## BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of	)	
The Ohio Bell Telephone Company	)	Case No. 93-487-TP-ALT
for an Increase in Electric Rates in its	)	
Sarvica Area	3	



Prepared
Testimony of
Stephen R. Chaney
Performance Analysis Department

Staff Exhibit \_\_\_\_\_

1. Q. Please state, for the record, your name, position, and background.

A. My name is Stephen R. Chaney. I am employed as a Financial Analyst in the Performance Analysis Division, Utilities Department of the Public Utilities Commission of Ohio, 180 East Broad Street, Columbus, Ohio, 43266-0573.

I have received a Bachelor of Science Degree in Civil Engineering from Purdue University in December, 1978, and a Master's Degree in City and Regional Planning from Ohio State University in December, 1981. I have been employed by the Public Utilities Commission of Ohio since January, 1982.

- 2. Q. What is the purpose of your testimony in this proceeding?
  - A. It is the purpose of my testimony in this proceeding to update the cost of capital determination contained in the Staff Report of Investigation and to respond to objections to the Staff Report of Investigation that relate to the rate of return issue. In the body of my testimony, I will address objections of the Applicant number 2 a through e, objections of the OCC numbers 50 through 55, objections of the IXC Coalition numbers 1 through 3, objection of Time Warner Access number 2, objection of the American Association of Retired People number 6, and objection of the Legal Aid Society of Dayton number 41.

3. Does your testimony address any issues regarding the embedded costs of 1 Q. 2 long-term debt and preferred stock? 3 4 A. No, objections regarding embedded costs were not filed. 5 6 4. Q. Does your recommendation in this testimony contain a recommended 7 point within the rate of return range. 8 9 No. The purpose of my recommendation is to present an accurate 10 estimate of the Applicant's cost of capital. The Staff's analysis was 11 conducted solely with regard to cost of capital issues. The Staff believes 12 that all points within the range are reasonable estimates of the 13 Applicant's cost of capital, and any decision as to what rate of return 14 should be granted, within the range, must necessarily be based on factors 15 other than cost of capital. 16 17 O. How did the Staff determine its recommendation of a fair and reasonable 18 rate of return for the Applicant? 19 20 Α. The Staff calculated the rate of return based on a cost of capital approach. 21 This methodology takes into account the amounts and costs of long-term debt, preferred stock, and common equity. The cost of capital as 22 23

determined by the Staff appears in Table 1, below.

return?

% Weighted

Cost

2.41%

8.14-8.82%

10.55-11.23%

A. The Staff used the discounted cash flow (DCF) methodology to determine the cost of equity capital (required return) to Ameritech and Subsidiaries. The DCF method recognizes that investors must be compensated for foregoing the present use of income. Investors purchase stock with the expectation of receipt of future dividends. The price an investor is willing to pay is equal to the present value of expected future dividends.

(1) 
$$P_0 = \frac{D_1}{(1+k)} + \frac{D_2}{(1+k)^2} + ... + \frac{D_t}{(1+k)^t} = \sum_{t=1}^{\infty} \frac{D_t}{(1+k)^t}$$

Where:

Po = current price of the stock

Dt = expected dividends in the year t

K = discount rate (required return)

If the expected dividend growth rate can be represented by g then equation (1) becomes:

(2) 
$$k = \frac{D_1}{P_0} + g$$

Where:

k = discount rate (required return) or cost of capital

g = expected growth rate in dividends

That is, the cost of capital (stockholders' required return) is the sum of the dividend yield and the expected growth rate. As  $D_1$  is not known ahead of time,  $D_1 = D_0 (1+g)$  is substituted:

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$$k = \frac{D_o(1+g)}{P_o} + g$$

- 9. Why did the Staff use the discounted cash flow (DCF) methodology to determine the cost of equity capital?
  - The Staff views the DCF approach as an appropriate basis for the determination of the cost of capital because it is consistent with the Staff's effort to promote economic efficiency in a regulated environment. The Staff believes that regulatory authorities must function as a substitute for competitive market forces and believes that achievement of economic efficiency is beneficial to both the utility company and the consumers.

The DCF approach is consistent with economic efficiency because it equates the "required" return of the equity investor (or cost of capital to the company) to what can be earned on new additional investment in the competitive marketplace.

Consider an investor who has purchased and holds one share of public utility stock. He has done so because his "required" return for his saving sacrifice is equal to the expected return he will receive by holding the stock.

If the investor observes that the expected return from the public utility stock is less than: (1) the expected return from shares of unregulated

companies of comparable risk, and/or (2) the return that can be earned on new direct (physical) investment of comparable risk, then he will sell his share of the public utility stock and either purchase the shares of the unregulated companies or engage in direct investment.

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Assume now that many investors act in the same rational way. The selling of the public utility stock will reduce its price and therefore increase the expected return up to the point where it is equal to the return of the comparable unregulated companies and/or to the return of the new additional direct investment.

The exact opposite movement will occur if the expected return from a public utility stock is higher than the expected return from stock of comparable unregulated companies.

Therefore, the "required" return or cost of capital derived by using the DCF approach is equal to the cost of equity capital of unregulated companies of comparable risk and the return on additional direct investments of comparable risk. It is thus consistent with the principles of economic efficienty and commensurate with returns on investment in other enterprises bearing corresponding risks.

- 10. Q. How did the Staff apply the DCF methodology to arrive at a cost of equity recommendation in the case of the Applicant?
  - A. The Staff used a discounted cash flow (DCF) analysis to estimate the cost of common equity to the Applicant. The Staff's customary and preferred

method of analysis is to apply the DCF methodology to the Applicant's common stock, or, if the Applicant is a subsidiary, to that of the parent company. A secondary method of analysis, applying the DCF methodology to a comparable group of companies, is also often employed.

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In the present case, efforts to establish reasonable and meaningful estimates of the Applicant's cost of equity through a DCF analysis of Ameritech's common stock were not, at the time of the Staff Report, successful. The update of the Ameritech-only DCF is more meaningful. Although aspects remain problematic. The "classic" DCF model utilizes a company's retention ratio and earned return on equity to compute a sustainable growth rate, a specification usually referred to as the "B times R" approach. The five-year "BxR" for Ameritech is 5.36%. The July 1993 to June 1994 average of Ameritech's stock price, together with the dividend over the period produces a dividend yield of 4.70%, which, when combined with the "BxR" growth rate, results in a cost of equity estimate of 10.31%. Value Line projects earnings per share forward to the 1997-99 time frame at \$4.15, while 1994 earnings per share are expected to be \$2.55. Using the midpoint of 1998, this implies a 12.18% compound annual growth rate and a 17.45% estimate of the cost of equity. The equivalent estimate in the Staff Report is 9.66%. The Staff believes this illustrates the problem of relying, in certain situations, upon earnings estimates by financial analysts, particularly when applied to a single company. For groups of companies, however, the earnings estimates are less volatile, as statistical distortions are likely to be offsetting, at least to some degree.

A group of telephone companies with a substantial orientation towards provision of local service would be useful in cost of equity analysis. The Staff utilized the Telecommunications CompuStat data base to screen for a group of companies for a comparable DCF analysis. The selection criteria required companies to be located in the continental United States, have publicly traded common stock, and have local service operating revenues. An additional selection criterion was that Value Line information be available for the company. Besides Ameritech, fifteen companies met these criteria, and Value Line reports were examined for these companies. From this examination, the Staff concluded that the business activities or market situation of four of these companies indicated that their inclusion in a comparable group would be inappropriate. The excluded companies were Century Telephone, Lincoln Telecommunications, Sprint Corporation, and Telephone & Data Systems.

The basic selection criteria being a substantial orientation towards local service, the Staff believes this to be an adequate method for comparable group selection. However, additional explicit criteria can be applied, with the resultant selection of the same group. These criteria are, a Standard & Poor's senior debt rating of BBB+ or better, total operating revenues and sales of greater than \$200 million, a ratio of local service operating revenues to total telephone operating revenues between twenty and sixty percent, and local service operating revenues greater than toll service operating revenues. No comparable group is perfect, but the Staff believes that the selected group of Ameritech and eleven

other companies represents the best tradeoff between similarity to Ameritech and an adequate group size for purposes of analysis.

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A number of financial estimates and statistics, drawn from the Value Line reports and the CompuStat data base, are presented in Exhibit SRC-1 for Ameritech and the remaining 11 companies which constitute the comparable group utilized in the Staff's analysis. The current yields are derived from Value Line and Compustat data. The EPS and DPS growth rates identified as "VLEG" and "VLDG" are the calculated compound annual growth rates from the 1994 estimate to the estimate for the 1997-99 time frame, evaluated at the midpoint of 1998. The growth rates identified as "Box" are the rates reported in the Annual Rates box, as "Est'd '90-'92 to '97-'99," and represent a longer perspective. These "Box" growth rates produce cost of equity estimates of 13.23% and 8.79%. The DPS estimate produces a low equity estimate of 8.79%, because, as with current growth estimates, in general, it is biased downward for DCF application. The increasing future earnings of the past few years for these companies has led to a general medium term dividend growth estimate bias downward, given the comparatively greater inertia of dividends to earnings.

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The "VLEG" and "VLDG" growth rates produce cost of equity estimates of 15.04% and 9.82%, which is low and resultant from a downward biased growth estimate. The 1988 to 1993 historic Value Line growth rates result in cost of equity estimates of 5.64% for earnings and 9.70% for dividends. The 5.64% estimate should be dismissed as it is inconsistent with current costs of capital. The 9.70% estimate is low, consistent with

its derivation from a dividend growth estimate. The Value Line prospective "BxR," derived from the projected EPS, DPS, and return on equity in the "'97-'99" column, results in an equity estimate of 12.43%. Analysis of Value Line points to an estimated cost of equity of about 12.35%.

The Institutional Brokers Estimate Survey (IBES) earnings growth estimates result in an cost of equity estimate of 12.04% for the comparable group. Zacks Corporate Earnings Estimator earnings estimates result in a 12.69% equity cost estimate. Using 1989 to 1993 average "BxRs," computed from CompuStat data, results in an unreasonable 7.24% equity cost estimate. Together with Value Line, these estimators imply an estimated cost of equity of about 12.35%.

According to CompuStat data, the comparable group's earnings available for common (before extraordinary items) were 12.49% of average common equity over the years 1989 through 1993. However, during this same period, overall interest rates and costs of capital have fallen considerably. Moody's Aa rated public utility bonds average annual yields were 9.55%, 9.64%, 9.09%, 8.54%, and 7.44% for 1989, 1990, 1991, 1992, and 1993 respectively. Thus, over the interval that the comparable group was earning 12.5% on equity, Aa bond rates were approximately 8.85%. As of middle May of 1994, their yield was approximately 8.33%, over fifty basis points lower. In middle August of 1993, after years of a steady downward trend, Aa bond rates took a dive from about 7.25% to about 6.80%, and then reversed direction to begin what has been a steady upward trend. The earned returns have fallen dramatically from 14.2%

for 1992, with a 13.8% average for 1988 through 1992, to 7.9% for 1993. Both bond yields and earned returns seem to have become less stable.

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Another consideration is the relatively short time range of EPS projections (generally no more than five years), as compared with the "expected growth rate" of the DCF model, which assumes an infinite horizon. If earnings growth is expected to significantly accelerate after the projection period, the use of the EPS projections will understate the true expected growth rate and produce a cost of equity estimate with a downward bias. It has been argued that the growth of earnings from cellular technology represents an instance of this type of bias. The Staff recognizes the validity of this consideration, in that significant earnings growth can be expected from cellular technology, but believes that some of this growth is already captured in the earnings estimates of the period. Also, care must be made to distinguish between absolute growth and growth rates. S&P's projections of increasing numbers of cellular subscribers also show a declining growth rate to this increase. S&P also projects a decline in the monthly revenues per subscriber, as the industry extends its penetration of the mass market.

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Lastly, the Staff has also considered the question of the various classes of risk facing the Applicant and companies in the comparable group. Under the conditions present in the telecommunications industry, a fair and reasonable return on capital employed in the public service may be different than the overall cost of capital to a company. It cannot be denied that the risk element has increased for providing local exchange and other services whose rates are subject to regulatory authority.

However, telecommunications companies are investing in many services, activities, and technologies for which a very high degree of uncertainty exists regarding future profitability. The Staff believes that the provision of those services whose rates are subject to regulatory authority is a less risky undertaking than other activities, and that the capital so employed is subject to less risk than the average level of risk facing the company. Because of the Staff's cost of capital approach, Staff recommendations have reflected, to a limited extent, some costs of capital associated with non-regulated or non-utility operations. This is unavoidable, and is not allowed to reflect on a significant portion of the Staff rate of return recommendations. This case is no different. Consideration of the uncertainty associated with this issue, allows for an appropriate equity recommendation for a regulated enterprise. Future, as well as, present involvement in competitive enterprise is taken into account.

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Based upon the considerations discussed above, the Staff believes that a fair and reasonable return on common equity is between 11.85% and 12.85%. To provide for this return allowance must be made for issuance and other costs, as shown on Table 2, resulting in an adjustment factor of 1.02029. Applying this factor to the baseline cost of common equity range results in a recommendation of 12.09% to 13.11%.

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1	11.	Q.	Has the Staff changed the cost of common equity u	sed i	in the Staff											
2			Report?													
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4		A.	Yes, the Staff's recommended common equity cost now	refle	ects twelve											
5			month average stock prices for July 1993 through June	month average stock prices for July 1993 through June 1994, rather than												
6			January 1993 through December 1993 as used in the Staff Report. The													
7			declared dividend over the last four quarters is updated to reflect the													
8			second quarter of 1994. Zacks and IBES were updated to June estimates.													
9			The Value Line issued April 15, 1994 is referenced (see Attachment). The													
10			adjustment for equity issuance costs now reflects retained earnings and													
11			total common equity balances as of December 31, 1993.	The	adjustment											
12			factor is now 2.02029% rather than the 2.02094% in the	Staff	Report (see											
13			Table 2). The resultant Staff-recommended cost of common equity													
14			range, incorporated in Table 1, is 11.99% to 13.01%.													
15			TADITO													
16 17			TABLE 2													
18			Ameritech and Subsidiaries													
19			Adjustment for Equity Issuance Costs													
20			December 31, 1993													
21			(Dollars in Thousands)		•											
22																
23			(1) Retained Earnings	\$	3,455,300											
24			(2) Total Common Equity	\$	7,844,635											
25			(3) Ratio of (1) to (2)		0.44047											
26			(4) External Equity Ratio, w [1.0-(3)]		0.55953											
27			(5) Generic Issuance Cost, f		3.50%											

1.02029

12.09%

13.11%

Net Adjustment Factor (w/(1-f)) + (1-w)

Low End Equity Cost  $[11.85\% \times (6)]$ 

High End Equity Cost [12.85%  $\times$  (6)]

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(6)

(7)

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- 12. Q. Why does the Staff recommend a cost of equity rate range?
- A. The Staff recognizes an unavoidable tradeoff between certainty and usefulness. On one hand, one could estimate the Applicant's cost of equity with a more-than-sufficient degree of certainty to be within a range of, possibly, four-hundred basis points. A four-hundred basis point range is not, however, very useful or informative for equity cost determination.
- 10 13. Q. What are common stock issuance costs?

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- 12 Issuance costs include expenditures made directly by the company 13 issuing stock, for the purpose of issuing stock. Some of these 14 expenditures would be for filing with the SEC, accounting, legal 15 representation, printing, and exchange listing. Issuance costs also include the underwriting spread, which is not an expenditure for the 16 17 issuing company. Basically, the underwriting spread is the difference 18 between the proceeds to the company and the price paid by the primary 19 purchasers of an issue. Issuance costs are the difference between the 20 amount paid by the primary purchasers and the net proceeds, which is 21 the amount available for investment by the company.
- 23 14. Q. Are you aware of any empirical measurement of the magnitude of issuance costs?
  - A. Yes, published studies have provided some measurement of the magnitude of underwriter spread relative to issue size. A study by

Borun and Malley (1) finds that underwriter spreads average 2.93% of "initial price" for competitive bids brought by electric utilities. Logue and Jarrow (2) examined spreads for large utilities. magnitudes of 3.011% of offering price for competitive registered issues. Finnerty (3) found an average spread of 3.34% of offering price (or "closing price prior to offering") for electric utility issues. Pettway (4) found an average cost of 3.6580% for competitively bid issues by electric utilities, not only for underwriter spread but also for direct issuance expenditures. Borun and Malley (1) found electric utilities paid 0.09% to 3.1% of "initial price," with an average of 0.4% for direct issuance costs alone. Based on these studies, a reasonable estimate of underwriter spread would be 3.0% of the offering price, and a reasonable estimate of underwriter spread together with direct issuance costs would be 3.5%. In its generic determination of cost of common equity for public utilities issued January 3, 1990, the Federal Energy Regulatory Commission adopted 3.18% as the percent issuance costs are of total common equity.

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# 15. Q. Why is an adjustment for issuance cost necessary?

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A. The cost of issuance is properly spread over the life of the stock issue. As long as stock has been issued, an equity adjustment is necessary. It does not matter what future financing plans have been prepared. The investor requires a full return as long as the investor owns the stock. The company issuing new equity, initially receives funds in the amount of the equity issued. The amount of equity issued less the issuance cost is the amount available to the company for investment, yet the investor is, as required, paid a return on the full amount of investment. A greater

- return, therefore, must be earned on the lesser amount that can be invested. This is made possible by the Staff's adjustment to the baseline cost of equity.
- 5 16. Q. Should an adjustment be made to the cost of equity to reflect dilution or price pressure?

- A. No. The investors pay the public offering price, which reflects any dilution effect. The investors require a return on the amount they have invested, not the amount that their investment would have entailed had they been able to buy shares at market price prior to any public announcement of stock issuance.
- 17. Q. Why has the Staff applied its equity issuance adjustment to the common equity balance less retained earnings?
  - A. Consider a company at the stage of its initial public offering and later. The funds collected through the initial public offering are used to finance company operations. The earnings from company operations that are not paid in dividends are retained and are available to fund further operations. Retained earnings that are reinvested in company operations earn a return for the initial investor. As long company operations continue to grow, reinvested funds that are not paid as dividends will compound over the life of the company, enhancing the value of investors' holdings. The cost of issuance associated with the initial public offering is money paid by investors on which the company cannot earn a return. But as the company accumulates retained

earnings, the proportion of investors capital that is not available for company operations is reduced. In this way, it becomes easier for the company to meet or exceed the returns required by initial investors.

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Subsequent stock offerings are subject to the same sequence. A fraction of invested funds, issuance expense, cannot earn a return. The difference, total investment less issuance, is equity and is available for company operations. As retained earnings accumulate, the proportion of invested capital that can earn a return increases. By applying its equity issuance adjustment to the common equity balance less retained earnings, the Staff allows a premium to be earned to compensate for invested funds the company could not commit to operations, but does not apply that premium to retained earnings, which are available in their entirety for reinvestment. As the proportion of investment which can earn a return increases, the adjustment commensurately decreases. Retained earnings increases the available pool of capital, but issuance expense, which is not available to the company, increases only with new stock issuance. The adjustment increases commensurately with the occurrence of new stock issuance, by virtue of the retained earnings proportion of equity decreasing.

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The Applicant's implied argument that the proportion of funds not available would remain the same, over the years, as the proportion of the issuance cost to the initial funds raised publicly, would be true only in the absence of an adjustment. With an adjustment, the full return is earned in the first and every year. Although a portion of the initial investment is absent and always remains absent, the money the absent

portion would have earned goes into the pool of available funds every year by virtue of the adjustment. The money attained by virtue of the adjustment is compounded in subsequent years. Because only the nominal amount of the issuance cost is not available, its deleterious effect on earnings decreases over the years in line with the decrease in the adjustment. 18. O. Are the current DCF estimates for Ameritech useful for DCF analysis? 

- A. Currently, these estimates may be useful. At the time of the Staff Report, the average DCF estimate for Ameritech was 10.04%. At present the average is 12.21%. The Staff uses comparable group DCF equity estimates in its DCF analysis, and not Ameritech alone, because the results for Ameritech are too volatile over time, and a group is likely to produce significantly less volatile results.
- 17 19. Q. Why does the Staff not apply a quarterly DCF formulation?
- A. Were the Staff to apply a quarterly DCF, it would also account for the effect of monthly receipts, which the Staff believes would counteract the effect of quarterly dividends on the cost of equity.
- 23 20. Q. What is the result of CAPM analysis?

A. The average 30 year Treasury bond yields over the past three, six, nine, and twelve months are 7.36%, 6.96%, 6.69%, and 6.60%. These average to 6.90%. Adding to that the product of the .75 beta for Ameritech and the

7.2% premium of total equity returns over 20 year Treasury yields, results in an cost of equity estimate of 12.30%. The average difference over the last year between 30 year and 20 year Treasury yields is .513%. Subtracting half that difference from the 12.30% equity estimate, to account for use of the 20 year premium with the 30 year yield, by interpolation, results in a corrected estimate of 12.04%. Adding .25% for issuance cost brings the estimate to 12.29%, which is within the Staff's recommended range.

## 21. Q. Why are long term yields correctly used for CAPM analysis?

A. Equity investments are, by nature, long term investments, regardless of the investor's horizon. Short term investors accept the possibility of price losses, when the market devalues a stock, in anticipation of conditions or events thought to occur after the short term horizon. Equity investors accept risks associated with changes in inflation and interest rates that may occur in the long term. Short term yields would improperly omit much of the effect of these risks on the CAPM equity estimate.

22. Q. Is the cost of equity altered by alternative regulation provisions?

A. Possibly. The regulatory climate throughout the country, over the last few years, has changed. Alternative regulation for telephone companies has been implemented across the country. As such, market prices would reflect alternative regulation. No explicit cost of equity adjustment should be made, therefore, to compensate for an alternative regulation

- effect, regardless of what the proper magnitude and direction of such an effect would be.

  Would you respond to AARP objection number 6.?
  - A. Yes. The Staff are using a parent-consolidated capital structure, which incorporates the capital structures of all Ameritech subsidiaries. These subsidiary capital structures would be incorporated whether they are high-equity or low-equity. The argument made in the objection that the capital structure is, "inappropriate to the extent that it supports lower cost capital structures (greater debt) in the Ameritech non-LEC subsidiaries," would apply to a stand alone capital structure. It is not, however, an argument that is pertinent to this case, as Staff uses a parent-consolidated capital structure.
- 16 24. Q. Does this conclude your testimony?17
- 18 A. Yes, it does.

#### REFERENCES

- (1) Borun, Victor M., and Malley, Susan L., "Total Flotation Costs for Electric Company Equity Issues," Public Utilities Fortnightly, February 20, 1986, pp. 33-39.
- (2) Logue, Dennis E., and Jarrow, Robert A., "Negotiations vs. Competitive Bidding in the Sale of Securities by Public Utilities," Financial Management, Autumn 1978, pp. 31-39.
- (3) Finnerty, John D., "How to Lower the Cost of Floating A New Stock Issue," Public Utilities Fortnightly, March 17, 1983, pp. 25-29.
- (4) Pettway, Richard H., "A Notice on the Flotation Costs of New Equity Capital Issues of Electric Companies, Public Utilities Fortnightly, March 18, 1982, pp. 68-69.

Exf. SRC-1

AMERITECH AND SUBSIDIARIES Comparable DCF Equity Cost Analysis

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NXN	Stock Prices (\$, Monthly High over Monthly Low) From Dow Jones Retrieval:	30 46.00000 30 44.81250			30 45.62500 30 46 50000	-	30 43.75000		00 40.12500 10 41.27500					33.25000	-		39.75000 35.37500	50 40.90885	Latest Four Quarterly Dividends, (\$) From Value Line and Compustat:	00 0.59000 00 0.59000 00 0.59000 00 0.59000		00 2.36000	B 0.05769		(0.00378)	_	31 0.04836 03) (0.13413)	27 (0.02051)	75 0.03599
BLS	(onthly Low) Fa	00 58.5000 00 54.37500	, _	_	00 58.75000 no 61 00000		63.5000		00 56.75000		60.87500			00 63.50000 00 55.50000	-	,	00 62.25000 10 59.25000	29 58.31250	From Value Lin	0006970 00 0006970 00 0006970 00		00 2.76000	11 0.04733		55 0.04102		83 0.04281 53 (0.02003)	77 0.02427	76 0.07275
BEL	ly High over M	50 60.12500	-	_	00 60.87500 00 66.87500		50 64,50000		59,0000		56.37500		_	00 55.25000 00 49.00000			00 56.75000 00 52.87500	57.30729	Dividends, (\$)	00 0.67000 00 0.67000 00 0.67000 00 0.67000		00 2.70000	31 0.04711		42 0.02455		46 0.04183 21 0.04053	59 0.03977	0.08876
AIT	rices (\$, Month	40.68750	43.56250	45.56250	42.0000	41.56250	42.68750	40.37500	37.75000	36.37500	42.00000	42.25000	36.75000	43.12500	40.50000	37.00000	41.87500 37.87500	je \$ 40.41406	our Quarterly	0.46000 0.48000 0.48000 0.48000	Annual Dividend, (\$):	1.90000	0.04701	BXR from Compustat:	0.05842		0.05346	4V 0.05359	R 0.10312
	Stock P.	2/8	8/83	86/6	10/93		11/93	12/93	1/8		\$ %	₹/s		\$ }	5/94	•	<b>3</b> 5	Average \$	Latest B		Annual		Yield:	BXR fr	BXR 89	BXR 2	BXR 92 BXR 93	BXR 5AV	COESBR



AVE	0.09824	0.15043	0.12036	0.12686	0.12425					0.09696	0.05639	0.13233	96280'0
SNG	1.76 1.85 0.01247 0.06510	2.55 3.15 0.05283 0.10755	0.054	0.053	0.41270 0.15500 0.06397 0.11927	1.28 1.52 1.76	1.98 2.50 2.53	0.02932 0.03185	0.00239	0.08282 0.08548	0.05449	0.09406	0.010
RTC	0.83 1.15 0.08152 0.12022	1.40 2.20 0.11300 0.15282	0.108	0.119 0.15904	0.47727 0.16000 0.07636 0.11488	0.55 0.68 0.80	0.85 1.06 1.20	0.03250	0.02481	0.06945	0.06148	0.130 0.17043	0.070
GIE	1.90 2.40 0.05840 0.11589	2.35 3.35 0.08864 0.14776	0.082	0.078 0.13655	0.28358 0.21000 0.05955 0.11710	0.99 1.30 1.85	1.58 1.77 2.20	0.07056	0.04350	0.12871 0.12023	0.10017	0.080	0.050
CSN	0.80 0.96 0.04558 0.08973	0.85 2.00 0.21392 0.26517	0.073	0.139	0.52000 0.19000 0.09880 0.14519	0.35 0.56 0.80	0.66 1.31 0.86	0.07133	(0.08417)	0.11657 0.12838	(0.04550)	0.115	0.025
AT	0.88 1.25 0.08774 0.12192	1.65 2.60 0.11368 0.14868	0.13353	0.112 0.14694	0.51923 0.20500 0.10644 0.14121	0.38 0.52 0.82	0.59 1.04 1.39	0.09110	0.05802	0.12538 0.11075	0.09126 0.11981	0.125 0.16035	0.085
<u>NSM</u>	2.14 2.35 0.02340 0.07279	2.90 4.30 0.09848 0.15148	0.066 0.11744	0.064	0.45349 0.20500 0.09297 0.14570	1.76	2.85 2.72	0.03910	(0.00934)	0.08924 0.04825	0.03847	0.075	0.015 0.06398
SBC	1.56 1.90 0.04929 0.08804	2.65 3.70 0.08344 0.12345	0.083	0.080	0.48649 0.18500 0.09000 0.13025	1.24 1.51	1.77	0.03940	0.06006	0.07778	0.09921 0.03693	0.095 0.13544	0.045
PAC	2.18 2.40 0.02404 0.06946	2.60 3.65 0.08480 0.13292	0.048	0.09030	0.34247 0.14500 0.04966 0.09621	1.76 2.18	2.81	0.04280	(0.00071)	0.08905	0.04361	0.040	0.015
NXN	2.36 2.75 0.03823 0.09813	3.20 4.50 0.08523 0.14784	0.050 0.11057	0.051 0.11163	0.38889 0.19500 0.07583 0.13790	2.02	3.32 3.12	0.03111	(0.01243)	0.09060	0.04455	0.060	0.030
BLS	2.76 3.50 0.05938 0.10952	4.25 5.80 0.07773 0.12875	0.066 0.11646	0.069	0.39655 0.16000 0.06345 0.11378	2.36	3.51 3.58	0.03131	0.00395	0.08013	0.05147	0.095	0.040
138	2.76 3.08 0.02742 0.07583	3.65 4.90 0.07363 0.12421	0.072	0.069 0.11937	0.37143 0.19000 0.07057 0.12101	2.04 2.68	3,33 3,39	0.05457	0.00357	0.10426 0.04711	0.05085	0.065 0.11518	0.020
AIT	1.94 2.90 0.10051 0.15224	(\$) 2.55 (\$) 4.15 0.12175 0.17449	0.061	0.059	0.30120 0.19500 0.05873 0.10851	1.38 1.86	2.21 2.67	0.05970	0.03782	0.10952 0.04701	0.08661	N 0.080 0.13077	0.085
	VL DIV %4 (\$) VL DIV %8 (\$) VLDG	VL EARN '94 (\$) VL EARN '96 (\$) VLEG	IBES	ZACKS	VL.B., '98 VL.BXR, '98 VL.BXR, '98	(\$) 88, AIQ (\$) 88, AIQ	EARN '83 (\$) EARN '88 (\$) EARN '93 (\$)	GSD G10D	CSE C10E	50 1001	SE 10E	VL BOX EARN VL BXE R	VL BOX DIV

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AMERITECH NYSE-AIT			ECENT RICE	37	PÆ RATED	15.3	Trailing: Median:	<b>3</b> )	E RATE	0.98	DAYD 71.0	5.29	VA VA	NE NE	749
TRUELINESS Proform   4 Amongs Lower Court	11.1 13.4 10.4 10.4		25.4 16.3	25.0 18.5	24.5 20.6	34.1 23.4	34,9 26.3	34.9 27.9	37.0 29.1	46,6 35,1	42.3 38.3			erget Pric	
SAFETY Maphoes Scale: 1 Highest to 5 Lowest)							111 <b>9</b> 110	<b>X</b>		240	-1 1000			****	
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les 75 (+105%) 23% au 60 (+60%) 17%				Per p	-	1991	397	3							# 2
JASONOJFM	- 145 146 A	EN THE	Return	Price 8	rength		****	· ·							# :
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merican Information Technologies	Corp. 1984	1985 ^	1986	1987	1988	1969	1990	1991	1992	_				ME PUB., INC	
Ameritech), is one of the seven roolding companies resulting from			16,40 4,91	17.36 5.43	18.39 5.50	18.90 5.62	20.17 5.82	20.29 5.90	20.64 6.25	21.42 8.81	225		Parameter ( "Copis Flow		27.
realoup of the American Teleph elegraph Co. on January 1, 1954		1	1.97	2.12 1.28	221 1.38	230 1.49	2.37 1.61	2.32 1.72	2.51 1.78	2.67 1.86	255 1.96		Earnings p	er sh <sup>(31)</sup> 'd per sh <sup>(2)</sup>	. 4
hare of Ameritech stock was exchan 0 shares of AT&T (pre-divestiture) or	ged for 2.97	3.41	164	3.56	3.47	3.65	4.00	4,04	4.14	3.83	146	1.40	Cup'l Spon	ding per sis	3. 21.
tock. The stock began trading on a	when Stass	584.11	13.33 570.88	13.86 549.22	14.57 538.40	14.22 540.38	14,63 528,65	15.10 533.27	12.94 540.34	14.35 546.84	15.25 152.55	550,40		he Outst'g	9 574
isued basis on November 21. Regular trading of Ameritech sher			10.7 .73	10.5 .70	10.3 .88	12.5	13.0	13.4 .86	129	14.7		Line	Avg And 1 Relative Pf	E Radio	14
an on February 16, 1984.	8.6%		5.7%	5.8%	6.0%	52%	5.2%	5.5%	5.5%	4.7%	-		Ang And I		44
APITAL STRUCTURE as of 12/31/03 blair Debt \$6692.0 mill. Due in 5 Yrs \$290	G.4 8346.1 990.6		9352.1 1138.4	9636.0 1188.1	9903.3 1253.4	10211	10663 1253.8	10818	11153 1346.0	11710 1451.1	12299 1236		Revenues (		155 23
ilit. II:Debt \$4090.4 mill.       LT interect \$283.8 xxt. \$109.6 mill. cecitalized leases.	mil. 44.2%		44.9% 12.2%	37.5% 12.5%	33.8% 12.2%	30.6% 12.1%	30.7% 11.8%	30.3%	31.0% 12.1%	321% 124%	32.0% 10.0%		hoome for Nat Profit h		32.6 15.2
J: interest etimod: 8.8xC total interest. overage: 5.8x)	40.4% 59.8%	37.6%	37.1% 62.9%	36.9% 63.1%	31.4% 63.6%	39.7% 80.3%	39.6% 69.4%	38.0% 62.0%	39.6% 60.4%	31.3% 65.7%	31.0% 57.0%	34.5%	Long-Yerm Common E	Cebt Retio	20.0 80.0
seesse, Uncapitalizad: Annual rentals 590.	11507	11967	12106	12052	12331	12756	12007	13061	11578	11935	12465	13015	<b>Total Capit</b>	ul (Semili)	153
Annion Liability None	15024	10.7%	15789 10.9%	15933 11,4%	18078 11.3%	16296	16852 11.2%	19966 11,1%	17335 13.1%	17366 13.8%	17400 12.0%	15.0%	Het Plant (i % Earned T	otal Cap'l	15.5
16 Stock None Sympton Stock 548,643,000 also.	14.0%		15.0% 15.0%	15.8% 15.8%	15.3% 15.3%	16.1%	16.2%	15.2% 15.2%	19.3%	18.5%	北海		% Earned & % Earned C	let Worth Joseph Espeity	19.6
edjusted for 2-for-1 stock spilt, paid 1/24/94	5.7%	1 1	5.9% 81%	6.3% 60%	5.8% 61%	5.9%	5.3% 67%	4,1%	5.8% 70%	5.8% 88%	5.0% 40%	4.EX	% Retained	to Comm 6 to Not Prof	d e.c
URRENT POSITION 1991 1992 1	2/31/03 BUSI	IE\$8; Am	eritech is	a holdin	g ca, for	IL, INO,	MICH, O	t, and	case, 2	M; ohe	, 22%. P	archeses	49.9% #	ke in Telepi	orn Corp
	2470.8 10 75	ets & othe 6 of popul	letion in t	1044 <b>51</b>	DOL in 1	C/83 Ann	eritacin be	enumé	Custom	or Angel	Belf emp	Atyeat 2	95. '98 de	onel equity o p. rete: 7.4	1%. Ha
ccts Payable 1405.0 1336.2	1210.6 POPS	gional holi ), Access	lines: 17	'.6 millio	n; 66%	of lines :	digital. '9	3 rev.	57, 192 Weins	employer inc.: Dek	ns, 1.04 s hwens, Ac	nillion alu Kiruse: 3i	imhaiderz. 9 Sauth We	Chairman: \ cker Orive.	Villiam L Chicago
<b>Tener</b> 1683,8 1785,1 (amenit Liab. 5072.0 5239,1	1873.1 Dream	down: local				nce, 121 ter						312-750		rceeds	that
x. Chg. Cov. 383% 466% MNUAL RATES Post Post Earld	551% COH	omp	017 A	a W	ot be	9 a s	tood	one.	Ame	ritech'	B CON	loca	i excha	inge bu	sines
change (per shi) 10 Yrs. 5 Yrs. 10 ' Evenues 4.5%	buy	out pla	ın, wi	areb	y it is	offer	ing i	2001	tence	with	in the	fram	rework	of its e	ristir
<b>arrengs 4.0%</b> (	LOW GELT	s to va y retir	erzeni	s. Th	e cos	t of th	1660 ii	30813-	woul	d like	dy be	attac	bed to	monthi	y bill
ook Value 1.5%	25%	a will	to the	e tur	no of	abou	t 60d	DOT	spots	CULT	ently	being	utilized	i than i I by the	dom
Cal. CUARTERLY REVENUES (\$ mill.) Index Mar.31 Jun.30 Sep.30 Occ.31	peri	re, cre	i caus	ing s	hare :	net fo	n for	that year	nant	long	;-dista	DC8 (	Christa	. Mear	awhil
<b>992   2691   2806   2813   2843  </b>	0818 to L	kely fa	ill beid	w 19	93's ta	ally.		•	most	of t	he co	oper	in its	networ	k wi
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985 3125 3275 3278 3120	120mp 80m	erited e \$1.6	فلللنط	DED. LIE	long	-term	debt	last	also	allow	the o	OMERAL	y to Di	expense	ompr
SAMONGS PER SHARE (III)	Full was	. The	intere	et ex	pense	savin	Q5 88	well	hene	ive in	terect	ive m	ultimed	ha serv	ices :

apmonrable to post-diventiture estimates & re-sults. (B) Based on ave. sha, out. Excl. non-

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CHARTERLY DIVIDENCS PAID (50

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1.70 1.76

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year.

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.90

425

(A) Figures from before divertiture (1/1/94) not tru. charge: '91, 27e; '92, 53.26. Includes uncomparable to post-divestiture estimates & result gain (loss); '90, (6s); '92, 5s. Nest.egs... rpt. clue teta Apr. (C) Nest divid meeting about retur; gain: '98, 7s; '91, 14s; '93, 11s. Etcl. etc... June 18. Goes ax about June 25. Divid pay.

claims about 1st of Jan., April, July., and Oct. of DW'd regresset, claim evaluates. (D) in millione, adj. for stock spills.

cal trends. Ameritech is actively seeking cially if this equity's superior quality is to lift the restrictions that prohibit it from also taken into consideration.

Stock's Price States

Ameritech stock isn't timely. However,

long-term investors may want to take a

closer look. The strategic steps that

Ameritech is presently taking are likely to

have a detrimental impact on near-term

results but should enhance the long-term value of the stock. Thus, total returns for the pull to 1997-99 look worthwhile, espe-

its customers. Still, for now ...

Philip S. Mulqueen

65 100 1 800-833-0046

April 15, 1994

95

year. The interest expense savings as well as the absence of remanding costs should

add about a dime to '94's bottom line. Also,

equity income comparisons from the company's Talecom of New Zealand subsidiary

will benefit considerably from the absence

of restructuring expenses incurred last

Starting in 1995, we think sarnings

growth ought to outdistance histori-

offering long-distance service, a business

### CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing Prepared Testimony of Stephen R. Chaney, submitted on behalf of the Public Utilities Commission of Ohio, was served by regular U.S. mail, postage prepaid, or hand delivered to the parties of record on this 3rd day of August, 1994.

THOMAS W. MCNAMEE
Assistant Attorney General

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