination/reduction in the surcharge. Such refunds may be made by means of bill credits to customers of record in the refund month. Citizens may make such refunds over two successive months if this is necessary to calculate the amount of the total refund for each customer. Such refunds shall be completed within 120 days of the effective date of this Commission order.

5. On or before October 1, 1989, Citizens shall file its application for 1990 financial attrition review.

6. The parties to the settlement agree that the terms of Rule 51.8 and 51.9 of the Commission's Rules of Practice and Procedure apply to this settlement agreement.

7. The following compares Citizens' request and the adopted settlement figures:

	<u>Application</u>	<u>Adopted Settlement</u>
% Debt	34.67%	38.00%
% Equity	65.33%	62.00%
Cost of Debt	8.08%	8.00%
Cost of Equity	14.50% - 15.50%	13.00%
Rate of Return	12.41%	11.10%
Effective Date	unknown	1/1/89
Revenue Requirement	- 0 -	(\$3,034,000)

(END OF APPENDIX B)

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TERMS OF AGREEMENT ADOPTED FOR 1989 ATTRITION YEAR
FOR ROSEVILLE TELEPHONE COMPANY

1. The return on common equity for Roseville for attrition year 1989 shall be 12.8%.
2. The average cost of debt for Roseville for attrition year 1989 shall be 10.19%.
3. The debt and equity ratio utilized to set rates for Roseville for attrition year 1989 shall be 30.00% debt and 70.00% equity. The actual debt and equity ratio will vary.
4. The rate of return on total capital for Roseville for attrition year 1989 shall be 12.02%.
5. Application of the stipulated capital structure and costs of debt and equity produce a decrease in revenue requirement for Roseville for 1989 in an annualized amount of \$724,000, or \$60,333.33 per month.
6. The reduced revenue requirement will be reflected in a reduction of Roseville's 8.57% surcharge in intraLATA services, to a surcharge of 5.3% effective February 1, 1989, and continuing until further order of this Commission.
7. The date by which this rate change can be adopted by the Commission or implemented by Roseville is unlikely to be before July 1, 1989. Assuming that rates will not be changed until July 1, 1989, it will be necessary for Roseville to reduce further the intraLATA surcharge for the remainder of 1989 to 2.572% to insure that Roseville's ratepayers realize the entire benefit of the 1989 surcharge reduction. It is impractical to provide Roseville's ratepayers with the benefit of this rate reduction from February 1, 1989 to the date the change is implemented in any other way. A

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workpaper demonstrating the manner in which the surcharge reductions were calculated and what the surcharge will be, based upon a July 1, 1989 implementation date, is attached to Roseville's Proposed Settlement Agreement as Exhibit "B".

8. Effective January 1, 1990, Roseville will be authorized to increase the surcharge established on July 1, 1989 from 2.572% to 5.3%.

9. Roseville will file an application for a review of cost of capital and capital structure for 1990 no later than October 1, 1989.

A comparison of the original recommendation of Roseville and the adopted settlement figures for each item addressed in the settlement is as follows:

	<u>Application</u>	<u>Adopted Settlement</u>
% Debt	22.00%	30.00%
% Equity	78.00%	70.00%
Cost of Debt (Weighted)	9.90%	10.19%
Cost of Equity	14.50%	12.80%
Rate of Return	13.50%	12.02%
Effective Date	unknown	2/1/89
Revenue Requirement Impact	+\$997,000	(\$724,000)

No other party has made a specific proposal regarding any of these issues. Although it did not make a specific proposal concerning any issue, DRA carefully analyzed all of Roseville's proposals, exhibits, and workpapers and persuaded Roseville to move its position in the direction of the proposed settlement. The reasons Roseville has modified its position are set forth in detail in testimony dated February 8, 1989 of Mark B. Shull, Roseville's Controller, attached to its Proposed Settlement Agreement. The

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results of DRA's analysis of Roseville's application and the reasons why it believes the proposed settlement is in the interests of Roseville's ratepayers and shareholders are set forth in the Mowrey Testimony, also attached to the Proposed Settlement Agreement.

The parties entered into the settlement agreement on the basis that all of the elements of it be adopted without modification, as this decision has done.

The parties entered into the settlement agreement on the basis that the terms of Rule 51.8 of the Commission's Rules of Practice and Procedure would apply and that adoption of the agreement would not be construed as precedent regarding any principle or issue in any current or future proceeding. Further the parties agreed that the issues resolved by the settlement agreement should not be construed as reflecting the views or position of any party except as a reasonable and appropriate compromise of the issues involved in Roseville's application.

Although the terms of the application did not require customer notification, this settlement involves a rate decrease. Therefore, pursuant to the requirements of Public Utilities Code § 454 Roseville agrees to notify its customers of the adoption of this settlement proposal within the time limits specified in the Commission's Rule 24.

(END OF APPENDIX C)

likely that DRA would have presented a study which differed from Burke's if this matter had been litigated. He therefore concludes that "[t]hat debate should wait until Contel's next financial attrition review."

F. Discussion

It is difficult to be certain of the reasonableness of any settlement proposal when we have no detailed recommendation from DRA setting forth its version of the costs of capital and the appropriate ratios of debt and equity. Mowrey's testimony seems to imply that if DRA had made a recommendation regarding the three mid-sized telephone companies that recommendation would have incorporated the same 12.25% to 12.75% return on common equity based on a common equity ratio of 55% that it recommended for Pacific and GTEC in their recent attrition proceeding. We are not informed, however, why that would be the case, and we have no idea what factors DRA would take into account in making such a recommendation. In the future, we believe settlement proposals such as the present one ought to include the position, and the workpapers or calculations to support it, that each party would take if the matter were to go to hearing. We reluctantly make the following observations and determinations in spite of this significant impediment primarily because each of the telephone companies which is a party to the present proceeding has agreed that it will file for review of its cost of capital and capital structure before the end of this year, and because the customers of each of these companies will benefit during 1989 to an extent that might not be possible if we were to proceed to hearing on each of these companies now. Having made that clear, we set out our analysis of the available evidence and information.

The ratio of debt and preferred stock to equity in Burke's testimony and in the Contel settlement proposal differ markedly. Burke claims that the ratio in the settlement proposal cannot actually be achieved in 1989. Nonetheless he is willing to

base Contel's revenue requirement for 1989 on the settlement figures, and indicates that this is justified by beneficial tradeoffs in the settlement proposal, primarily the need for only a single rate change in 1989 to fully offset the revenue changes required by a variety of Commission orders.

We have recently expressed our concern with capital structures which lean too heavily on more expensive equity funding and thereby detrimentally impact ratepayers. The 53% equity ratio proposed in the settlement is in the range of those we most recently adopted for Pacific and GTEC, which fact, while not conclusive, tends to indicate, where there is no evidence to the contrary and in light of Mowrey's supporting testimony, that this ratio range is also reasonable for Contel. Therefore, we will maintain the debt to equity ratio provisionally adopted in D.88-11-050.

Turning to cost, we note that there is little discussion of the cost of long-term debt or the cost of preferred stock. We assume that this is due to the fact that there is much less room for variability in the input upon which the calculations of these costs are based, leading the parties to concentrate their efforts on the cost of equity where more variability in input is possible. The methods used by Burke to calculate the cost of debt and the cost of preferred stock seem reasonable and acceptable.

Determining the cost of equity is basically the educated guess of some organization or person who has spent some time observing whatever patterns of investor behavior existed in the past, and observing what outside factors may have impacted those patterns and then trying to make a reasonable projection of the future behavior of investors from these accumulated observations.

Burke calculates a return on equity between 13.88% and 14.53%, while the stipulated settlement sets it at the same 13% which we adopted recently for Pacific and GTEC. When we look at the derivation of Burke's estimate, it is clear that slight

and Roseville, we have proceeded with this assessment based on the record as it exists.

2. The financial models which the witnesses for Contel, Citizens, and Roseville used to determine the cost of capital are standard models which this Commission has traditionally accepted as fair indicators of probable trends when properly applied.

3. No party disputes the capital structure proposed in Contel's stipulated settlement of 44% long-term debt, 3% preferred stock, and 53% equity.

4. No party disputes Contel's stipulated 8.36% cost of debt, its stipulated 5.54% cost of preferred stock, its stipulated 13% cost of equity, or its stipulated rate of return on capital of 10.74% for attrition year 1989.

5. No party disputes the capital structure proposed in Citizens' stipulated settlement of 38% long-term debt and 62% equity.

6. No party disputes Citizens' stipulated 8% cost of debt, its stipulated 13% cost of equity, or its stipulated rate of return on capital of 11.10% for attrition year 1989.

7. No party disputes the capital structure proposed in Roseville's stipulated settlement of 30% long-term debt and 70% equity.

8. No party disputes Roseville's stipulated 10.19% cost of debt, its stipulated 12.8% cost of equity, or its stipulated rate of return on capital of 12.02% for attrition year 1989.

Conclusions of Law

1. The provisions in the stipulated settlement agreements of the three telephone utilities in this proceeding which require filing for review of 1990 capital structure during the latter part of 1989 and the consequence of higher rates which would otherwise be in effect make it reasonable to proceed with an assessment of these settlement proposals despite the limitations of the record before us.

2. The capital structure for Contel set out in its stipulated settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest.

3. The capital structure for Citizens set out in its stipulated settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest.

4. The capital structure for Roseville set out in its stipulated settlement agreement is reasonable in light of the whole record, consistent with law, and in the public interest.

ORDER

IT IS ORDERED that:

1. Contel of California, Inc.'s stipulated settlement agreement as described in Appendix A to this decision, and as provisionally adopted in D.88-11-050, is hereby made final for the 1989 attrition year.

2. Citizens Utilities Company of California's (Citizens) stipulated settlement agreement as set forth in Appendix B to this decision is adopted.

3. Roseville Telephone Company's (Roseville) stipulated settlement agreement as set forth in Appendix C to this decision is adopted.

4. Within 14 days of the effective date of this decision, Citizens shall file an advice letter to reflect the tariff revisions adopted in this decision as consistent with the terms of the settlement agreement set forth in Appendix B of this decision. The effective date of the ordered tariff revisions shall be 5 days after the advice letter filing. Such advice letter filing shall comply with General Order 96-A.

5. Within 14 days of the effective date of this decision, Roseville shall file an advice letter to reflect the tariff revisions adopted in this decision as consistent with the terms of

likely that DRA would have presented a study which differed from Burke's if this matter had been litigated. He therefore concludes that "[t]hat debate should wait until Contel's next financial attrition review."

F. Discussion

It is difficult to evaluate the reasonableness of settlement proposal when we have no detailed recommendation from all parties setting forth its version of the costs of capital and the appropriate ratios of debt and equity. DRA's Mowrey's testimony seems to imply that if DRA had made a recommendation regarding the three mid-sized telephone companies that recommendation would have incorporated the same 12.25% to 12.75% return on common equity based on a common equity ratio of 55% that it recommended for Pacific and GTEC in their recent attrition proceeding. We do not know, however, why that would be the case, and nor do we know what factors DRA would take into account in making such a recommendation. In the future, we believe settlement proposals such as the present one ought to include the position, and the workpapers or calculations to support it, that each party would take if the matter were to go to hearing. Our Settlement Rules provide that in cases where a comparison exhibit would ordinarily be filed, if participating staff supports the settlement, it shall prepare an exhibit indicating the impact of the settlement in relation to the issues it contested or would have contested in a hearing. We think attrition proceedings lend themselves equally well to this requirement and will, for the future, expect to see such a showing if DRA supports a settlement in attrition proceeding.

We make the following observations and determinations primarily because each of the telephone companies which is a party to the present proceeding has agreed that it will file for review of its cost of capital and capital structure before the end of this year, and because the customers of each of these companies will benefit during 1989 to an extent that might not be possible if we

were to proceed to hearing on each of these companies now. We set out below our analysis of the available evidence and information.

The ratio of debt and preferred stock to equity in Burke's testimony and in the Contel settlement proposal differ markedly. Burke claims that the ratio in the settlement proposal cannot actually be achieved in 1989. Nonetheless he is willing to base Contel's revenue requirement for 1989 on the settlement figures, and indicates that this is justified by beneficial tradeoffs in the settlement proposal, primarily the need for only a single rate change in 1989 to fully offset the revenue changes required by a variety of Commission orders.

We have recently expressed our concern with capital structures which lean too heavily on more expensive equity funding and thereby detrimentally impact ratepayers. The 53% equity ratio proposed in the settlement is in the range of those we most recently adopted for Pacific and GTEC, which fact, while not conclusive, tends to indicate, where there is no evidence to the contrary and in light of Mowrey's supporting testimony, that this ratio range is also reasonable for Contel. Therefore, we will maintain the debt to equity ratio provisionally adopted in D.88-11-050.

Turning to cost, we note that there is little discussion of the cost of long-term debt or the cost of preferred stock. We assume that this is due to the fact that there is much less room for variability in the input upon which the calculations of these costs are based, leading the parties to concentrate their efforts on the cost of equity where more variability in input is possible. The methods used by Burke to calculate the cost of debt and the cost of preferred stock seem reasonable and acceptable.

Burke calculates a return on equity between 13.88% and 14.53%, while the stipulated settlement sets it at the same 13% which we adopted recently for Pacific and GTEC. When we look at the derivation of Burke's estimate, it is clear that slight

He concludes that in light of these factors DRA takes the position that the 12.8% return on equity is acceptable "when viewed in the context of the entire settlement".

I. Discussion

We again emphasize the concerns we expressed in the first paragraph of our Contel attrition discussion. In the case of Roseville the data on which we must rely is even less reliable than that available in the testimony presented on behalf of Contel and Citizens. Nonetheless we are persuaded that the circumstances make it reasonable for us to adopt the stipulated settlement reached by Roseville and DRA.

Our concern about the Roseville data is related to Crichfield's testimony which clearly shows that it is difficult to apply the conventional cost of equity tests to a company whose stock is not widely traded. We agree with Crichfield that his risk premium analysis is more likely to be accurate than his DCF analysis which is based upon the behavior of the stock of other companies, but we note that there are several possibilities for error in his risk premium analysis as well. For one, the risk premium analysis requires determining a beta, but since Roseville's stock is not widely traded Roseville has no published beta. Thus, Crichfield had to determine a proxy beta thereby adding one more possible inaccuracy to the ultimate cost of equity projection. Besides, the risk premium analysis tends to produce results which are significantly higher than the DCF analysis, and in this case no reliable comparison of the two analyses can be made to determine the size of the discrepancy. In spite of these reservations we recognize that the stipulated settlement proposes the only capital structure of the five which have either recently been adopted or are recommended for adoption which does not set the return on equity at 13%. It appears that the parties agree that the lower 12.8% return is a fair compromise for the 70% equity ratio, and on this basis we will adopt it.

and Roseville, the record is adequate to determine the reasonableness of the settlement.

2. The financial models which the witnesses for Contel, Citizens, and Roseville used to determine the cost of capital are standard models which this Commission has traditionally accepted as fair indicators of probable trends when properly applied.

3. No party disputes the capital structure proposed in Contel's stipulated settlement of 44% long-term debt, 3% preferred stock, and 53% equity.

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7. No party disputes the capital structure proposed in Roseville's stipulated settlement of 30% long-term debt and 70% equity.

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Conclusions of Law

1. The provisions in the stipulated settlement agreements of the three telephone utilities in this proceeding which require filing for review of 1990 capital structure during the latter part of 1989 and the consequence of higher rates which would otherwise be in effect make it reasonable to proceed with an assessment of these settlement proposals despite the limitations of the record before us.