Exhibit No.:_____
Issue: Cost of Capital
Witness: Terence D. Robinson
Type of Exhibit: Direct Testimony
Sponsoring Party: Fidelity Telephone Company
Case No.:_____
Date: <u>December 30, 2003</u>

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application	)	
of Fidelity Telephone Company	)	
for authority to file, establish,	)	
and put into effect new, increased,	)	Case No._____
or revised rates and charges for	)	
telephone service.	)	

AFFIDAVIT OF TERENCE D. ROBINSON

Terence D. Robinson, of lawful age, being duly sworn, deposes and states as follows:

1. My name is Terence D. Robinson. I am employed by GVNW Consulting, Inc. as a Senior Consultant.

2. Attached hereto and made a part of hereof for all purposes is my direct testimony consisting of Pages 1 through 11 and Schedules No. 1 through 2.

3. I hereby affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge and belief and that the information contained in the attached schedules is also true and correct to the best of my knowledge and belief.

_____
Terence D. Robinson

Subscribed and sworn to before me this 29th day of December, 2003.

_____
Notary Public

My Commission expires: _____

1

2

3   Q.   Please state your name and address.

4   A.   My name is Terence D. Robinson and my business address is 2270 La Montana Way,

5   Colorado Springs, CO 80918.

6

7   Q.   By whom are you employed and in what capacity?

8   A.   I am a Senior Consultant of GVNW Consulting, a consulting firm specializing in working

9   with small telephone companies.

10

11   Q.   Please outline your educational background and any professional licenses you hold.

12   A.   I was graduated in 1978 from Central Washington University in Ellensburg, Washington,

13   with a BA in Business Administration and Economics. I also hold an MBA from Butler

14   University in Indianapolis, Indiana (1984) and a Masters of Management in Financial

15   Planning Services from the University of Dallas, in Irving, Texas (1989). I am a licensed

16   Certified Public Accountant in the state of Washington and a Certified Financial Planner –

17   Practitioner. I am also a NASD (National Association of Securities Dealers) series 7 and

18   66 licensed securities and advisory representative.

19

20   Q.   Please outline your business and experience background.

21   A.   Following completion of my undergraduate studies, I joined the public accounting firm of

22   Ernst & Ernst (subsequently Ernst & Whinney and now Ernst & Young) in 1978 as a

23   consultant in its Tacoma, Washington Telecommunications Practice Group. As a

1   consultant, I focused on preparing toll separations cost and settlement studies for small

2   telephone companies located throughout the country. In 1980, I joined GTE (subsequently

3   Verizon) as an Economic Analyst in its Northern Region Headquarters located in

4   Indianapolis, Indiana. In 1982, I was promoted to Manager Toll Budgets and, in that

5   position, participated in GTE's annual budgeting and strategic planning programs. In 1984,

6   I was promoted to Manager Capital Recovery at the GTE World Headquarters in Stamford,

7   Connecticut. In that position, I developed new depreciation policies and programs and

8   advocated those methods to state regulatory bodies and the FCC. In 1986, I was transferred

9   to Irving, Texas as a Staff Manager Cost. In that position, I worked for two years as the

10   Regulatory representative assisting the Finance group in implementing the FCC's newly

11   ordered revised Part 32 accounting, Part 36 cost separations, Part 69 access costs and Part

12   64 cost allocation manual rules. In 1989, I was promoted to Manager Regulatory Planning

13   where I participated in a wide range of regulatory and financial planning activities over the

14   ensuing nine years. In 1999, I joined GVNW Consulting as a Senior Consultant and have

15   concentrated on providing financial, management and regulatory advisory services to

16   clients throughout the country, with a strong client base in Missouri.

17

18 Q.   Have you previously testified in regulatory proceedings?

19 A.   Yes. I have testified on cost and capital recovery issues before regulatory bodies in Illinois,

20   Idaho, Minnesota, North Carolina and California.

21

22 Q.   Please describe the purpose of your testimony.

1   A.   I am testifying on behalf of Fidelity Telephone Company ("Fidelity", or the "Company"). I

2   will present testimony on the Company's required cost of capital.

3

4   Q.   Have you prepared any schedules to accompany your testimony?

5   A.   Yes. I have prepared and am sponsoring the following schedules:

6   Schedule TDR-1 DCF Results for the Comparable Group

7   Schedule TDR-2 CAPM Results for the Comparable Group

8

9   RATE OF RETURN

10

11   Q.   What are the basic principles that the Commission should consider in determining the rate

12   of return the Company should achieve on its rate base investments?

13   A.   The basic principles underlying the determination of the rate of return a public utility

14   company should be allowed to earn are firmly established legal precedents developed

15   decades ago. The key elements of this determination were clearly enunciated in the

16   <u>Bluefield Waterworks & Improvement Co. v. Public Service Commission of West Virginia</u>

17   case in 1923. The United States Supreme Court held that:

18   "A public utility is entitled to such rates as will permit it to earn a return on the value of the
19   property which it employs for the convenience of the public equal to that generally being
20   made at the same time and in the same general part of the country on investments in other
21   business undertakings which are attended by corresponding risks and uncertainties;...The
22   return should be reasonably sufficient to assure confidence in the financial soundness of the
23   utility and should be adequate, under efficient and economical management, to maintain
24   and support its credit and enable it to raise the money necessary for the proper discharge of
25   its public duties."
26
27   This principle was further strengthened in <u>Federal Power Commission et. al. v. Hope</u>

28   <u>Natural Gas Co.</u> where the court stated:

1 "...the return to the equity owner should be commensurate with returns on investments in
2 other enterprises having corresponding risks. That return, moreover, should be sufficient to
3 assure confidence in the financial integrity of the enterprise, so as to maintain its credit and
4 to attract capital."
5
6 These principles should form the basis of the Commission's determination of the cost of

7 capital for Fidelity Telephone Company.

8

9 Q. What process would you propose for the Commission to follow in determining a rate of

10   return on capital that meets the criteria outlined above?

11 A. The Company's current capital structure includes no long-term debt and only a small

12   amount of outstanding preferred stock, accounting for less than 1% of the Company's total

13   capital. The ongoing operations of the Company are financed entirely through the internal

14   generation of funds, as made available by the equity owners who through quality

15   management have been able to retire long-term debt financing in recent years. These

16   internally generated funds have been invested by the Company in assets the Company

17   utilizes to provide telecommunications services to its customers. In a company financed

18   entirely with equity, the appropriate cost of equity for the company is equivalent to a fair

19   rate of return on total capital or rate base for the company.

20

21 Q. How do you propose the Commission should determine the Company's cost of common

22   equity?

23 A. I have chosen to use the Discounted Cash Flow (DCF) model and the Capital Asset Pricing

24   Model (CAPM) as the primary tools to determine the cost of equity for Fidelity.

25

26 Q. Would you briefly describe the DCF model?

1   A.   This analytical tool stems from the theory that market prices of equity securities are

2   constantly being adjusted by the marketplace to an equilibrium point representing the

3   underlying value of the securities to the investor. Thus, the market price of the stock

4   continually reflects the expected return and the return required by investors to invest in the

5   stock. The cost of equity can be expressed by the formula:

6
7
$$k = \frac{D_1}{P_0} + g$$

8
9
10   Where k (the cost of equity capital) equals the anticipated dividend yield [D_1, anticipated

11   dividends over the next 12 months, divided by P_0, the current stock price] plus the

12   expected future growth in dividends (g) continuously summed into the future. The model

13   assumes that the investor's growth horizon is unlimited and that earnings, book values and

14   market prices grow together. The DCF model is widely accepted as a reasonable working

15   model describing investor's expectations and actual behavior.

16

17   Q.   Since Fidelity's common stock is not market-traded, how have you performed this analysis

18   for the Company?

19   A.   I performed a DCF analysis based on a group of publicly traded comparable companies in

20   the telecommunications industry (the Comparable Group). The Comparable Group is a

21   group of companies with the necessary data available, having risk characteristics similar to

22   the Company because they are involved in the same general industry. I believe that an

23   analysis of the Comparable Group will provide a reasonable basis for determining a fair

24   rate of return for the Company.

25

1 Q. How did you identify the companies you used in this analysis?

2 A. Initially, I used the <u>MultexInvestor Financial Research and Information Service</u>

3 (MultexInvestor) published by Reuters, to identify all publicly traded companies classified

4 as participating in the Communications Services Industry. The initial download produced a

5 list of 214 companies. From that list I eliminated companies that:

6   1)   Indicated no dividend yield,

7   2)   Represent foreign based corporations trading in our markets as ADRs,

8   3)   Had a market capitalization of greater than $25 billion,

9   4)   Failed to generate an operating profit in each of the last five reporting years,

10   5)   Did not have published forward-looking five-year investment analyst earnings

11   estimates reported.

12 Six companies (Comparable Group) remained after applying these criteria. These are the

13 companies that I included in my analysis. They are listed on Schedules TDR-1 and 2.

14

15 Q. How did you proceed with the completion of the DCF study?

16 A. Having identified the Comparable Group, I went about the task of collecting the data inputs

17 required to apply the DCF formula as defined earlier. The <u>MultexInvestor</u> service

18 independently publishes most of the required inputs. From this service I was able to get

19 reported anticipated long-term growth rates for earnings-per-share (EPS). Taking data

20 from reports produced by several different investment analysts, <u>MultexInvestor</u> publishes

21 an EPS growth rate for the next 5 years. It prints both a high and low analyst estimate,

22 from which I developed an average, which I used for the variable "g" in the DCF formula.

23 I then calculated dividend yields for each company and for the total group. The dividends

1   were obtained from the <u>MultexInvestor</u> service, and the current stock price was the closing

2   price on September 30, 2003. These results allowed me to calculate an estimated DCF

3   return for each company in the Comparable Group and on a composite basis for the group

4   as a whole. I arrived at an estimated return on equity for Fidelity by analyzing the

5   individual company and composite group returns.

6

7   Q.   Please proceed with your description of the DCF analysis.

8   A.   Schedule TDR-1 shows the completion of my DCF analysis, deriving an estimated cost of

9   common equity for the Comparable Group. The expected dividend payments and current

10   stock price as discussed above provided a projected dividend yield. The projected dividend

11   yield was then added to the average forward looking growth rate to arrive at the estimated

12   cost of common equity for each company. An average for the group was also derived.

13

14   Q.   What do your results show?

15   A.   The estimated equity costs for the individual companies vary from a low of 9.00% to a high

16   of 27.38% with an average of 17.89% return on equity from the Comparable Group.

17

18   Q.   Please describe the additional risks that you mentioned that you relied on in making your

19   recommendation on the estimated cost of equity for Fidelity Telephone Company.

20   A.   While the companies in the Comparable Group are all telecommunications companies in

21   the local exchange telephone business, as is Fidelity, there are characteristics of the

22   Comparable Group companies that are different from Fidelity that I believe should be given

23   consideration. Shenandoah Telecommunications, which is the smallest of the Comparable

1	Group in terms of total common equity, has a common equity investment that is more than
2	2 times as large as Fidelity's common equity. Alltel Corporation, the largest of the
3	Comparable Group, on these terms, has common equity that is 171 times as large as
4	Fidelity. These companies, with possibly one exception, are involved in operations that are
5	spread over multiple states and serve literally hundreds of thousands of customers. All
6	have stock listed on national markets and have access to capital at a national level.
7	Fidelity, on the other hand, serves a limited geographical area. This area is rural in nature,
8	with relatively low growth, and with somewhat limited economic opportunities. Fidelity's
9	ability to reach capital markets is primarily local or regional in nature rather than on a
10	national scale. Because of the Company's small size, both in terms of customer numbers
11	and geography, its degree of business risk to individual events, such as specific competitive
12	impacts, or to natural events, such as a tornado, are considerably higher than the companies
13	in the Comparable Group. For these reasons, I believe that Fidelity is subject to a degree of
14	risk higher than that in the Comparable Group and that its required rate of return is
15	substantially higher than the projected equity cost for the Comparable Group.
16	
17	Q. Would you briefly describe the CAPM model.
18	A. The CAPM describes the relationship between a security's investment risk and its market
19	rate of return. This relationship identifies the rate of return which investors expect a
20	security to earn so that its market return is comparable with the market returns earned by
21	other securities that have similar risk. The general form of the CAPM is as follows:
22	
23	$$K = R_r + \beta (R_m - R_r)$$
24	Where:
25	K = the expected return of equity for a specific security;
26	

8

1   R_r =   the risk free rate;

2   β =   beta; and

3

4      $R_m - R_r$ =   the market risk premium.

5

6   The first term of the CAPM is the risk-free rate (R_r). The risk-free rate represents the level

7   of return that may be achieved without accepting any risk. In reality there is no such risk-

8   free asset, but U.S. Treasury securities are generally used as an approximation. For

9   purposes of my analysis the risk-free rate used is the yield on the 30-year U.S. Treasury

10   Bond of 4.92%, as reported at the close of market on October 1, 2003.

11

12   The second term of the CAPM is beta (β). Beta is an indicator of a security's investment

13   risk. It represents the relative movement and relative risk between a particular security and

14   the market as a whole (where beta for the market equals 1.00). Securities with betas

15   greater than 1.00, exhibit greater volatility than do securities with betas less than 1.00. This

16   causes a higher beta security to be less desirable and therefore requires a higher return in

17   order to attract investor capital away from a lower beta security. Schedule TDR-2 presents

18   the appropriate betas for the Comparable Group.

19

20   The final term of the CAPM is the market risk premium ($R_m - R_r$). The market risk

21   premium represents the expected return from holding the entire market portfolio less the

22   expected return from holding a risk-free investment. For purposes of this analysis, the

23   appropriate market risk premium was determined to be 7.00% as presented in <u>Ibbotson</u>

24   <u>Associates, Stocks, Bonds, Bills, and Inflation 2003 Yearbook</u>.

25

26 Q.   Are there any other factors that should be considered in applying the CAPM to develop the

27   appropriate equity cost of Fidelity?

1	A.	Yes. An important element not captured by the CAPM is known as the size effect. The
2		size effect is evident in that even after adjusting for the systematic (beta) risk of small
3		stocks, they still outperform large stocks. Although the betas for small stocks tend to be
4		larger than those for larger companies, the higher betas do not account for all of the risks
5		faced by investors in small companies. The size effect is properly treated as a premium
6		added directly to the CAPM or:

7

8
$$K = R_r + \beta (R_m - R_r) + SP$$

9

10 Where SP is the appropriate size premium based on a Company's equity market

11 capitalization. The appropriate premiums for companies of distinct market capitalization

12 are presented in <u>Ibbotson Associates, Stocks, Bonds, Bills, and Inflation 2003 Yearbook</u>.

13

14 Q. Did you use the CAPM with size effect formula in deriving your CAPM cost of equity

15 estimate?

16 A. Yes. Due to the wide variance in the market capitalization of the Comparable Group, I

17 believe it is necessary to account for the size effect. The size of the Comparable Group

18 varies from Shenandoah Telecommunications, which is the smallest of the Comparable

19 Group with a market capitalization of approximately $170 million, to Alltel Corporation,

20 the largest of the Comparable Group with a market capitalization of more than $15 billion.

21

22 Q Please proceed with your description of the CAPM analysis.

23 A. Schedule 2 shows the completion of my CAPM analysis of the estimated cost of common

24 equity for the Comparable Group. The Comparable Group betas are applied against the

1		market risk premium, the product of which is added to the risk free rate and the size
2		premium. The resulting figure represents each comparable Company's cost of equity.
3		
4	Q.	What do your results show?
5	A.	The estimated equity costs for the individual companies vary from a low of 7.97% to a high
6		of 13.91% with an average of 11.72% return on equity from the Comparable Group.
7		
8	Q.	What is your recommendation of the appropriate cost of equity and cost of capital to be
9		used in this proceeding for Fidelity?
10	A.	Based on the results of my DCF analysis yielding a composite 17.89% cost of equity for
11		the Comparable Group and my CAPM analysis yielding a composite 11.72% cost of equity
12		for the Comparable Group, I would recommend a range of 11.72% to 17.89%, with a mid-
13		point of 14.8%, as the appropriate cost of equity and capital for Fidelity.
14		
15	Q.	Does this conclude your testimony?
16	A.	Yes, it does.
17		
18		
19		
20		
21		
22		

Fidelity Telephone Company

DCF Results for the Comparable Group

**Discounted Cash Flow (DCF) Cost of Equity Estimates
for the Six Telecommunications Companies**

Company Name	Symbol	1 Expected Dividend	2 Recent Stock Price	3 Projected Dividend Yield	4 Average Growth Rate	5 Cost of Common Equity
Alltel Corporation	AT	$1.40	$ 46.34	3.02%	7.50%	10.52%
Centurytel	CTL	$0.22	$ 33.89	0.65%	8.35%	9.00%
CT Communications	CTCI	$0.26	$ 12.96	2.01%	22.50%	24.51%
Sunwest Communications	SURW	$1.00	$ 38.83	2.58%	24.80%	27.38%
Telephone & Data Systems	TDS	$0.62	$ 57.88	1.07%	16.20%	17.27%
Shenandoah Telecommunications	SHEN	$0.74	$ 44.85	1.65%	17.00%	18.65%
				1.83%	16.06%	17.89%

Notes: Column 3   [Column 1 / Column 2]
        Column 5   [Column 3 + Column 4]

Sources: Column 1   Current annual dividend payment as reported by MultexInvestor
                          financial research and information service

        Column 2   Closing price on September 30, 2003

        Column 4   Mean analyst consensus EPS growth rates as reported by
                          First Call/Thomsom Financial on October 1, 2003

Fidelity Telephone Company

CAPM Results for the Comparable Group

Capital Asset Pricing Model (CAPM) Cost of Equity Estimates
for the Six Telecommunications Companies

	1	2	3	4	5
Company Name	Risk Free Rate	Company Beta	Market Risk Premium	Size Premium	Cost of Common Equity
Alltel Corporation	4.92%	0.88	7.00%	-0.32%	10.76%
Centurytel	4.92%	1.01	7.00%	0.42%	12.41%
CT Communications	4.92%	0.07	7.00%	2.56%	7.97%
Surwest Communications	4.92%	0.72	7.00%	2.06%	12.02%
Telephone & Data Systems	4.92%	1.19	7.00%	0.66%	13.91%
Shenandoah Telecommunications	4.92%	0.82	7.00%	2.56%	13.22%
		0.78			11.72%

Notes: Column 1   Risk Free rate is the 30 year U. S. Treasury Rate as quoted on October 1, 2003

Column 2   Beta as reported by MultexInvestor financial research and information service October 2003

Column 3   Market rate premium is the amount over the risk free rate that is demanded by investors for holding a portfolio of equal risk to the market, and was reported by Ibbotson Associates, Inc. in Stocks, Bonds, Bills and Inflation 2003 Yearbook: page 248 Table C-1 - *long-horizon expected equity risk premium*

Column 4   Size premium recognizes that betas for smaller companies tend to be greater than those for large compaics, however, these betas do not account for all of the risks faced by those who invet in small companies, and was reported by Ibbotson Associates, Inc. in Stocks, Bonds, Bills and Inflation 2003 Yearbook: page 248 Table C-1 - Size Premium

Column 5   [column 1 +(column 2 *times* column 3)+4]