Exhibit No. ____ (JHV-7T)
Docket No. UT-040788

BEFORE THE

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	)	
Complainant,	)	
v.	)	**DOCKET NO. UT-040788**
VERIZON NORTHWEST INC.,	)	
Respondent.	)	
. . . . .	)	

REBUTTAL TESTIMONY OF

JAMES H. VANDER WEIDE, Ph.D.

ON BEHALF OF
VERIZON NORTHWEST INC.

FEBRUARY 2, 2005

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I. INTRODUCTION

Q. WHAT IS YOUR NAME AND BUSINESS ADDRESS?

A. My name is James H. Vander Weide. I am Research Professor of Finance and Economics at the Fuqua School of Business of Duke University. I am also President of Financial Strategy Associates, a firm that provides strategic and financial consulting services to business clients. My business address is 3606 Stoneybrook Drive, Durham, North Carolina.

Q. ARE YOU THE SAME JAMES H. VANDER WEIDE THAT FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Verizon Northwest Inc. ("Verizon NW") has asked me to review the direct testimonies of Mr. James A. Rothschild on behalf of the Washington Utilities and Transportation Commission Staff and Mr. David Parcell on behalf of Public Counsel, and to rebut the major financial and economic positions, including cost of capital, contained in their testimonies.

II. SUMMARY

A. Mr. Rothschild

Q. WHAT IS MR. ROTHSCHILD'S RECOMMENDED OVERALL COST OF CAPITAL FOR VERIZON NW?

A. Mr. Rothschild recommends an overall cost of capital of 7.71%, based on a 9.25% cost of equity, 6.99% cost of long-term debt, 2% cost of short-term debt, and a capital structure containing 45% common equity, 49% long-term debt, and 6% short-term debt.

Q. HOW DOES MR. ROTHSCHILD ARRIVE AT HIS RECOMMENDED 9.25% RECOMMENDED COST OF EQUITY FOR VERIZON NW?

A. Mr. Rothschild arrives at his recommended 9.25% cost of equity by applying his DCF and inflation risk premium/CAPM cost of equity methodologies to proxy groups of electric, natural gas, and telecommunications companies and to the S&P 500 index.

Q. WHAT ARE YOUR BASIC CONCLUSIONS REGARDING MR. ROTHSCHILD'S DIRECT TESTIMONY?

A. My basic conclusions regarding Mr. Rothschild's direct testimony may be summarized as follows:

Risk. Mr. Rothschild's low cost of equity recommendation reflects his opinion that Verizon NW is a low-risk monopolist with a correspondingly low rate of return requirement. In espousing this opinion, Mr. Rothschild seems to be unaware that Verizon

NW's wireline telecommunications market in Washington State has become highly competitive as a result of strong competition from CLECs, cable TV providers, VoIP providers, and wireless providers. He also seems to be unaware that the very foundations of Verizon NW's business model are threatened by rapid advances in VoIP and wireless technologies. As a result of the many changes in the telecommunications industry in recent years, Verizon NW has lost 9% of its access lines in Washington State since the first quarter of 2002 and is likely to lose a much higher percentage of its access lines in the future. Mr. Rothschild's dramatic mischaracterization of the competitive, technological, and regulatory environment in telecommunications has caused him to significantly understate Verizon NW's cost of capital.

Capital Structure. Mr. Rothschild calculates Verizon NW's weighted average cost of capital using a book value capital structure containing 45% common equity, 49% long-term debt, and 6% short-term debt. However, Mr. Rothschild's book value capital structure contains significantly more debt and less equity than the average book value capital structure of the three RBHCs he used to estimate Verizon NW's cost of equity. If Mr. Rothschild wanted to (incorrectly) rely on a book value capital structure, he should at least have used the average book value capital structure of the telecommunications companies in his cost of equity analysis. Since the financial risk implied by Mr. Rothschild's recommended book value capital structure is significantly higher than the financial risk implied by his cost of equity calculations, Mr. Rothschild should have adjusted his estimated cost of equity upward to account for this higher risk.

Mr. Rothschild's use of book value capital structure weights is also inconsistent with the economic and financial theory of corporate valuation. Economic and financial theory incontrovertibly require the sole use of market value capital structure weights to calculate a company's weighted average cost of capital because the weighted average cost of capital is defined as the return investors expect to earn on a portfolio of debt and equity securities of comparable risk, and investors measure the expected return and risk on their portfolios based on the market values of their investments, not the book values. As a result, the use of Mr. Rothschild's incorrect book value weights would send incorrect economic signals for Verizon NW's investment decisions. Since Mr. Rothschild's incorrect book value equity weight, 45%, is significantly less than the 80% average market value equity weight for his telecommunications companies, his use of book value weights by itself causes him to significantly underestimate Verizon NW's weighted average cost of capital.

Proxy Groups. Mr. Rothschild estimates Verizon NW's cost of equity by applying his cost of equity methodologies to groups of electric, natural gas, telecommunications, and industrial companies. Mr. Rothschild's electric and natural gas companies are poor proxies for the purpose of estimating Verizon NW's cost of equity because electric and natural gas utilities are significantly less risky than Verizon NW. The RBHCs are also poor proxies for the purpose of estimating Verizon NW's cost of equity because traditional cost of equity methodologies do not provide reliable cost of equity estimates for companies such as the RBHCs that are experiencing de-regulation, competitive entry, dramatic industry restructuring, and profound technological change. In addition, the

RBHCs are simply too small a sample to provide reliable cost of equity estimates. Although a large group of industrial companies is generally a good proxy for the purpose of estimating Verizon NW's cost of equity, Mr. Rothschild's flawed and inconsistent application of the DCF model to the S&P 500 invalidates his result.

Discounted Cash Flow Model. Mr. Rothschild chooses to use an annual DCF model to estimate Verizon NW's cost of equity, even though the companies in his analyses all pay dividends quarterly. The annual DCF model combines an annual dividend with a market price that necessarily includes investor's knowledge that dividends are paid quarterly. Since an investor attributes some value to the quarterly payment of dividends, a firm's stock price will be higher when it pays dividends quarterly than when it pays the same amount of dividends annually. Even though Mr. Rothschild uses the higher price which reflects the quarterly payment of dividends, he does not similarly reflect quarterly dividends in calculating the dividend component of the DCF cost of equity. He therefore creates a clear mismatch of data sets which causes him to understate Verizon NW's cost of equity.

Growth. In applying his DCF model to this proxy groups of electric, natural gas, and telecommunications companies, Mr. Rothschild relies on the "br + sv" method of estimating future growth in earnings, dividends, and stock prices. Mr. Rothschild fails to recognize that the "br + sv" method cannot logically be applied to rate-regulated companies because it involves a logical circularity, namely, the rate of return on equity must be known to estimate the cost of equity through the DCF model, at the same time

that the cost of equity is used to set the allowed rate of return on equity. In addition, Mr. Rothschild implements his "br + sv" method incorrectly. Specifically, he uses estimates for each company's retention ratio and rate of return of equity that are significantly less than the data reported by Value Line, which is his primary data source. Furthermore, Mr. Rothschild uses an incorrect formula for calculating the retention ratio. Each of these errors causes Mr. Rothschild to significantly understate Verizon NW's cost of equity.

Mr. Rothschild's application of the DCF model to the S&P 500 is inconsistent with his application of the DCF model to his other groups of proxy companies. In applying the DCF model to his proxy companies, Mr. Rothschild at least attempted to determine a long-run growth rate for his proxy companies. In contrast, Mr. Rothschild's application of the DCF model to the S&P 500 relies entirely on an estimate of the expected one-year increase in the price of the S&P 500 stock index for the period from June 15, 2004, to June 30, 2005. This one-year stock price forecast is an unreliable estimate of long-run future growth in the DCF model.

Inflation Risk Premium/CAPM Approach. Mr. Rothschild's Inflation Risk Premium/CAPM results are biased downward by his use of real stock returns over the period 1802 to 2001 to estimate future expected returns. During the 19th century, the stock market was comprised of very few stocks, mainly the stocks of several banks, railroads, and insurance companies, located in the Northeast. These stocks were thinly traded; and, since no dividend data were available, a rough estimate had to be made of the average dividends on these stocks. Furthermore, prices for the period generally were

based on averages of high and low bids, not prices at which trades actually occurred. For these and many other reasons, the historical returns on these stocks are simply not indicative of returns investors expect to receive on stock investments in 2004.

Mr. Rothschild's Inflation Risk Premium/CAPM results are also biased downwards by his decision to drastically reduce Ibbotson Associates' risk premium data for the period 1926 – 2003 to reflect Mr. Rothschild's belief that risk premiums have declined over time. Ibbotson Associates has conducted extensive statistical tests of the hypothesis that risk premiums have declined over time and, based on the results of these studies, rejected Mr. Rothschild's opinion that risk premiums have declined over time. If Mr. Rothschild had properly used the Ibbotson Associates' risk premium of 7.2% instead of his own risk premium of approximately 4%, his inflation risk premium/CAPM results would have been approximately 300 basis points higher than the results he reports.

B. Mr. Parcell

Q. WHAT IS MR. PARCELL'S RECOMMENDED OVERALL COST OF CAPITAL FOR VERIZON NW?

A. Mr. Parcell recommends an overall cost of capital of 8.26%, based on a 10.5% cost of equity, a 6.99% cost of long-term debt, a 1.75% cost of short-term debt, and a capital structure containing 44.9% common equity, 49.3% long-term debt, and 5.8% short-term debt.

Q. HOW DOES MR. PARCELL ARRIVE AT HIS RECOMMENDED 10.5% COST OF EQUITY?

A. Mr. Parcell arrives at his recommended 10.5% cost of equity in two steps. First, he applies the DCF, CAPM, and comparable earnings methodologies to proxy groups of telecommunications and local natural gas distribution companies. Second, he reduces his cost of equity results for these proxy companies by 100 basis points to reflect his opinion that Verizon NW faces significantly less risk than his average proxy company.

Q. WHAT ARE YOUR BASIC CONCLUSIONS REGARDING MR. PARCELL'S DIRECT TESTIMONY?

A. My basic conclusions regarding Mr. Parcell's direct testimony may be summarized as follows:

Risk. Mr. Parcell views Verizon NW's regulated wireline telecommunications operations in Washington State as being significantly less risky than the average company in his proxy groups, including Verizon NW's parent, Verizon Communications, Inc. In an attempt to support his view, Mr. Parcell applies the DCF and CAPM methodologies to proxy groups of wireless companies, wireless networking companies, telecommunications equipment companies, publishing companies, and international telecommunications companies that he considers to be in the same lines of business as Verizon Communications' unregulated businesses. Since he obtains higher cost of equity estimates for his proxy groups than he obtains for Verizon Communications, and Verizon Communications' cost of equity is a weighted average of the costs of equity for its

regulated and unregulated businesses, Mr. Parcell concludes that Verizon Communications' regulated businesses, including Verizon NW, are less risky than Verizon Communications' consolidated businesses.

However, Mr. Parcell's cost of equity studies for these proxy groups are seriously flawed. First, Mr. Parcell's cost of equity results for his unregulated proxy groups are dominated by the extremely high cost of equity results he obtains for the numerous telecommunications equipment manufacturers in these groups. The cost of equity for the telecommunications equipment manufacturers are irrelevant to Verizon Communications' cost of equity because Verizon Communications is not engaged in manufacturing telecommunications equipment and telecommunications equipment manufacturing is significantly more risky than any of Verizon Communications' other businesses. Second, Mr. Parcell's cost of equity result for his wireless service proxy group is dominated by aberrant individual results for several wireless companies that are significantly more risky than Verizon Communications' wireless business. Third, Mr. Parcell's cost of equity results for his proxy groups are based in many instances on incorrect growth rates that differ from the growth rates that appear in the current edition of his data source, Value Line, available at the time of his studies. For example, Mr. Parcell incorrectly reported that Value Line did not have data on dividend growth, when, in fact, Value Line reported a dividend growth rate of zero for those companies. Mr. Parcell's analysis also ignored the fact that the DCF model can not be applied to companies that pay zero dividends.

Proxy Groups. Mr. Parcell estimated Verizon NW's cost of equity using proxy groups of six telecommunications holding companies and six local natural gas distribution companies ("LDCs"). His proxy group of LDCs is clearly inappropriate to estimate Verizon NW's cost of equity because the LDCs face significantly less competitive, technology, and regulatory risk than Verizon NW. His telecommunications proxy group is also inappropriate for the purpose of estimating Verizon NW's cost of equity because the telecommunications holding companies are: (1) able to diversify their competitive, technology, and regulatory risks by investing in several telecommunications technologies and geographic areas; and (2) operate in an industry that is experiencing dramatic industry restructuring, and thus violates the basic stability assumptions of Mr. Parcell's cost of equity models.

DCF and CAPM Results. The results of Mr. Parcell's DCF and CAPM models are biased downward by his incorrect choices of model inputs. For example, Mr. Parcell chose growth estimates in his DCF model that significantly underestimate the growth forecasts used by investors in making stock buy and sell decisions. In his application of the CAPM, Mr. Parcell used a return on the market portfolio estimate that understates a reasonable estimate of this critical input in the CAPM.

Comparable Earnings. Mr. Parcell reports rates of return on equity for his proxy group of telecommunications companies in the range 12.6% to 18.6%, and for a proxy group of companies in the S&P 500, in the range 12.7% to 14.5%. The logic of the comparable earnings method requires that Verizon NW's allowed return on equity be set equal to the

average rates of return on equity for the comparable groups of companies. However, contrary to this logic, Mr. Parcell dismisses the returns of his proxy companies on the grounds that: (1) the market-to-book ratios of his proxy companies are greater than 1.0; and (2) in his opinion, a market-to-book ratio greater than 1.0 signifies that these companies are earning more than their costs of equity.

Mr. Parcell's dismissal of the returns on equity for his comparable companies is both unjustified and self serving. I present examples of hundreds of companies that have market-to-book ratios exceeding 1.0, but that are earning either negative rates of return on equity or rates of return on equity less than the cost of debt. Contrary to the assumption of Mr. Parcell's approach, these companies could not be earning returns that exceed their costs of equity. As I explain, one would expect the market-to-book ratios of most companies to be greater than 1.0 simply because: (1) market values are forward looking, while book values reflect historical costs; and (2) accounting principles require companies to write down the book value of their assets when market values are less than book values, but do not allow companies to write up the book value of their assets when market values exceed book values.

III. REBUTTAL OF MR. ROTHSCHILD

A. Risk

Q. WHAT IS MR. ROTHSCHILD'S OPINION REGARDING THE RISK VERIZON NW FACES WHEN IT OFFERS REGULATED TELECOMMUNICATIONS SERVICES IN WASHINGTON STATE?

A. Mr. Rothschild believes that Verizon NW is a low-risk monopolist with a correspondingly low rate of return requirement.

Q. HOW DOES MR. ROTHSCHILD ATTEMPT TO SUPPORT HIS OPINION THAT VERIZON NW FACES LITTLE RISK IN PROVIDING REGULATED TELECOMMUNICATIONS SERVICES IN WASHINGTON STATE?

A. Mr. Rothschild attempts to make four arguments that he believes support his position that Verizon NW faces little risk when it provides regulated telecommunications services in Washington State. Mr. Rothschild argues that: (1) Verizon NW faces little or no competition for regulated telecommunication services [Rothschild at p. 8]; (2) Verizon NW's high fixed costs create high barriers to competitive entry [Rothschild at p. 70]; (3) Verizon NW's regulated operations are low risk because Verizon NW can raise prices to recover its costs [Rothschild at p. 12]; and (4) regulatory attempts to aggregate returns on regulated and unregulated services do not increase risk because investors don't care whether the returns come from regulated or unregulated businesses [Rothschild at p. 72].

Q. DOES MR. ROTHSCHILD PROVIDE ANY EMPIRICAL EVIDENCE TO SUPPORT HIS OPINION THAT VERIZON NW FACES LITTLE OR NO COMPETITION FOR ITS REGULATED TELECOMMUNICATIONS SERVICES IN WASHINGTON STATE?

A. No. Mr. Rothschild simply states that Verizon NW itself must believe that it faces little or no competition for its regulated services because it seeks a rate increase in this

proceeding. In his opinion, it would be unreasonable for Verizon NW to seek a rate increase if it faced significant competition for its wireline telecommunications services.

Q. DOES VERIZON NW FACE COMPETITION FOR ITS REGULATED TELECOMMUNICATIONS SERVICES IN WASHINGTON STATE?

A. Yes. In my direct testimony, I presented evidence that Verizon NW faces strong competition for its telecommunications services in Washington State from CLECs, cable TV companies, Internet service providers, VoIP providers, and wireless service providers. As shown below in Table 1, from the first quarter of 2002 through September 30, 2004, Verizon NW lost 17 percent of its business lines and 5 percent of its residence lines in Washington State.[1]

Table 1
Changes in Access Lines Served by Verizon NW in Washington State

	1Q 2002	3Q 2004	Gain/Loss
Business	295,138	245,657	-17%
Public	5,347	4,030	-25%
Residence	643,626	611,715	-5%
Total	**944,111**	**861,402**	**-9%**

Q. ARE INVESTORS AWARE OF THE INCREASED COMPETITION IN WIRELINE TELECOMMUNICATIONS MARKETS SUCH AS VERIZON NW'S MARKETS IN WASHINGTON STATE?

A. Yes. Investors are especially aware of the enormous threat to Verizon NW's wireline telecommunications services arising from the introduction of new wireless, VoIP, and cable TV technologies. For example, in a recently published lead article on the

[1] http://investor.verizon.com/business/xls/access_lines-3q-04.xls

implications of VoIP and improved cable technologies for traditional telecommunications companies such as Verizon NW, *The Wall Street Journal* states:

> In just over a year, one out of every eight households in the Portland, Maine, region has signed up for Internet phone service supplied by Time Warner Inc.'s cable-television unit. For many, the phone jack in the wall that connects to the phone company's network is now just a useless hole. Time Warner is rolling out the same service to millions of consumers nationwide.
>
> It's one more sign of a telecommunications upheaval that's unfolding at warp speed. And it isn't good news for Bell phone companies such as Verizon Communications Inc., which through its predecessors has controlled local phone service in the Northeast since the start of the 20th century. Already, Verizon's traditional phone lines are down by nine million, or 16%, since the end of 2000, according to research firm Precursor Group.
>
> Across the nation, the business models that have worked for decades for Verizon and other phone giants are showing signs of unraveling. The cable industry's push into the phone business and a torrent of innovations such as Internet calling and advanced wireless technology are threatening the foundations of the nation's $300 billion telecom industry.[2]

Similarly, a recent article in *The Economist* concludes that the rapidly increasing migration from traditional networks to VoIP "makes traditional telephone networks obsolete;" makes geography, distance, and time irrelevant; and de-links the previously intertwined components of traditional telephony—access to the network and service. In

[2] "Heavy Toll: Phone Industry Faces Upheaval as Ways of Calling Change Fast – Cable, Internet, Wireless Hurt the Value of Old Networks, Threaten a Business Model," *The Wall Street Journal*, August 25, 2004. Also see "Free for All: Telecom companies are invading one another's turf like never before;" "Here Comes Cable ... and it wants a big piece of the residential phone market;" "Outside the Lines: As their traditional local-phone business slips away, the Bells look for ways to adapt," from "Technology (A Special Report)," *The Wall Street Journal*, September 13, 2004; and "Vision, meet reality," a special report on mobile 3G telecoms, *The Economist*, September 4, 2004, pp. 63 – 65.

addition to the dramatic changes in wireline telephony, including VoIP, rapid advances in wireless technologies are increasingly driving voice traffic to wireless networks and displacing voice traffic from fixed wireline networks altogether. Analysts predict that new wireless technologies such as WiMax will become increasingly available to provide broadband access over the airwaves.[3]

Q. HAVE CABLE TV COMPANIES IN VERIZON NW'S SERVICE TERRITORY IN WASHINGTON ANNOUNCED PLANS TO PROVIDE BASIC TELEPHONE SERVICE USING VOIP TECHNOLOGY?

A. Yes. Comcast, a major provider of bundled cable TV, telephone, and long distance service in Verizon NW's service territory in Washington State, has announced plans to market VoIP service to all households that have access to its systems within the next 18 months. Analysts predict that Comcast's launch of VoIP service

> is likely to accelerate the rapid shrinking of the Bells' local phone business. Already, consumers have been cutting off their traditional phone lines, substituting them with cellphones and Internet phone service from startups.[4]

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S ASSERTION THAT VERIZON NW ITSELF MUST BELIEVE THAT IT FACES NO COMPETITION, OR ELSE IT WOULD NOT SEEK TO INCREASE ITS RATES?

[3] "The phone call is dead; long live the phone call: Who wins and who loses as phone calls move on to the internet?," *The Economist*, December 4, 2004, pp. 61 – 62.
[4] "Comcast Plans Major Rollout of Phone Service Over Cable," *The Wall Street Journal*, January 10, 2005.

A. No. Since Verizon NW is currently earning a return on its regulated services that is less than its cost of capital, Verizon NW has no choice but to seek a rate increase, even if it loses some customers to its competitors. If a rate increase is granted, at least the customers Verizon NW serves will be profitable.

Furthermore, Verizon NW's rates for regulated services have deviated significantly from the rates that would arise in an unregulated competitive market. In unregulated competitive markets, rates will tend to reflect the economic cost of providing service, where economic cost includes both incremental cost and a reasonable markup to cover overhead. However, Verizon NW's rates have been *above* economic cost in some regulated market segments, but significantly *less than* economic cost in other market segments. Naturally, competitors have focused primarily on the market segments where Verizon NW's regulated rates have been above economic cost, and regulators have responded by reducing rates in these markets. With the reduction in regulated rates in markets where rates were above economic cost, the previous subsidy for the services priced below economic cost has disappeared. Thus, it is certainly reasonable for Verizon NW to seek rate increases in those market segments where rates are below economic cost in order to offset its lost contribution from services in those segments where regulated rates have exceeded economic cost. Indeed, in markets where rates are below economic cost, and especially in markets where prices are below incremental cost, Verizon NW is unlikely to lose significant market share to competitors because its competitors' rates are also likely to be below these levels, and thus the competitors are likely to simply raise rates in line with Verizon NW.

Q. WHY HAVE RATES FOR INDIVIDUAL REGULATED TELECOMMUNICATIONS SERVICES FAILED TO REFLECT THE ECONOMIC COST OF PROVIDING SERVICE?

A. For many years, regulated telecommunications prices have been set to reflect *social* goals such as universal service and affordability rather than *economic* goals such as efficiency. Under the philosophy of social pricing, regulators set prices for some services above economic cost in order to provide subsidies to other services that were priced below economic cost. Such prices provided strong incentives for competitors to enter the segments of the market where services were priced above economic cost and a strong disincentive for competitors to enter markets where services were priced below economic cost. In response to the entry of competitors in markets where prices were set above economic cost, regulators have, in many cases, reduced prices to approximate economic cost. However, regulators have generally been reluctant to increase prices in markets where services were priced below economic cost. Thus, prices for regulated telecommunications services continue to deviate from the rates that would arise in an unregulated competitive market for telecommunications services.

Q. HAVE ECONOMISTS RECOGNIZED THAT PRICES FOR REGULATED TELECOMMUNICATIONS SERVICES FREQUENTLY DEVIATE FROM THE ECONOMIC COST OF PROVIDING SERVICE?

A. Yes. That telecommunications prices deviate from the economic cost of providing service was recognized at least as early as 1984. For example, see Alfred E. Kahn, "The Road to More Intelligent Telephone Pricing," *Yale Journal on Regulation*, (Volume 1,

Number 2, 1984, pp. 139 – 157); John T. Wenders, *The Economics of Telecommunications: Theory and Policy*, Ballinger Publishing, 1987; Bridger M. Mitchell and Ingo Vogelsang, *Telecommunications Pricing: Theory and Practice*, Cambridge University Press, 1991; and David L. Kaserman and John W. Mayo, "Cross Subsidies in Telecommunications: Roadblocks on the Road to More Intelligent Telephone Pricing," *Yale Journal on Regulation*, (Volume 11, Number 1, 1994, pp. 119 – 148).

Q. DO YOU HAVE ANY EVIDENCE THAT VERIZON NW'S RATES FOR REGULATED SERVICES HAVE DEVIATED SIGNIFICANTLY FROM THE RATES THAT WOULD ARISE IN UNREGULATED COMPETITIVE MARKETS?

A. Yes. If Verizon NW's rates for regulated services approximated the rates that would arise in competitive markets, the level of competition across Verizon NW's different market segments should be approximately the same. Instead, competitive entry has been strongest in the toll, carrier access, and business segments of Verizon NW's markets, especially in urban areas, and weakest in the basic residential service market, particularly in rural areas. This evidence suggests that toll, carrier access, and business services, especially in urban markets, have been priced above economic cost, while basic residential exchange service, especially in rural markets, has been priced below economic cost.

Q. DOES THE FACT THAT RESIDENTIAL SERVICES HAVE BEEN PRICED BELOW THE ECONOMIC COST OF PROVIDING BASIC RESIDENTIAL SERVICES MEAN THAT THERE IS NO COMPETITION FOR BASIC RESIDENTIAL EXCHANGE SERVICE?

A. No. Competition for basic residential services is arising even though basic residential services have been priced below their economic cost. In this case, competition is arising either from CLECs who are able to lease Verizon NW's network at large discounts or from providers who use new technologies such as wireless and VoIP that have lower economic costs than Verizon NW's regulated wireline network.

Q. HAS THE WUTC MADE AN EFFORT TO REDUCE THE DISCREPANCY BETWEEN VERIZON NW'S PRICES AND ITS ECONOMIC COST OF PROVIDING SERVICE IN THOSE MARKETS WHERE REGULATED PRICES HAD BEEN SET ABOVE THE ECONOMIC COST OF PROVIDING SERVICE?

A. Yes. The WUTC made an effort to reduce the discrepancy between Verizon NW's prices and economic cost when it reduced Verizon NW's access charges by $29.7 million in Docket No. UT-020406. Economists generally agree that carrier access was a market in which prices were set above economic cost in order to provide a subsidy for basic residential exchange service.

Q. DID THE ACCESS CHARGE REDUCTIONS THE WUTC ORDERED IN DOCKET NO. UT-020406 ELIMINATE THE DISCREPANCY BETWEEN VERIZON NW'S PRICES AND ITS ECONOMIC COSTS?

A. No. The Commission made no effort in Docket No. UT-020406 to increase Verizon NW's basic residential local exchange rates so that these rates could approximate the economic cost of providing subscriber access services. The Commission's failure to allow Verizon NW to offset the $29.7 million carrier access charge reduction with increases in revenues from basic services is one of the reasons Verizon NW has filed this case.

Q. IN SUMMARY, IS MR. ROTHSCHILD CORRECT WHEN HE STATES THAT VERIZON NW WOULD NOT SEEK TO INCREASE RATES IF THERE REALLY WERE COMPETITION FOR REGULATED SERVICES?

A. No. Mr. Rothschild's argument is undoubtedly false. Specifically, Mr. Rothschild fails to recognize that Verizon NW is currently earning a return on its regulated services that is significantly less than its cost of capital and that a rate increase may be the only choice Verizon NW has to attempt to increase its earned rate of return to the level of its cost of capital. In addition, Mr. Rothschild fails to understand that a significant percentage of Verizon NW's competition has arisen in markets where regulated prices have been set above competitive market levels in order to provide support for other services that are priced below competitive market levels. In the segments of Verizon NW's markets where prices are set below competitive market levels, and, especially where prices are set below incremental cost, Verizon NW can increase its revenues by raising prices without losing significant market share to its competitors.

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S ARGUMENT THAT VERIZON NW'S HIGH FIXED COSTS CREATE HIGH BARRIERS TO ENTRY IN THE MARKET FOR REGULATED TELECOMMUNICATIONS SERVICES?

A. No. High fixed costs only create barriers to entry in markets where: (1) prices reflect the economic cost of providing service; and (2) competitors cannot use new technologies to reduce the cost of entry. Neither of these conditions applies to Verizon NW's regulated services. As noted above, Verizon NW's prices do not reflect economic cost because regulators have traditionally set telecommunications prices to achieve social rather than economic goals. Furthermore, as described in my direct testimony and in the articles cited above, competitors are able to use new technologies such as wireless and VoIP to provide basic voice telecommunications services at a lower cost than Verizon NW, and without requiring the use of Verizon NW's network. Competitors such as cable companies have the additional advantage that they can finance their entry into voice services by raising prices on their unregulated cable and data services.

Q. ON PAGE 12 OF HIS TESTIMONY, MR. ROTHSCHILD ARGUES THAT VERIZON NW FACES LOW RISK BECAUSE REGULATED OPERATIONS CAN SIMPLY RAISE PRICES TO RECOVER COSTS, SO LONG AS REGULATORS APPROVE THE RATE INCREASE. DID THE WUTC ALLOW VERIZON NW TO RAISE PRICES TO RECOVER ITS COSTS IN EITHER THE ACCESS CHARGE PROCEEDING OR THE INTERIM RATE CASE FILING?

A. No. The WUTC failed to allow Verizon NW to raise its prices for basic services, even though it recognized that the inability to raise prices could mean that Verizon NW would be unable to recover its costs.

Q. DID THE STAFF RECOGNIZE THAT VERIZON NW WAS EARNING LESS THAN ITS REQUIRED RATE OF RETURN ON INTRASTATE REGULATED SERVICES IN VERIZON NW'S INTERIM RATE PROCEEDING?

A. Yes. Staff Witness Strain acknowledged that Verizon NW was earning a return of only 2.09% on its intrastate regulated services.

Q. IS THE WUTC STAFF NOW RECOMMENDING THAT VERIZON NW BE ALLOWED TO RAISE PRICES TO RECOVER ITS COSTS?

A. No. Even though the Staff recognized in the interim filing that Verizon NW was earning significantly less than its allowed rate of return, the Staff is now recommending that Verizon NW's revenues from intrastate regulated services be reduced by approximately $26 million.

Q. WHAT IMPACT WOULD THE STAFF'S RECOMMENDED $26 MILLION DECREASE IN REVENUES HAVE ON VERIZON NW'S INTRASTATE CASH FLOWS?

A. As shown below in Table 2, the Staff's proposal would reduce Verizon NW's intrastate cash flows from $84.390 million to $67.771 million. In contrast, Verizon NW's intrastate capital expenditures are $85.498 million. Thus, the Staff's recommendation

would cause Verizon NW's cash shortfall from intrastate operations to be approximately $18 million.

Table 2
Impact of Staff's Revenue Reduction on Verizon NW's Cash Shortfall
(Dollars in Thousands)

	Actual Results	*Staff Recommended Revenue Decrease*	*Proforma Results*
Net Income From Continuing Operations	($49,104)	($16,619)	($65,723)
Depreciation and Amortization	$125,272	$0	$125,272
Change in Deferred Taxes	$8,222	$0	$8,222
Operating Cash Flows	$84,390	($16,619)	$67,771
Washington Intrastate Capital Expenditures	$85,498		
Cash Shortfall	($1,108)		($17,727)

Q. HAS THE STAFF ATTEMPTED TO AGGREGATE RETURNS ON SERVICES NOT REGULATED BY THE WUTC WITH RETURNS ON SERVICES THAT ARE REGULATED BY THE WUTC?[5]

A. Yes. In the Interim Rate Proceeding, Staff refused to recommend an interim rate increase for Verizon NW because, in its opinion, Verizon NW was earning an adequate rate of return on its total services, even though its rate of return on regulated wireline telecommunications services in Washington State was admittedly below Verizon NW's cost of equity. In the current phase of this proceeding, Staff is implicitly attempting to aggregate returns on Verizon NW's regulated and unregulated businesses by assigning a significant portion of Verizon NW's expenses and rate base to its unregulated services.

[5] I will refer to services that are not regulated by the WUTC as "unregulated services," and to those services that are regulated by the WUTC as "regulated services."

Q. DOES THE STAFF'S ATTEMPT TO AGGREGATE RETURNS ON VERIZON NW'S REGULATED AND UNREGULATED BUSINESSES INCREASE THE RISK OF VERIZON NW'S INVESTMENT IN REGULATED SERVICES?

A. Yes. The Staff's attempt to aggregate returns on Verizon NW's regulated and unregulated businesses significantly increases the risk that Verizon NW will be unable to earn its cost of capital on its investment in regulated services. If Verizon NW cannot earn its cost of capital on regulated services, it will have no incentive to continue to invest in the facilities required to provide these services.

Q. MR. ROTHSCHILD ALSO ARGUES THAT YOUR COMMENTS REGARDING REGULATORY RISK IN YOUR DIRECT TESTIMONY IGNORE BOTH THE WIDESPREAD IMPLEMENTATION OF RATE CAP PLANS AND THE FACT THAT VERIZON NW HAS NOT FILED A GENERAL RATE CASE SINCE 1982. DOES THE IMPLEMENTATION OF RATE CAP PLANS AROUND THE COUNTRY OR THE TIMING OF VERIZON NW'S LAST RATE CASE REDUCE VERIZON NW'S REGULATORY RISK OF PROVIDING REGULATED WIRELINE TELECOMMUNICATIONS SERVICES IN WASHINGTON STATE?

A. No. It is difficult to understand how Mr. Rothschild could conclude that these factors would reduce Verizon NW's regulatory risk. First, since Verizon NW is regulated by rate of return regulation, the existence of rate cap plans in other states is irrelevant to Verizon NW's risk of providing regulated wireline telecommunications services in Washington State. Furthermore, Verizon NW, as a regulated company under rate of

return regulation, has the right to seek rates that provide it an opportunity to earn a fair rate of return on its investment. I am unaware of any restriction that would prevent Verizon NW from asking for a rate increase to recover its costs if it has not filed a general rate case for many years. Rather than penalizing Verizon NW for maintaining its basic service rates since 1982, the WUTC should recognize that Verizon NW has made every effort to provide high quality basic service at affordable rates since 1982, but that basic service rates currently do not allow Verizon NW an opportunity to earn a rate of return in line with its cost of capital.

B. Capital Structure

Q. HOW DOES MR. ROTHSCHILD ATTEMPT TO CALCULATE THE COST OF CAPITAL FOR USE IN SETTING VERIZON NW'S RATES IN THIS PROCEEDING?

A. Mr. Rothschild attempts to calculate the cost of capital for use in setting rates by computing a weighted average of what he postulates is Verizon NW's cost of debt and cost of equity.

Q. WHAT CAPITAL STRUCTURE WEIGHTS DOES MR. ROTHSCHILD USE IN HIS ESTIMATE OF VERIZON NW'S COST OF CAPITAL?

A. Mr. Rothschild uses capital structure weights that are approximately equal to the book value percentages of debt and equity found on the consolidated balance sheet of Verizon Communications Inc. at June 30, 2004. Using a capital structure mix containing 45% common equity, 49% long-term debt, and 6% short-term debt, Mr. Rothschild calculates

a weighted average cost of capital of 7.71% for use in setting Verizon NW's rates in this proceeding.

Q. DOES FINANCIAL AND ECONOMIC THEORY PROVIDE ANY GUIDANCE ON THE CORRECT CAPITAL STRUCTURE WEIGHTS TO USE IN CALCULATING THE WEIGHTED AVERAGE COST OF CAPITAL?

A. Yes. As I noted in my direct testimony, financial and economic theory requires the use of market value weights (market values of debt and equity) to calculate the weighted average cost of capital because market values are the best measures of the amounts of debt and equity investors have invested in the company at any point in time. For example, investors measure the amounts they have invested in their mutual fund accounts at the end of any quarter by the market value of the securities in the account at that time. Furthermore, investors measure the risk and return on their investment portfolios using market value weights because they purchase a company's stocks and bonds at market price, not at book value. Thus, the return, and the risk or uncertainty of the return, can only be measured in terms of market values.

Q. WHY IS THE FACT THAT INVESTORS MEASURE THE RISK AND RETURN ON THEIR INVESTMENT PORTFOLIOS USING MARKET VALUE WEIGHTS RELEVANT TO THE ISSUE OF WHAT WEIGHTS SHOULD BE USED TO MEASURE A COMPANY'S WEIGHTED AVERAGE COST OF CAPITAL?

A. The fact that investors measure the risk and return on their investment portfolios using market value weights is relevant to the issue of what weights should be used to measure

the weighted average cost of capital because the weighted average cost of capital is defined as the return investors expect to receive on a portfolio of debt and equity investments of comparable risk. If the company does not measure its weighted average cost of capital in the same way that investors measure expected returns on their portfolio of debt and equity investments, the company will have little likelihood of earning a return on its investments that is commensurate with returns investors expect to earn on other investments of comparable risk. Furthermore, since investors measure expected return and risk using market value weights, the WUTC can only send correct economic signals for investment decisions if it measures the company's weighted average cost of capital using market value weights.

Q. WHAT DO ECONOMISTS HAVE TO SAY ABOUT THE USE OF BOOK VALUE CAPITAL STRUCTURES TO MEASURE THE WEIGHTED AVERAGE COST OF CAPITAL?

A. Economists unanimously reject the use of book value capital structures to estimate the weighted average cost of capital because book values depend on arbitrary accounting conventions, are based on historical costs, and are inherently backward looking. I have taught corporate finance for more than 30 years, and I do not recall ever encountering a financial or economic text that recommended anything other than the use of market value weights to calculate a company's weighted average cost of capital. For example, the following well-known texts recommend the use of market value weights to estimate the weighted average cost of capital: Copeland/Weston, *Financial Theory and Corporate Policy*, Chapter 13, Third Edition, 1988, Addison-Wesley, Reading, MA.;

Brealey/Myers, *Principles of Corporate Finance*, Chapter 9, page 214, Fifth Edition, 1996, McGraw-Hill; and Robert C. Higgins, *Analysis for Financial Management*, Chapter 8, Fourth Edition, 1995, Irwin.

Q. SINCE ECONOMISTS UNANIMOUSLY RECOMMEND USING MARKET VALUE WEIGHTS TO MEASURE THE WEIGHTED AVERAGE COST OF CAPITAL, WHY DOES MR. ROTHSCHILD RECOMMEND USING VERIZON COMMUNICATIONS INC.'S BOOK VALUE CAPITAL STRUCTURE WEIGHTS TO MEASURE VERIZON NW'S WEIGHTED AVERAGE COST OF CAPITAL?

A. Mr. Rothschild presents five arguments that allegedly support his use of Verizon Communications Inc.'s book value capital structure weights to measure Verizon NW's weighted average cost of capital in this proceeding. First, he argues that Verizon Communications Inc.'s consolidated book value capital structure weights are similar to the "actual" capital structures used by electric, natural gas, telecommunications, and industrial companies (Rothschild at p. 11 and p. 14). Second, he argues that book value capital structures are used by bond rating agencies to assess a company's bond rating (Rothschild at p. 59 -60). Third he argues that book value capital structures are consistent with the use of the Discounted Cash Flow (DCF) model[6] to estimate the cost of equity (Rothschild at pp. 14 and 62 – 66). Fourth, he argues that book value capital structures "provide a forward-looking view of what management sees as the proper capital structure" (Rothschild at p. 61). Fifth, Mr. Rothschild argues that use of a market

[6] The DCF model is defined in Section II, C, 2, below.

value capital structure to estimate Verizon NW's weighted average cost of capital violates the principles of the *Hope* Natural Gas case (Rothschild at p. 18).

Q. WHEN HE COMPARES VERIZON COMMUNICATIONS INC.'S BOOK VALUE CAPITAL STRUCTURE TO THE "ACTUAL" CAPITAL STRUCTURES OF HIS ELECTRIC, NATURAL GAS, TELECOMMUNICATIONS, AND INDUSTRIAL COMPANIES, HOW DOES MR. ROTHSCHILD MEASURE THE "ACTUAL" CAPITAL STRUCTURES USED BY THESE COMPANIES?

A. Mr. Rothschild measures the "actual" capital structures of these companies from Value Line data on the amounts of debt and equity reported on the books of these companies.

Q. IS IT FAIR TO SAY, THEN, THAT MR. ROTHSCHILD IS SIMPLY COMPARING THE BOOK VALUE CAPITAL STRUCTURE OF VERIZON COMMUNICATIONS INC. TO THE AVERAGE BOOK VALUE CAPITAL STRUCTURE OF HIS SAMPLE ELECTRIC, NATURAL GAS, TELECOMMUNICATIONS, AND INDUSTRIAL COMPANIES?

A. Yes.

Q. IS IT ALSO FAIR TO SAY THAT WHEN MR. ROTHSCHILD USES THE WORD "ACTUAL" IN FRONT OF THE PHRASE "CAPITAL STRUCTURE," HE IS USING THE WORD "ACTUAL" AS A SYNONYM FOR THE PHRASE, "BOOK VALUE"?

A. Yes.

Q. WHAT IS THE BASIC ASSUMPTION UNDERLYING MR. ROTHSCHILD'S COMPARISON OF HIS RECOMMENDED CAPITAL STRUCTURE TO THE AVERAGE BOOK VALUE CAPITAL STRUCTURE OF HIS ELECTRIC, NATURAL GAS, TELECOMMUNICATIONS, AND INDUSTRIAL COMPANIES?

A. Mr. Rothschild's comparison is based on his fundamental assumption that the average book value capital structure of his sample companies reflects the "actual" capital structure of these companies in some meaningful sense.

Q. DO THE BOOK VALUE CAPITAL STRUCTURE WEIGHTS OF MR. ROTHSCHILD'S SAMPLE GROUPS OF ELECTRIC, NATURAL GAS, TELECOMMUNICATIONS, AND INDUSTRIAL COMPANIES INDICATE THEIR "ACTUAL" FINANCING OR CAPITAL STRUCTURE WEIGHTS IN ANY MEANINGFUL SENSE?

A. No. While the book value of a company's debt often approximates the company's actual debt financing, the book value of a company's equity rarely approximates the actual amount of a company's equity financing. The book value of the equity in the capital structures of Mr. Rothschild's sample groups of electric, natural gas, telecommunications, and industrial companies reflects the historical cost of these companies' assets and their accumulated retained earnings since the companies were formed. Since a company's accumulated retained earnings depend on the company's accounting conventions used to measure earnings rather than on any specific cash flows into and out of the company, they do not reflect the company's actual financing in any meaningful sense. For

example, a company's decision to increase its rate of depreciation, or to write down the value of its assets, reduces the percentage of equity in a company's balance sheet, but has no impact whatsoever on the company's cash flows. Since a company's pattern of financing is fundamentally related to the pattern of cash flows into and out of the company, not to the pattern of accounting earnings, the amounts of equity shown on the company's books do not represent equity financing in any meaningful sense.

Q. YOU MENTION THAT A COMPANY'S BOOK VALUE CAPITAL STRUCTURE IS DISTORTED BY ACCOUNTING WRITE-OFFS THAT HAVE NO IMPACT ON A COMPANY'S CASH FLOWS. HAS VERIZON NW'S PARENT TAKEN ANY ACCOUNTING WRITE-OFFS OVER THE LAST TEN YEARS THAT HAVE REDUCED THE PERCENTAGE OF EQUITY IN ITS CAPITAL STRUCTURE BUT THAT HAVE NOT REDUCED THE CASH FLOWS AVAILABLE FOR INVESTMENT?

A. Yes. Verizon NW's parent has taken approximately $20 billion in accounting write-offs over the last decade. A large part of the write-offs occurred when Verizon Communications determined that, due to the existing competitive telecommunications environment, it could no longer use regulatory accounting principles to record assets and equity on its balance sheet. The extraordinary charges due to the discontinuance of regulatory accounting, the adoption of new accounting standards relating to the accounting for post-employment benefits, and certain other one-time charges greatly decreased the percentage of equity and increased the percentage of debt in Verizon NW's

capital structure. Write-offs taken by Verizon NW and its predecessor companies have reduced the amount of equity on the companies' books by more than 50%.

Q. WHAT AVERAGE BOOK VALUE CAPITAL STRUCTURES DOES MR. ROTHSCHILD REPORT FOR HIS SAMPLE ELECTRIC, NATURAL GAS, TELECOMMUNICATIONS, AND INDUSTRIAL COMPANIES?

A. For his sample group of electric companies, Mr. Rothschild reports an average capital structure containing 41.75% common equity, 1.01% preferred equity, 50.71% long-term debt, and 6.53% short-term debt (Rothschild at p. 11). For his sample group of gas distribution companies, Mr. Rothschild reports an average capital structure containing 45.65% common equity, 0.21% preferred equity, 45.88% long-term debt, and 8.25% short-term debt (Rothschild at p. 11). For his telecommunications companies, Mr. Rothschild reports an average capital structure containing 56.8% common equity, 37.2% long-term debt, and 6.0% short-term debt (Rothschild at p. 11). For industrial companies, Mr. Rothschild simply reports an average common equity ratio of 40.73% (Rothschild at p. 14).

Q. ARE THE AVERAGE BOOK VALUE CAPITAL STRUCTURES OF MR. ROTHSCHILD'S ELECTRIC AND NATURAL GAS DISTRIBUTION COMPANIES RELEVANT TO THE ISSUE OF WHAT CAPITAL STRUCTURE SHOULD BE USED TO SET VERIZON NW'S RATES IN THIS PROCEEDING?

A. No. There are at least two reasons why the average book value capital structures for electric and natural gas distribution companies are irrelevant to the issue of what capital

structure should be used to set Verizon NW's rates in this proceeding. First, as noted above, financial theory requires the use of market value capital structure weights to estimate a company's weighted average cost of capital. Thus, book value capital structure weights are by their very nature irrelevant to an estimate of Verizon NW's cost of capital. Second, Mr. Rothschild's electric and natural gas distribution companies are significantly less risky than Verizon NW's wireline telecommunications business in Washington State. As a more risky company, Verizon NW should have significantly more equity in its capital structure than either the average electric or the average natural gas distribution company since companies generally need to offset higher business risk with lower financial risk.

Q. DOES THE AVERAGE BOOK VALUE CAPITAL STRUCTURE MR. ROTHSCHILD REPORTS FOR THE INDUSTRIAL COMPANIES PROVIDE AN ACCURATE PICTURE OF A HEALTHY INDUSTRIAL COMPANY'S BOOK VALUE CAPITAL STRUCTURE?

A. No. As shown in Mr. Rothschild's Exhibit ___(JAR-3), Schedule 12, 62% of the companies in Mr. Rothschild's industrial company average have below investment grade bond ratings. Companies with below investment grade bond ratings are certainly not considered to be financially healthy, and if Verizon NW were to have a below investment grade bond rating, it likely would not be able to raise the capital required to provide high-quality wireline telecommunications services in Washington State. Furthermore, Mr. Rothschild's data give equal weight to small companies and large companies. For this

proceeding, more relevant information is the typical capital structure of financially healthy, large industrial companies.

Q. HAVE YOU CALCULATED THE AVERAGE BOOK VALUE CAPITAL STRUCTURE FOR THE S&P INDUSTRIALS?

A. Yes. As shown in Exhibit No. ____ (JHV-8), the S&P Industrials have an average book value capital structure containing 66% equity when short-term debt is excluded, and 64% equity when short-term debt in included. Thus, the S&P Industrials have significantly more equity in their book value capital structures than the 45% equity Mr. Rothschild is recommending for Verizon NW in this proceeding.

Q. MR. ROTHSCHILD REPORTS AN AVERAGE BOOK VALUE CAPITAL STRUCTURE FOR HIS TELECOMMUNICATIONS HOLDING COMPANY GROUP THAT CONTAINS APPROXIMATELY 57% EQUITY. IF THE AVERAGE BOOK VALUE CAPITAL STRUCTURE FOR HIS TELECOMMUNICATIONS HOLDING COMPANY GROUP CONTAINS 57% EQUITY, WHY DID MR. ROTHSCHILD RECOMMEND A BOOK VALUE CAPITAL STRUCTURE THAT CONTAINS ONLY 45% EQUITY?

A. Mr. Rothschild recommends a book value capital structure for Verizon NW containing only 45% equity because he relies entirely on capital structure data for Verizon Communications, Inc.; and Verizon Communications, Inc. has significantly more debt in its book value capital structure than the other two RBHCs in Mr. Rothschild's telecommunications holding company group.

Q. DID MR. ROTHSCHILD RELY ON DATA FOR ALL THREE RBHCS WHEN HE ESTIMATED VERIZON NW'S COST OF EQUITY?

A. Yes, he did.

Q. IS IT CONSISTENT FOR MR. ROTHSCHILD TO RELY ON DATA FOR ALL THREE RBHCS WHEN HE ESTIMATES VERIZON NW'S COST OF EQUITY, AND THEN RELY SOLELY ON BOOK VALUE CAPITAL STRUCTURE DATA FOR ONE OF THE RBHCS, VERIZON COMMUNICATIONS, INC., TO ESTIMATE THE CAPITAL STRUCTURE COMPONENT OF THE WEIGHTED AVERAGE COST OF CAPITAL?

A. No. To be consistent, if Mr. Rothschild wanted to use book value capital structure weights (which, of course, is incorrect), he at least should have used the average book value capital structure weight for the RBHCs containing 57% equity.

Q. DO BOND RATING AGENCIES USE BOOK VALUE CAPITAL STRUCTURES TO ASSESS A COMPANY'S BOND RATING?

A. I am not clear what Mr. Rothschild means when he states that the accounting book value capital structure is "used" by rating agencies such as Standard and Poor's. Rating agencies look at many variables, including a company's ability to service its debt, the company's cash flow from operations, the market values of the company's assets and equity, and the quality of the company's management. There is no formula for book value capital structures that assure any given bond rating. If there were, Verizon Communications Inc.'s bond rating would probably be lower than it is because, according

to the data in Mr. Rothschild's Exhibit___(JAR-3), Schedule 12, Verizon Communications Inc. has a capital structure rating consistent with a below-investment grade rating of BB. S&P maintained Verizon Communications' bond rating because it focused on other variables such as the market value of Verizon Communications' equity and Verizon Communications' cash flows from operations.

Q. ASSUMING FOR THE SAKE OF ARGUMENT THAT BOND RATING AGENCIES DID USE BOOK VALUE CAPITAL STRUCTURES IN CONJUNCTION WITH OTHER INFORMATION TO ASSESS A COMPANY'S BOND RATING, WOULD THIS IMPLY THAT BOOK VALUE CAPITAL STRUCTURES SHOULD BE USED TO ESTIMATE A COMPANY'S WEIGHTED AVERAGE COST OF CAPITAL?

A. No. A company's weighted average cost of capital is defined as the return investors expect to receive on a portfolio of debt and equity investments of similar risk. Since investors measure both the risk and return on their portfolios of stock and bond investments using the market values of these investments, not the book values, market values must be used to measure the company's weighted average cost of capital. If market values were not used to measure the company's weighted average cost of capital, the company's weighted average cost of capital would not send correct economic signals for the company's investment decisions. Furthermore, Mr. Rothschild is attempting to estimate Verizon NW's weighted average cost of capital, not its bond rating. For this purpose, he should have used the same capital structure investors use in measuring the risk and return on their portfolios of stock and bond investments, namely, market values.

Q. ARE BOOK VALUE CAPITAL STRUCTURES CONSISTENT WITH THE USE OF THE DCF MODEL TO ESTIMATE THE COST OF EQUITY?

A. No. The DCF model measures the return investors expect to receive on the market value of their equity investment in the company. If book value capital structures are used to measure the weighted average cost of capital, investors will not be able to earn a return on the market value of their investment measured by the DCF model. Thus, market value capital structures are the only capital structures that are consistent with use of the DCF model to estimate the cost of equity, and book value capital structures are undoubtedly *inconsistent* with use of the DCF model to estimate the cost of equity.

Q. ON PAGE 58 OF HIS TESTIMONY, MR. ROTHSCHILD ARGUES THAT MARKET VALUE CAPITAL STRUCTURE WEIGHTS ARE INCONSISTENT WITH USE OF THE DCF MODEL TO MEASURE THE COST OF EQUITY BECAUSE THE DCF MODEL "ASSUMES THAT A COMPANY COULD REINVEST NEW FUNDS AT THE SAME BOOK RETURNS THAT GIVE RISE TO MARKET PRICES." IS MR. ROTHSCHILD'S ARGUMENT CORRECT?

A. No. The DCF model assumes that a company's current stock price is equal to the present value of expected future cash flows received by investors and that investors can reinvest these cash flows at the same rate of return over time. The DCF model does not make any assumption about *book* returns. The model's assumptions all relate to the returns investors receive on the *market values* of their investment.

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S ARGUMENT THAT BOOK VALUE CAPITAL STRUCTURES "PROVIDE A FORWARD-LOOKING VIEW OF WHAT MANAGEMENT SEES AS THE PROPER CAPITAL STRUCTURE?"

A. No. As noted above, book value capital structures reflect neither the company's historical pattern of financing nor the company's expected pattern of financing. Book value capital structures fail to reflect the company's historical pattern of financing because the book value of equity reflects primarily retained earnings, and earnings do not measure the cash flows into and out of the company. Financing can only come from a company's pattern of cash flows, not the accounting policies employed to measure the company's earnings. Book value capital structures also fail to reflect a company's expected future financing patterns because book values are inherently based on historical costs, whereas future financing must be obtained at market values.

Q. ON PAGE 18 OF HIS TESTIMONY, MR. ROTHSCHILD ASSERTS THAT YOUR USE OF A MARKET VALUE CAPITAL STRUCTURE VIOLATES THE PRINCIPLE IN THE U. S. SUPREME COURT'S *HOPE* NATURAL GAS CASE THAT FAIR VALUE IS THE END PRODUCT OF THE PROCESS OF RATE MAKING, NOT THE STARTING POINT. IS MR. ROTHSCHILD'S ASSERTION CORRECT?

A. No. In my testimony, I am not trying to determine the fair value of Verizon NW's property, plant, and equipment. Rather, I am using stock prices determined in the marketplace to calculate the percentages of debt and equity in those companies' capital structures. My use of stock prices to calculate the percentages of debt and equity in the

capital structure is no more inconsistent with the *Hope* case than Mr. Rothschild's use of stock prices in his DCF model.

Q. YOU MENTION THAT FINANCIAL THEORY REQUIRES THE USE OF MARKET VALUE CAPITAL STRUCTURE WEIGHTS TO ESTIMATE THE WEIGHTED AVERAGE COST OF CAPITAL. WHAT ARE THE AVERAGE MARKET VALUE CAPITAL STRUCTURE WEIGHTS OF THE RBHCS AND THE S&P INDUSTRIALS?

A. As reported in my updated direct testimony, over the last five years the RBHCs had an average capital structure containing 82% equity and the S&P Industrials had an average capital structure containing 84% equity. Using the most recent data from Value Line, the RBHCs have an average market value capital structure containing approximately 80% equity, and the average capital structure for all the S&P Industrial companies contains approximately 88% equity (see Exhibit No. ____ (JHV-8)).

C. Cost of Equity

Q. HOW DOES MR. ROTHSCHILD ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Rothschild estimates Verizon NW's cost of equity by applying the Discounted Cash Flow (DCF) method to four groups of proxy companies and by applying what he calls the risk premium/CAPM method[7] to companies with a beta[8] equal to 1.0.

1. Proxy Companies

Q. WHAT PROXY GROUPS DOES MR. ROTHSCHILD USE TO IMPLEMENT HIS DCF APPROACH?

A. Mr. Rothschild applies his DCF method to proxy groups of 14 electric utilities, 13 local gas distribution utilities, three telecommunications holding companies, and the S&P 500.

Q. IS VERIZON NW COMPARABLE IN RISK TO MR. ROTHSCHILD'S GROUPS OF ELECTRIC AND NATURAL GAS UTILITIES?

A. No. Verizon NW faces significantly greater competitive, technology, and regulatory risk than Mr. Rothschild's proxy groups of electric and natural gas utilities. While Mr. Rothschild's proxy electric and natural gas utilities operate in franchised retail markets that are relatively closed to competition, Verizon NW operates in telecommunications markets that are open to the full effects of competition. Furthermore, unlike the electric and natural gas businesses of Mr. Rothschild's proxy companies, Verizon NW's business is endangered by major technological changes that threaten the very foundation of its business model. Specifically, within the next several years, a high percentage of Verizon

[7] The DCF method is described in Section II, C., 2 below. The Capital Asset Pricing Model (CAPM) is defined in Section II, C., 3 below.

[8] Beta measures a company's relative risk compared to a portfolio of all securities. Thus, a beta of 1.0 indicates that a company has the same risk as the portfolio of all securities, while a beta less than 1.0 indicates that a company is less risky than the portfolio of all securities, and a beta greater 1.0 indicates that the company has more risk than the portfolio of all securities. In practice, the portfolio of all securities is generally measured by the S&P 500.

NW's customers will likely obtain telecommunications services from competitors using wireless, cable TV, and VoIP technologies that bypass Verizon NW's wireline network. In addition, unlike Mr. Rothschild's electric and gas utilities, Verizon NW is required to lease its network to competitors at a discount so that these competitors can directly compete with Verizon NW in the retail market without making any investment in network facilities. Given the wide disparity in risks between Verizon NW and Mr. Rothschild's proxy groups of electric and natural gas utilities, the Commission should dismiss Mr. Rothschild's DCF results for these groups entirely.

Q. WHAT TELECOMMUNICATIONS HOLDING COMPANIES DID MR. ROTHSCHILD USE TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Rothschild used a group consisting of the three RBHCs that still pay dividends, namely BellSouth, SBC, and Verizon NW.

Q. ARE THE RBHCS COMPARABLE IN RISK TO VERIZON NW'S WIRELINE TELECOMMUNICATIONS BUSINESS IN WASHINGTON STATE?

A. No. The RBHCs' consolidated businesses are less risky than Verizon NW's regulated wireline telecommunications business in Washington State because the RBHCs are able to diversify away many of the competitive, technological, geographic, and regulatory risks facing Verizon NW's regulated wireline telecommunications business in Washington State by investing in more than one telecommunications technology and geographic area.

Q. ARE THERE OTHER REASONS WHY THE RBHCS ARE NOT A SUITABLE PROXY FOR THE PURPOSE OF ESTIMATING VERIZON NW'S COST OF EQUITY?

A. Yes. There are at least two additional reasons why the RBHCs are unsuitable for this purpose. First, Mr. Rothschild's DCF model is based on the assumption that companies operate in a stable economic environment where investors can reliably forecast future earnings and dividend growth. The RBHCs do not satisfy this basic requirement of the DCF model. Specifically, they operate in unstable markets, where technology is changing so rapidly that the RBHCs' basic business model of offering wireline telecommunications services is endangered. Second, a sample of three companies is simply too small a sample for the purpose of estimating the cost of equity. Financial experts recognize that one can significantly reduce the estimation errors in the cost of equity by using a large group of companies of comparable risk.

Q. WHAT COMPANIES DO YOU RECOMMEND BE USED FOR THE PURPOSE OF ESTIMATING VERIZON NW'S COST OF EQUITY?

A. I recommend two groups of publicly-traded industrial companies as risk proxies for Verizon NW's wireline telecommunications business in Washington State, including the S&P Industrials, and a conservative group of industrial companies with less than average business risk.

Q. WHY DO YOU RECOMMEND GROUPS OF INDUSTRIAL COMPANIES AS RISK PROXIES FOR VERIZON NW'S WIRELINE TELECOMMUNICATIONS BUSINESS?

A. I recommend groups of publicly-traded industrial companies as risk proxies for Verizon NW's wireline telecommunications business because they satisfy the basic criteria for proxy companies; namely, they are publicly traded; have sufficient data to apply cost of equity methodologies; taken as a whole, have similar risk to Verizon NW's local exchange operations; are sufficiently large in number to reduce the random noise in the cost of equity estimation process to an acceptable level; and, on average, operate in reasonably stable economic environments.

Q. HOW DO THE S&P INDUSTRIALS DIFFER FROM THE S&P 500 REFERRED TO BY MR. ROTHSCHILD?

A. The S&P Industrials differ from the S&P 500 primarily in that the S&P Industrials exclude financial institutions and utilities. The S&P Industrials are a more appropriate proxy group than the S&P 500 because financial institutions invest primarily in highly-liquid financial assets rather than long-lived physical assets and employ highly-leveraged capital structures; and utilities are undoubtedly less risky than telecommunications companies.

Q. DID YOU PRESENT EVIDENCE IN YOUR DIRECT AND UPDATED DIRECT TESTIMONY THAT YOUR TWO RECOMMENDED GROUPS OF

INDUSTRIAL COMPANIES ARE SLIGHTLY LESS RISKY THAN THE RBHCS?

A. Yes. I presented evidence on pp. 25 – 26 of my updated direct testimony that my two recommended industrial proxy groups are a safer group than either the RBHCs or the average company in the Value Line universe of companies. These data are summarized below in Tables 3 and 4:

Table 3
Average Risk Measures for Vander Weide S&P Industrial Group, the RBHCs, and the Value Line Universe of Companies

Company Group	Safety Rank	Beta	Earnings Predictability	Financial Strength	Financial Strength (numerical)
Vander Weide S&P Industrial Group	1.8	0.98	80	A+	2
RBHCs	2.0	1.01	85	A+	2
Value Line universe	3.0	1.06	53	B+	5

Table 4
Average Risk Measures for Vander Weide Proxy Group, the RBHCs, and the Value Line Universe of Companies

Company Group	Safety Rank	Beta	Earnings Predictability	Financial Strength	Financial Strength (numerical)
Vander Weide Proxy Group	1.8	0.93	93	A+	2
RBHCs	2.0	1.01	85	A+	2
Value Line universe	3.0	1.06	53	B+	5

2. <u>The DCF Model</u>

Q. WHAT IS THE DCF APPROACH TO ESTIMATING THE COST OF EQUITY?

A. The DCF approach is based on the assumption that investors value their investment in a company's stock on the basis of the future cash flows, or dividends, they expect to

receive from owning the stock. Assuming that dividends are received only at the end of each year and grow at a constant annual rate, *g*, the DCF approach implies that the cost of equity can be estimated from the equation $k = D_1/P_s + g$, where *k* is the cost of equity, D_1 is the expected next period annual dividend, P_s is the current price of the stock, and *g* is the constant annual growth rate in earnings, dividends, and book value per share. The term D_1/P_s is called the dividend yield component of the annual DCF model, and the term *g* is called the growth component of the annual DCF model. When dividends are paid quarterly, the annual DCF model must be modified to correctly account for the quarterly payment of dividends.

Q. WHAT DCF MODEL DOES MR. ROTHSCHILD USE TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Rothschild uses an annual DCF model to estimate Verizon NW's cost of equity. See Direct Testimony of Mr. Rothschild, Appendix B.

Q. WHAT IS THE BASIC ASSUMPTION OF THE ANNUAL DCF MODEL?

A. The annual DCF model is based on the assumption that companies only pay dividends at the end of each year, rather than at the end of each quarter.

Q. DOES THE ANNUAL DCF MODEL PROVIDE ACCURATE ESTIMATES OF AN INVESTOR'S REQUIRED OR EXPECTED RATE OF RETURN FROM INVESTING IN A FIRM'S STOCK?

A. No. The annual DCF model of stock valuation produces correct estimates of an investor's required or expected rate of return only if the firm pays dividends just once a year. Since most companies pay dividends quarterly, the annual DCF model produces downwardly-biased estimates of an investor's required or expected rate of return. Investors can expect to earn a higher annual effective return on an investment in a firm that pays quarterly dividends than in one that pays the same amount of dollar dividends once at the end of each year.

Q. NOTWITHSTANDING YOUR DISAGREEMENT WITH MR. ROTHSCHILD'S DECISION TO USE AN ANNUAL DCF MODEL, DID MR. ROTHSCHILD IMPLEMENT HIS ANNUAL MODEL CORRECTLY?

A. No. The basic assumption of the annual DCF model is that dividends are received annually, and the first dividend is assumed to be received one year from now. Thus, the first dividend must be obtained by taking the current dividend and multiplying by one plus the growth rate, "g." Instead, Mr. Rothschild obtained the first dividend by multiplying the current dividend by only one plus one-half the growth rate.

Q. MR. ROTHSCHILD'S DCF FORMULA INCREASES THE COMPANY'S CURRENT DIVIDEND TO ACCOUNT FOR ½ YEAR OF GROWTH. DOES INCREASING THE ANNUAL DIVIDEND FOR ½ YEAR OF GROWTH PROPERLY ACCOUNT FOR THE QUARTERLY PAYMENT OF DIVIDENDS?

A. No. Increasing the dividend for ½ year of growth only allows Mr. Rothschild to approximate the average annual dividend that will be paid over the next year. His

method of increasing the dividend in the context of an annual model does not account for the timing of the quarterly dividend payments or the time value of money associated with the quarterly payment of dividends. Thus, the present value of the future quarterly dividends does not equal the company's current stock price, as the DCF method requires.

Q. WHAT IS THE ROLE OF GROWTH EXPECTATIONS IN THE DCF MODEL?

A. According to the simple version of the DCF model, the cost of equity is the sum of two components: a company's dividend yield and investors' expectations regarding future growth in dividends, earnings, and cash flow per share. Thus, the growth expectation plays an important role in the DCF model.

Q. WHAT METHOD DID MR. ROTHSCHILD USE TO ESTIMATE INVESTORS' FUTURE GROWTH EXPECTATIONS FOR THE RBHCS?

A. Mr. Rothschild relied on the "br + sv" method of estimating future growth in his DCF model.

Q. WHAT IS THE "BR + SV" METHOD OF ESTIMATING FUTURE GROWTH IN THE DCF MODEL?

A. The "br + sv" method estimates future growth by examining growth in two components, internal growth, and external growth. According to the "br + sv" method, internal growth arises through retention of earnings and the rate of return that is earned on the retained earnings. Thus, internal growth is measured by the product of the company's retention rate, "b," and the company's expected rate of return on equity, "r." External growth

arises when the company issues new stock at prices in excess of book value. Thus, external growth is the product of "v," and "s," where "v" is the fraction of new common stock sold that accrues to the current shareholder and "s" is the funds raised from the sale of stock as a fraction of existing equity.

Q. IS THE "BR + SV" METHOD OF ESTIMATING FUTURE GROWTH USED IN THE INVESTMENT COMMUNITY?

A. Yes. The "br + sv" method is sometimes used in the investment community in analyzing non-utility companies. For those companies, the "br + sv" method generally provides approximately the same growth estimate as the I/B/E/S estimate. However, it is less frequently applied to utilities because of the problems that arise when it is applied to rate-regulated companies.

Q. WHAT ARE THE PROBLEMS OF APPLYING THE "BR + SV" METHOD OF ESTIMATING GROWTH TO RATE-REGULATED PUBLIC UTILITIES?

A. The main problem is that the "br + sv" method is circular. As noted above, the expected rate of return on equity is one of the key inputs in calculating internal growth. Yet the growth rate that is being calculated using the "br + sv" method will be used to estimate the cost of equity for a rate-regulated company, which, in turn, determines the company's allowed rate of return on equity. Since the company is generally expected to earn its allowed rate of return on equity, the "br + sv" method requires knowledge of the allowed rate of return before the allowed rate of return can be calculated, a logical impossibility.

A second problem is that the "br + sv" method is very sensitive to the data inputs used to estimate the expected rate of return on equity and expected retention ratio. Furthermore, there is no generally accepted method of estimating these inputs. Thus, the "br + sv" method provides considerable leeway for the analyst to bias results through the choice of these inputs.

Q. WHAT ARE VALUE LINE'S FORECASTS OF THE RBHCS' RETENTION GROWTH RATES FOR THE PERIOD 2007 TO 2009?

A. Value Line forecasts that the retention growth rate for BellSouth will be 6.5%, for SBC, 3.5%, and for Verizon NW, 9.0%.

Q. WHAT DCF RESULTS WOULD ONE OBTAIN USING THESE RETENTION GROWTH RATES AND THE ANNUAL DCF MODEL?

A. As shown below in Table 5, the DCF results for BellSouth, SBC, and Verizon NW are 12.0%, 8.7%, and 13.3%, respectively, with an average DCF result of 11.3%. Thus, the average DCF result for these companies using the Value Line data are approximately 200 basis points higher than the DCF result Mr. Rothschild obtains using his own estimates of "b" and "r." However, even these results understate the cost of equity for the RBHCs because the DCF model cannot be reliably applied to the RBHCs, which are undergoing dramatic industry restructuring.

Table 5
DCF Results for RBHCs Using Value Line BR + SV Growth Rates[9]

	Dividend Yield	Recent Price	2007 - 09 Projected Growth	SV Growth	BR + SV Growth	Cost of Equity
BellSouth	4.00%	27.50	7.50%	0.16%	7.66%	12.0%
SBC	4.90%	26.36	3.50%	0.16%	3.66%	8.7%
Verizon	3.80%	40.45	9.00%	0.16%	9.16%	13.3%
Average						11.3%

Q. ON EXHIBIT JAR-3, SCHEDULE 6, PAGE 1, MR. ROTHSCHILD DISPLAYS DCF RESULTS FOR THE RBHCS IN THE RANGE 9.07% TO 9.37%. WHY DOES MR. ROTHSCHILD SHOW RESULTS THAT ARE APPROXIMATELY 200 BASIS POINTS LOWER THAN THE ACTUAL RESULTS USING VALUE LINE DATA AND THE ANNUAL DCF MODEL?

A. Mr. Rothschild obtains significantly lower results because he uses lower retention ratios, and hence lower retention growth, than Value Line reports for the RBHCs.

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S DECISION TO USE LOWER RETENTION RATIOS AND RETENTION GROWTH RATES THAN THOSE REPORTED BY VALUE LINE?

A. No. Mr. Rothschild's use of lower retention ratios and lower retention growth rates is both economically unjustified and self-serving. Use of a lower retention growth rate produces a significantly lower DCF result using Mr. Rothschild's DCF methodology. If

[9] Data from The Value Line Investment Survey, October 1, 2004; SV Growth from Mr. Rothschild's Exhibit___(JAR-3), Schedule 6, page 1.

Mr. Rothschild is correct that investors use Value Line data to forecast retention growth rates, then he should base his calculation on Value Line's forecast of retention growth rates for the RBHCs. Mr. Rothschild provides no evidence that investors would use his retention growth rates rather than those of Value Line.

Q. ARE THERE OTHER PROBLEMS WITH MR. ROTHSCHILD'S DCF ANALYSIS?

A. Yes. There are several additional problems with Mr. Rothschild's DCF analysis. First, Mr. Rothschild used an incorrect formula to calculate his proxy companies' retention ratios. The retention ratio is commonly calculated as one minus the dividend payout ratio, where the dividend payout ratio is simply dividends divided by earnings, or D/E. Mr. Rothschild, however, calculated the retention ratio incorrectly, as: one minus the ratio of the dividend yield on book value per share to the rate of return on equity. Thus, Mr. Rothschild calculated the retention ratio not as (1 – D/E), but rather, as [1 – (D/B÷E/B)]. This formula would be correct only if Mr. Rothschild had divided both dividends and earnings by the same book value per share, B. However, Mr. Rothschild divided his dividends per share by last year's book value per share, and his earnings per share by some unknown future book value per share. In short, Mr. Rothschild's formula does not correctly measure the retention ratio as one minus the dividend payout ratio.

Second, Mr. Rothschild's DCF methodology is extremely sensitive to his estimates of each company's future return on equity and retention ratio. Yet Mr. Rothschild provides no objective method of obtaining his estimates of these quantities. As a result of the

sensitivity of his model results to the choices of return on equity and retention ratio, and because of his lack of objective standards for estimating the future rate of return on equity and retention ratio, Mr. Rothschild can obtain virtually any result through his choice of these variables.

Third, Mr. Rothschild argues that it is essential to use the same dividend in calculating the dividend yield that is used to estimate the retention ratio. Yet Mr. Rothschild does not himself consistently use the same dividend for the dividend yield as he uses for the retention ratio. If Mr. Rothschild had consistently used the same dividend, he would have obtained an average retention ratio for the RBHCs equal to 41%, not the 27.79% that he employed to obtain his cost of equity estimate.

Q. ON PP. 82 - 90 OF HIS TESTIMONY, MR. ROTHSCHILD CRITICIZES YOUR DCF ANALYSIS, CLAIMING THAT YOU IMPROPERLY RELY ON ANALYSTS' FIVE-YEAR GROWTH FORECASTS. WHY DID YOU RELY ON ANALYSTS' FIVE-YEAR GROWTH FORECASTS?

A. I relied on the analysts' forecasts in my DCF analysis because my studies indicate that investors use the analysts' forecasts in making stock buy and sell decisions. The DCF model requires the growth forecasts of investors, not my growth forecast, or Mr. Rothschild's growth forecast. As I describe above, Mr. Rothschild has improperly used his own growth forecast in his DCF analysis, not investors' growth forecasts.

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S ASSERTION THAT FINANCIAL NEWS OVER THE LAST YEAR OR TWO HAS CAUSED SOME INVESTORS TO BE LESS TRUSTFUL OF ANALYSTS' FORECASTS THAN THEY WERE PREVIOUSLY?

A. Financial news over the last year or two may have caused some investors to be less trustful of analysts' forecasts than they were previously. However, analysts' forecasts are still the best source of future growth expectations available to investors. For example, investors do not have much faith in historical growth rates because historical growth rates may have been affected by management manipulation of accounting data. The two most prominent cases for management manipulation of accounting data in the telecommunications industry are Qwest Communications and WorldCom. Analysts have the ability to recognize and adjust for any manipulation of historical earnings by management when the analysts make their forecasts. In addition, investors—even if they were to know what it was—have no reason to have faith in Mr. Rothschild's judgment regarding growth. Unlike Mr. Rothschild, I have not attempted to bias results by inserting my judgment into the growth forecasts used in the DCF model.

Q. ON PAGES 74 – 75 OF HIS TESTIMONY, MR. ROTHSCHILD ASSERTS THAT YOU BIASED YOUR DCF RESULTS BY INAPPROPRIATELY ELIMINATING COMPANIES OUTSIDE A RANGE OF REASONABLENESS. IS HE CORRECT?

A. No. My elimination of companies outside a zone of reasonableness was a conservative measure that reduced my recommended cost of equity in this proceeding. As noted on

Updated Exhibit No. ____ (JHV-8) to Exhibit No. (JVW-1T), my direct testimony, page 3 of 3, the weighted average DCF result for the entire sample of S&P Industrials was 13.42%. My recommended DCF result, which is based on the middle two quartiles of the S&P Industrials, was 13.46%. No companies were eliminated because their DCF results were lower than the yield on Moody's A-rated Industrials bonds or higher than 20% that were not also eliminated by my decision to use the middle two quartiles. Thus, my decision to eliminate companies with more extreme results increased my recommended DCF result by only four basis points (13.46% vs. 13.42%). However, I also performed another DCF study of the cost of equity for a set of Value Line companies that have conservative risk measures. As noted on updated Exhibit No. ____ (JHV-9) to my direct testimony, the weighted average DCF result for the entire sample of companies that met my conservative risk criteria was 13.94%, whereas my recommended result from this sample, based on an elimination of companies outside a range of reasonableness, was 13.20%. Thus, my decision to eliminate companies with extreme results reduced my DCF result for the second group by 74 basis points (13.20% vs. 13.94%). Looking at both studies, it is clear that Mr. Rothschild's assertion that I biased my DCF results upward by eliminating companies outside a range of reasonableness is false. Indeed, if anything, my DCF results were biased downward by my elimination of companies outside a zone of reasonableness.

Q. HOW DID MR. ROTHSCHILD APPLY THE DCF MODEL TO THE S&P 500?

A. Mr. Rothschild applied the DCF model to the S&P 500 by simply adding an estimate of the expected one-year increase in the price of the S&P 500 stock index for the period

from June 15, 2004, to June 30, 2005, to Barron's reported dividend yield for the S&P 500 Index of companies.

Q. DO YOU AGREE WITH MR. ROTHSCHILD'S APPLICATION OF THE DCF MODEL TO THE S&P 500?

A. No. First, Mr. Rothschild's application of the DCF model to the S&P 500 is inconsistent with his application of the DCF model to his other groups of proxy companies. In applying the DCF model to his proxy companies, Mr. Rothschild at least attempted to determine a long-run growth rate for his proxy companies. In contrast, Mr. Rothschild's application of the DCF model to the S&P 500 relies entirely on an estimate of the expected one-year increase in the price of the S&P 500 stock index for the period from June 15, 2004, to June 30, 2005. This one-year stock price forecast is an unreliable estimate of long-run future growth in the DCF model. Indeed, in my approximately 30 years of experience as a cost of capital expert, I have never previously seen an analyst use a one-year stock price growth forecast to estimate growth in the DCF model.

Second, the DCF method cannot be reliably applied to average data for a group of companies, without examining whether it is appropriate to apply the DCF method to the individual companies in the group. For example, the DCF method cannot be applied to companies that: (1) do not pay a dividend; or (2) have a negative growth rate. Of the companies in the S&P 500, 126 companies do not pay any dividends, and others could reasonably be expected to have a negative expected growth in stock price for the period

June 15, 2004 to June 30, 2005.[10] Thus, the DCF model cannot be applied to at least one-fourth of the companies in the S&P 500 and likely cannot be applied to many more.

Q. WHY CAN THE DCF MODEL NOT BE APPLIED TO A COMPANY THAT DOES NOT PAY A DIVIDEND?

A. The DCF model assumes that each future dividend is equal to the previous dividend times (1 + the growth rate, g). Under this assumption, if the current dividend is zero, then all future dividends must also be assumed to be zero. But if all future dividends are assumed to be zero, the stock price in the DCF model must also be zero, a clearly nonsensical result.

Q. DID MR. ROTHSCHILD INCLUDE COMPANIES WITH ZERO DIVIDENDS IN HIS APPLICATION OF THE DCF MODEL TO THE S&P 500?

A. Yes. As noted above, Mr. Rothschild applied the DCF model to the S&P 500 by adding a one-year forecasted increase in the stock price to the average dividend yield of the companies in the S&P 500. Mr. Rothschild's estimate of the average dividend yield included companies that paid no dividends.

Q. WHY CAN THE DCF MODEL NOT BE APPLIED TO A COMPANY WITH A NEGATIVE "SUSTAINABLE" GROWTH RATE?

[10] Since the stock price at June 30, 2005, is for the index of S&P 500 companies, there is no way to determine stock price growth for individual companies in the index.

A. The DCF model cannot be applied to a company with a negative "sustainable" growth rate because a negative growth rate cannot continue—sooner or later, a company with a negative growth rate will go out of business.

Q. IS MR. ROTHSCHILD'S DCF RESULT FOR THE S&P 500 BIASED DOWNWARD BY HIS USE OF AGGREGATE DATA FOR THE S&P 500?

A. Yes. As noted above, more than one-fourth of the companies in the S&P 500 either do not pay a dividend at all or have a negative expected price growth over the next year. Since Mr. Rothschild includes the zero percent dividend yield for the large number companies that do not pay dividends in the computation of the average dividend yield, the average dividend yield for the group of companies whose cost of equity can be estimated using the DCF model will be understated. Similarly, since Mr. Rothschild includes the unsustainable negative growth rates in the calculation of the average growth rate for the entire sample, the average sustainable growth rate for the companies to which the DCF model can be applied will be understated.

Q. HAVE YOU CALCULATED DCF RESULTS FOR COMPANIES IN THE S&P 500 THAT PAY DIVIDENDS?

A. Yes. As shown in Exhibit No. ____ (JHV-9), the DCF cost of equity for this group of companies is 13.6%.

3. Inflation Risk Premium/CAPM Model

Q. WHAT IS THE CAPITAL ASSET PRICING MODEL (CAPM)?

A The CAPM is an equilibrium model of the security markets in which the expected or required return on a given security is equal to the risk-free rate of interest, plus the company equity "beta," times the market risk premium:

Cost of equity = Risk-free rate + Equity beta x Market risk premium

The risk-free rate in this equation is the expected rate of return on a risk-free government security, the equity beta is a measure of the company's risk relative to the market as a whole, and the market risk premium is the premium investors require to invest in the market basket of all securities compared to the risk-free security.

Q. HOW DOES MR. ROTHSCHILD USE WHAT HE CALLS THE INFLATION RISK PREMIUM/ CAPM (CAPITAL ASSET PRICING MODEL) TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Rothschild begins with Dr. Siegel's estimate that stocks have earned an average real (adjusted for inflation) rate of return over the period 1802 to 2001 in the range of 6.6% to 7.0%. Mr. Rothschild then develops a calculation to support his opinion that investors expect long-term inflation to be 3.0% per year. From this information, he concludes that investors can expect to earn a nominal (not adjusted for inflation) rate of return in the range of 9.60% to 10.00% on stocks of average risk.

Mr. Rothschild then performs a second calculation in which he begins with Ibbotson Associates' risk premium data for the period 1926 to 2001, and he then adjusts this data downward judgmentally to reflect his belief that risk premiums have declined over time. From this second calculation, Mr. Rothschild concludes that the CAPM/Risk Premium cost of equity is 8.31%.

Q. YOU MENTION THAT MR. ROTHSCHILD BEGAN WITH DR. SIEGEL'S ESTIMATE THAT STOCKS HAVE EARNED A REAL RATE OF RETURN OF 6.6% TO 7.0% OVER THE PERIOD 1802 TO 2001. ARE STOCK DATA FOR A PERIOD BEGINNING IN 1802 RELIABLE?

A. No. During the 19th century, the stock market was comprised of very few stocks, mainly the stocks of several banks, railroads, and insurance companies, located in the Northeast. These stocks were thinly traded; and, since no dividend data were available, a rough estimate had to be made of the average dividends on these stocks. Furthermore, prices for the period generally were based on averages of high and low bids, not prices at which trades actually occurred. For these and many other reasons, the historical returns on these stocks are simply not indicative of returns investors expect to receive on stock investments in 2004.[11]

[11] Siegel's study relies on data obtained from G. William Schwert, "Indexes of U.S. Stock Prices from 1802 to 1987," *Journal of Business*, 1990. Vol. 63, no. 3. Schwert discusses the many problems with stock return data prior to 1926.

Q. YOU ALSO MENTIONED THAT MR. ROTHSCHILD ADJUSTED THE REPORTED IBBOTSON ASSOCIATES' RISK PREMIUM DOWNWARD TO REFLECT HIS BELIEF THAT RISK PREMIUMS HAVE DECLINED OVER TIME. DOES IBBOTSON ASSOCIATES AGREE WITH MR. ROTHSCHILD'S OPINION THAT RISK PREMIUMS HAVE DECLINED OVER TIME?

A. No. Ibbotson Associates has conducted extensive statistical tests of the hypothesis that risk premiums have declined over time. From their studies, they conclude that there is no valid reason to believe that risk premiums have, in fact, declined in recent years. They continue to strongly recommend that the risk premium be estimated using the arithmetic mean return on stock and bond investments from 1926 to the most recent period. With respect to the risk premium over the yield to maturity on long-term Treasury bonds, for example, Ibbotson strongly recommends using a risk premium of 7.2%, whereas Mr. Rothschild used a risk premium of only 4% in his Inflation Risk Premium/CAPM calculations. With respect to the risk premium over U.S. Treasury bills, Ibbotson recommends a risk premium of 8.6%, whereas Mr. Rothschild used a risk premium of only 5.49%.

Q. ON PAGE 52 OF HIS TESTIMONY, MR. ROTHSCHILD SHOWS GRAPHS OF THE 30-YEAR MOVING AVERAGE RISK PREMIUM WHICH APPEAR TO DISPLAY A DOWNWARD TREND. DOES IBBOTSON ASSOCIATES EXPLAIN WHY THE 30-YEAR MOVING AVERAGE RISK PREMIUM HAS DECLINED?

A. Yes. On page 77 of the 2004 Yearbook, Ibbotson Associates states:

> In viewing the graph from left to right, moving from longer to shorter historical periods, one sees that the value of the realized equity risk premium begins to decline significantly. Why does this occur? The reason is that the severe bear market of 1973-1974 is receiving proportionately more weight in the shorter, more recent average. If you continue to follow the line to the right, however, you will also notice that when 1973 and 1974 fall out of the recent average, the realized equity risk premium jumps up by nearly 1.5 percent.

Q. IS MR. ROTHSCHILD'S INFLATION RISK PREMIUM/CAPM A WIDELY USED METHOD FOR ESTIMATING THE COST OF EQUITY?

A. No. Indeed, this method of estimating the cost of equity is unique to Mr. Rothschild. I am not aware of anyone else employing this method to estimate the cost of equity, and Mr. Rothschild does not identify anyone else using his "technique."

Q. DOES MR. ROTHSCHILD'S INFLATION RISK PREMIUM/CAPM METHOD FOR ESTIMATING THE COST OF EQUITY DIFFER FROM THE TRADITIONAL CAPITAL ASSET PRICING MODEL FOR ESTIMATING THE COST OF EQUITY?

A. Yes. As explained above, Mr. Rothschild's Inflation Risk Premium/CAPM method begins with an estimate of the long-run real rate of return on common stock investments, adjusts this estimate for Verizon NW's beta, and adds an estimate of inflation. The traditional CAPM begins with an estimate of the risk-free rate of interest and adds an estimate of the risk premium on an investment in Verizon NW compared to the risk-free investment. According to the CAPM, the cost of equity is equal to the risk-free rate plus beta times the expected risk premium on the market.

Q. WHAT IS THE EFFECT OF THE DIFFERENCES BETWEEN MR. ROTHSCHILD'S INFLATION RISK PREMIUM/CAPM METHOD AND THE TRADITIONAL CAPM?

A. Not surprisingly, Mr. Rothschild's Inflation Risk Premium/CAPM method produces a significantly lower estimate of the cost of equity than the traditional CAPM method would produce because Mr. Rothschild uses an extremely low estimate of the market risk premium, approximately 4%, rather than the 7.2 % estimate of the market risk premium reported by Ibbotson Associates for the 1926 – 2003 time period.

Q. WHAT COST OF EQUITY RESULT DOES THE TRADITIONAL CAPM PRODUCE AT THIS TIME?

A. Using the average beta for the RBHCs of 1.02, the Ibbotson risk premium of 7.2%, and a risk-free rate of 5%, the CAPM cost of equity is 12.34%. This result is 250 to 400 basis points higher than the inflation risk premium/CAPM results Mr. Rothschild reports in his testimony.

IV. REBUTTAL OF MR. PARCELL

A. Risk

Q. DOES MR. PARCELL EXPRESS HIS OPINION REGARDING THE RISK OF VERIZON NW'S REGULATED TELECOMMUNICATIONS OPERATIONS IN WASHINGTON STATE?

A. Yes. Mr. Parcell believes that Verizon NW's regulated telecommunications operations in Washington State are significantly less risky than the parent's unregulated operations. For example, on pp. 29 – 30 of his direct testimony, Mr. Parcell states:

> Most of their [Verizon Communications'] non-local exchange operations involve more risky operations, such as long-distance, cellular & paging, telecommunications equipment, and foreign telecommunications. The higher risk of these operations carry a correspondingly higher cost of capital.

Q. MR. PARCELL LISTS "TELECOMMUNICATIONS EQUIPMENT" AS ONE OF THE PARENT'S NON-LOCAL EXCHANGE OPERATIONS. DOES VERIZON NW'S PARENT HAVE "TELECOMMUNICATIONS EQUIPMENT" OPERATIONS?

A. No. Verizon NW's parent is certainly not involved in any telecommunications equipment manufacturing operations, and the telecommunications equipment it resells requires little or no capital investment. The parent's unregulated operations include wireless services, information services, and foreign telecommunications services. For example, in its 2003 Annual Report, the parent lists its four major business segments as domestic telecom, wireless, information services, and international. The first of these business segments includes the parent's local and long distance telecommunications services; the second includes the wireless business; the third includes the local advertising business, and the fourth includes the parent's wireline and wireless service operations in other countries. No business segment includes telecommunications equipment manufacturing.

Q. HAS VERIZON COMMUNICATIONS EVER BEEN INVOLVED IN TELECOMMUNICATIONS EQUIPMENT MANUFACTURING?

A. No. The former Bell systems telecommunications equipment businesses remained with AT&T at the time of the AT&T breakup in 1984, and Verizon NW's parent has not reacquired any telecommunications equipment operations. (GTE had also exited the telecommunications equipment manufacturing business many years prior to its merger with Bell Atlantic.)

Q. DOES MR. PARCELL PRESENT ANY DATA ON THE PERCENTAGE OF THE PARENT'S OPERATING REVENUES AND INCOME THAT COME FROM ITS BUSINESS SEGMENTS?

A. Yes. On page 11 of his direct testimony, Mr. Parcell reports the following information regarding the percentage of operating revenues and income associated with the parent company's business segments.

Segment	Operating Revenues	Operating Income
Domestic Telecom	58%	53%
Domestic Wireless	33%	30%
Information Services	6%	15%
International	3%	2%

Q. DOES MR. PARCELL'S VIEW THAT THE PARENT'S REGULATED TELECOMMUNICATIONS OPERATIONS ARE MUCH LESS RISKY THAN ITS UNREGULATED TELECOMMUNICATIONS OPERATIONS AFFECT HIS RECOMMENDED COST OF CAPITAL IN THIS PROCEEDING?

A. Yes. His view that Verizon NW's regulated wireline telecommunications operations are less risky causes Mr. Parcell to reduce his recommended cost of equity by 100 basis points. Mr. Parcell states on page 31:

> I recommend a return on equity range of 10 percent to 11 percent for Verizon's local exchange operations. This range reflects the DCF (10.2-10.7%) and CAPM (11.8-12.9%) results of the telecommunications group, adjusted downward by 100 basis points to reflect the much lower risk which the local exchange operations face relative to the more risky operations of the consolidated telecommunications groups.

Q. DOES MR. PARCELL PRESENT ANY EVIDENCE THAT ALLEGEDLY SUPPORTS HIS OPINION THAT VERIZON NW'S REGULATED TELECOMMUNICATIONS OPERATIONS IN WASHINGTON STATE ARE MUCH LESS RISKY THAN THE PARENT'S UNREGULATED OPERATIONS?

A. Yes. Mr. Parcell attempts to support his opinion by calculating the cost of equity for several groups of companies that he believes are proxies for the parent's unregulated businesses. Since his average DCF and CAPM results for his proxy companies for the parent's unregulated businesses are higher than his DCF and CAPM results for his telecommunications holding company group, and, in his opinion, Verizon Communications' cost of equity is a weighted average of the costs of equity for its regulated and unregulated businesses, Mr. Parcell concludes that Verizon NW's regulated operations are less risky than the parent's unregulated operations.

Q. WHAT GROUPS OF COMPANIES DOES MR. PARCELL USE AS PROXIES FOR THE RISKS OF THE PARENT COMPANY'S UNREGULATED OPERATIONS?

A. As shown on Exhibit __(DP-13) and (DP-14), Mr. Parcell uses five groups of companies as risk proxies for the parent's unregulated operations, including a wireless group, a wireless networking group, a telecommunications equipment group, a foreign telecommunications group, and a publishing industry group. Mr. Parcell chose these proxy groups because, in his opinion, the companies in these groups are in the same businesses as the parent's unregulated operations:

> I performed DCF and CAPM analyses for several sets of publicly traded companies who are engaged in the types of operations in which many of the telecommunications groups' companies are diversified into. (Parcell at page 30.)

Q. ARE MR. PARCELL'S PROXY COMPANIES IN THE SAME LINES OF BUSINESS AS THE PARENT COMPANY'S UNREGULATED OPERATIONS, AS HE CLAIMS?

A. No. The companies in Mr. Parcell's wireless networking group and telecommunications equipment group are involved entirely in manufacturing telecommunications equipment, and four of the companies in Mr. Parcell's foreign telecommunications group are also involved predominantly in manufacturing telecommunications equipment. As noted above, the parent does not have any telecommunications equipment manufacturing operations. In addition, Mr. Parcell's publishing company group includes companies that are involved in diverse publishing enterprises, such as Deluxe Corp., the largest printer of

checks and related financial forms; John Wiley & Sons, which publishes books and journals primarily in the scientific, professional, and educational markets; and Playboy Enterprises, which publishes Playboy Magazine and owns nine domestic cable TV channels. In contrast, Verizon Communications' information services group is involved in selling advertising. Thus, contrary to his claim, Mr. Parcell has not identified companies in the same lines of business as the parent.

Q. ARE MR. PARCELL'S GROUPS OF COMPANIES COMPARABLE IN RISK TO THE PARENT COMPANY'S UNREGULATED OPERATIONS?

A. No. Since telecommunications equipment manufacturing operations are undoubtedly more risky than telecommunications service operations, Mr. Parcell's groups of telecommunications equipment manufacturing companies are not comparable in risk to any of Verizon Communications' non-regulated operations. By associating the parent's unregulated operations with telecommunications equipment manufacturing companies that are undoubtedly more risky than the parent's unregulated operations, Mr. Parcell mistakenly concludes that the parent's unregulated operations are more risky than its regulated operations.

In addition, Mr. Parcell uses companies in his wireless group that are also undoubtedly more risky than the parent's wireless telecommunications business. Mr. Parcell fails to recognize, for example, that the parent's wireless operations are considerably larger and economically more stable than the wireless operations of any of the companies in his wireless proxy group. In fact, four of the six companies in Mr. Parcell's wireless group

have already agreed either to be acquired or to merge because they were having a difficult time competing on a stand-alone basis.

1. Mr. Parcell's Wireless Networking and Telecommunications Equipment Groups

Q. DO YOU HAVE ANY EVIDENCE THAT THE TELECOMMUNICATIONS EQUIPMENT MANUFACTURING COMPANIES INCLUDED IN MR. PARCELL'S WIRELESS NETWORKING, TELECOMMUNICATIONS EQUIPMENT, AND FOREIGN TELECOMMUNICATIONS GROUPS ARE NOT COMPARABLE IN RISK TO ANY OF THE PARENT COMPANY'S UNREGULATED BUSINESSES?

A. Yes. As shown on Mr. Parcell's Exhibit ___ (DP-13), pages 1 – 2, the Value Line Safety Ranks for Mr. Parcell's telecommunications equipment manufacturing companies range from 3 – 5 (where 5 is the most risky), with an average of approximately 4; and the betas for these companies average well over 1.5 (see Table 6, which summarizes the data shown in Mr. Parcell's exhibit). These Safety Ranks and betas indicate that Mr. Parcell's telecommunications equipment manufacturing companies are among the most risky industry groups followed by Value Line.[12] That telecommunications equipment manufacturing is a risky business is not surprising to investors. Investors are well aware that companies such as Nortel Networks, Lucent Technologies, Alcatel, and Ericsson, have been in extreme financial distress for the last several years. Furthermore, according

[12] Recall that safety ranks range from 1 to 5, where 1 is least risky and 5 most risky; and that a beta greater than 1.0 indicates that an investment in the company's stock is riskier than an investment in the market as a whole. For example, of the 1,658 Value Line companies with safety rank ratings, only 294 companies have a safety rank as low as 4 or 5. Of the 1,643 Value Line companies with Value Line betas, only 242 have a beta equal to or greater than 1.5.

to Value Line, which is the source for Mr. Parcell's company groups, the wireless networking industry has had negative aggregate net profits for the last four years; and the average net profits for the companies in the telecommunications equipment industry, with the sole exception of Cisco Systems, also have been negative. None of the business segments of Verizon NW's parent have had negative profits over this period.

Table 6
Value Line Safety Ranks and Betas for Mr. Parcell's Telecommunications Service, Telecommunications Equipment, and Wireless Networking Companies[13]

Company Group	Safety Rank	Beta
Telecommunications Service	2	1.03
Telecommunications Equipment	4	1.59
Wireless Networking	4	1.66

2. Mr. Parcell's Wireless Group

Q. WHAT COMPANIES ARE INCLUDED IN MR. PARCELL'S WIRELESS GROUP?

A. Mr. Parcell's wireless group includes AT&T Wireless Services, Nextel, Sprint PCS, Telephone & Data Systems, U.S. Cellular, and Western Wireless.

Q. ARE THE COMPANIES IN MR. PARCELL'S WIRELESS GROUP COMPARABLE IN RISK TO THE PARENT'S WIRELESS BUSINESS SEGMENT?

[13] Data from Mr. Parcell's Exhibit___(DP-13).

A. No. The companies in Mr. Parcell's wireless group are significantly more risky than the parent's wireless business segment. Most of these companies have earned negative profits during the last four years, and all of the companies are significantly smaller than the parent's wireless business segment (see Table 7 below). The parent's wireless business segment has consistently earned positive profits in each of the last four years, and it is one of the two largest domestic wireless companies.

Table 7
Revenues and Net Profit for Mr. Parcell's Wireless Companies

	Revenues ($ Millions)				Net Profit ($ Millions)			
Company	**2000**	**2001**	**2002**	**2003**	**2000**	**2001**	**2002**	**2003**
AT&T Wireless	10,448	13,610	15,631	16,695	150	(98)	(46)	552
Nextel	5,714	7,689	8,721	10,820	(986)	(1,197)	236	1,571
Sprint PCS Group	6,341	9,725	12,074	12,690	(1,849)	(1,242)	(627)	(661)
Telephone & Data	1,411	1,558	1,796	2,123	151	149	136	62
U.S. Cellular	1,717	1,895	2,185	2,583	183	181	165	75
Western Wireless	835	1,073	1,210	1,501	20	(150)	(165)	(17)
Verizon Wireless	14,236	17,519	19,424	22,436	444	537	966	1,083

Q. DO YOU HAVE ANY EVIDENCE THAT COMPANIES SUCH AS VERIZON WIRELESS, WITH POSITIVE AND STABLE PROFITS, ARE LESS RISKY THAN WIRELESS COMPANIES WITH NEGATIVE AND UNSTABLE PROFITS?

A. Yes. It is evident from the data shown in Table 7 that Telephone & Data and U.S. Cellular are the only two companies in Mr. Parcell's wireless group that consistently have earned positive profits over the last four years. Not surprisingly, the average beta for these two companies is 1.05, while the average beta for the remaining companies in Mr.

Parcell's wireless group is 1.65 (see Mr. Parcell's Exhibit ___(DP-13), p. 2 of 2). Similarly, the average Value Line Safety Rank for the two companies with consistent positive profits is 3, whereas the average Value Line Safety Rank for the remaining wireless companies is 4.5 (where 5 is the least safe, and 1 is the safest). Obviously, the market views wireless companies with consistent positive profits as being less risky than those companies with negative and unstable profits.

Q. WHAT DCF AND CAPM RESULTS DOES MR. PARCELL OBTAIN FOR HIS PROXY GROUP OF WIRELESS COMPANIES?

A. Mr. Parcell's DCF and CAPM results for his wireless companies are displayed in Exhibit ___(DP-14), page 1 of 3, reproduced below as Table 8 and Table 9.

Table 8
Mr. Parcell's DCF Calculations for Wireless Companies

Wireless Companies	Yield	Growth	EPS	DPS	BVPS	Avg PS	Avg. Growth	DCF
AT&T Wireless	0.0%	8.0%			3.0%	3.0%	5.5%	5.5%
Nextel	0.0%	14.5%			39.5%	39.5%	27.0%	27.0%
Sprint PCS Group	0.0%	20.0%					20.0%	20.0%
Telephone & Data	0.9%	6.0%	7.0%	4.0%	5.0%	5.3%	5.7%	6.6%
U.S. Cellular	0.0%	6.0%	5.5%		5.0%	5.3%	5.6%	5.6%
Western Wireless	0.0%	34.0%					34.0%	34.0%
Average								16.4%

Table 9
Mr. Parcell's CAPM Calculations for Wireless Companies

Wireless Companies	Risk-Free Rate	Beta	Market Return	CAPM
AT&T Wireless Services	5.07%		12.60%	
Nextel Communications	5.07%	1.80	12.60%	18.6%
Sprint PCS Group	5.07%	1.75	12.60%	18.2%
Telephone & Data Systems	5.07%	1.00	12.60%	12.6%
U.S. Cellular	5.07%	1.10	12.60%	13.4%
Western Wireless	5.07%	1.40	12.60%	15.6%
Average				15.7%

As shown in Tables 8 and 9, Mr. Parcell obtains an average DCF result for his wireless group of 16.4% and an average CAPM result of 15.7%.

Q. DO YOU HAVE ANY CRITICISMS OF MR. PARCELL'S DCF AND CAPM RESULTS FOR HIS WIRELESS COMPANY GROUP ?

A. Yes. First, since nearly all the companies in his wireless group do not pay dividends, Mr. Parcell's DCF results for this group are meaningless. As discussed above in the rebuttal of Mr. Rothschild, the DCF model cannot be applied to companies that do not pay dividends. Second, Mr. Parcell's reported growth rates for his proxy wireless companies are not the growth rates reported in the most recent issue of Value Line available at the time of his testimony.[14] For example, Value Line reports zero dividend growth for all the companies in Mr. Parcell's wireless group except Telephone & Data Systems, whereas Mr. Parcell calculates his average growth rate as if there were no data for dividend growth (see Table 8 above). Furthermore, Value Line does not report any growth rates for Sprint PCS because Sprint PCS no longer exists as a separate entity. If Mr. Parcell

[14] Since Mr. Parcell's testimony was filed November 22, 2004, the most recent Value Line edition for the wireless group would have been dated October 1, 2004.

had used the data actually reported in the most recent Value Line issue available to Mr. Parcell at the time he prepared his testimony, his average DCF result for his wireless proxy companies would have been 7.9%, as shown below in Table 10:

Table 10
Corrected DCF Results for Mr. Parcell's
Wireless Companies Using Value Line Reported Data

Wireless Group	Yield	Growth	EPS	DPS	BVPS	Avg.	Avg Growth	DCF
AT&T Wireless Services	0.0%	6.5%	NMF	0.0%	1.5%	0.8%	3.6%	3.6%
Nextel Communications	0.0%	15.0%	NMF	0.0%	NMF	0.0%	7.5%	7.5%
Sprint PCS Group	NA	NA	NA	NA	NA			
Telephone & Data	0.8%	6.0%	7.0%	4.0%	4.5%	5.2%	5.6%	6.4%
U.S. Cellular	0.0%	6.0%	5.5%	0.0%	5.0%	3.5%	4.8%	4.8%
Western Wireless	0.0%	34.0%	NMF	0.0%	NMF	0.0%	17.0%	17.0%
Average								7.9%

However, as noted above, since most of Mr. Parcell's wireless companies do not pay dividends, even these results are meaningless.

Third, Mr. Parcell's CAPM results for his wireless proxy companies significantly overstate the cost of equity for Verizon Wireless because, unlike Verizon Wireless: (1) many of the companies in Mr. Parcell's group have negative and unstable earnings (see Table 7 above); and (2) Mr. Parcell includes a CAPM result for Sprint PCS even though Sprint PCS no longer exists.

3. <u>Mr. Parcell's Foreign Telecommunications Group</u>

Q. WHAT DCF AND CAPM RESULTS DOES MR. PARCELL OBTAIN FOR HIS FOREIGN TELECOMMUNICATIONS GROUP?

A. As shown in Exhibit__(DP-14), p. 2 of 3, Mr. Parcell obtains an average DCF result of 10.7% for his foreign telecommunications group and an average CAPM result of 13.6%.

Q. YOU NOTED ABOVE THAT AT LEAST FOUR OF THE COMPANIES IN MR. PARCELL'S FOREIGN TELECOMMUNICATIONS GROUP ARE DISSIMILAR TO VERIZON NW'S UNREGULATED BUSINESSES BECAUSE THEY MANUFACTURE TELECOMMUNICATIONS EQUIPMENT. WHICH COMPANIES IN MR. PARCELL'S FOREIGN TELECOMMUNICATIONS GROUP ARE INVOLVED PREDOMINANTLY IN TELECOMMUNICATIONS EQUIPMENT MANUFACTURING?

A. The four companies that receive virtually all their revenues and operating income from telecommunications equipment manufacturing are Alcatel, Ericsson, Nokia, and Nortel Networks.

Q. DOES THE PARENT'S FOREIGN TELECOMMUNICATIONS GROUP INVOLVE ANY MANUFACTURING OPERATIONS?

A. No. The parent's foreign telecommunications group includes only telecommunications service operations.

Q. DO YOU HAVE ANY EVIDENCE THAT THE FOUR TELECOMMUNICATIONS EQUIPMENT MANUFACTURERS IN MR. PARCELL'S FOREIGN TELECOMMUNICATIONS GROUP ARE CONSIDERABLY MORE RISKY THAN THE TELECOMMUNICATIONS

SERVICES COMPANIES IN MR. PARCELL'S FOREIGN TELECOMMUNICATIONS GROUP?

A. Yes. From the data displayed in Exhibit ___(DP-13), page 2 of 2, it is evident to even a casual observer that the four equipment manufacturers, Alcatel, Ericsson, Nokia, and Nortel Networks, are significantly more risky than the telecommunications service companies in the foreign telecommunications group. For example, these four companies have an average Value Line Safety Rank of 4 (where 5 is the most risky), and an average Value Line beta of 1.69, whereas the remaining companies in the foreign telecommunications group have an average Safety Rank of 3 and beta of 0.92.

Q. WHAT DCF AND CAPM RESULTS WOULD MR. PARCELL HAVE OBTAINED FOR HIS FOREIGN TELECOMMUNICATIONS GROUP IF HE HAD CORRECTLY ELIMINATED THE FOREIGN TELECOMMUNICATIONS EQUIPMENT MANUFACTURERS FROM THIS GROUP?

A. As shown below in Table 11, the average DCF and CAPM results for the foreign telecommunications service companies, eliminating the equipment manufacturing companies, are 10.3% and 12.0%, respectively. In contrast, the average DCF and CAPM result for the non-comparable foreign equipment manufacturers are 11.8% and 17.8%, respectively.

Table 11
Mr. Parcell's DCF and CAPM Results for
Foreign Telecom Service and Equipment Companies

Company	DCF	CAPM
BCE Inc.	10.6%	11.8%
BT Group	15.6%	12.6%
Cable & Wireless PLC	NMF	14.1%
Deutsche Telekom AG	4.3%	12.6%
TDC A/S	12.8%	10.7%
Telecom Corp. of New Zealand	18.1%	9.6%
Telecom. Chile	2.8%	12.2%
Telefonica, S.A.	9.2%	12.6%
Telefonos de Mexica, SA	16.0%	11.1%
Vodafone Group Plc	3.5%	12.2%
Alcatel	4.4%	18.2%
Ericsson Telephone AB	12.0%	19.0%
Nokia Corporation	19.0%	16.0%
Nortel Networks	NMF	17.9%
Service Companies	10.3%	12.0%
Equipment Manufacturers	11.8%	17.8%

Q. DO THESE DCF AND CAPM RESULTS SUPPORT MR. PARCELL'S CONCLUSION THAT THE PARENT'S FOREIGN TELECOMMUNICATIONS SERVICES OPERATIONS ARE MORE RISKY THAN ITS REGULATED DOMESTIC TELECOMMUNICATIONS OPERATIONS IN WASHINGTON STATE?

A. No. To the contrary, since the cost of equity results for the foreign telecommunications group, excluding the telecommunications equipment manufacturers, are lower than the average results for his telecommunications holding company group, Mr. Parcell's data suggest that the parent's foreign telecommunications service operations are less risky than Verizon NW's regulated telecommunications operations in Washington State.

4. Mr. Parcell's Publishing Industry Group

Q. WHAT COMPANIES ARE INCLUDED IN MR. PARCELL'S PUBLISHING INDUSTRY GROUP?

A. Mr. Parcell's publishing industry group contains a diverse set of companies, including Deluxe Corp., the largest printer of checks and related financial forms; John Wiley & Sons, which publishes books and journals primarily in the scientific, professional, and educational markets; and Playboy Enterprises, which publishes Playboy Magazine and owns nine domestic cable TV channels.

Q. ARE THE COMPANIES IN MR. PARCELL'S PUBLISHING INDUSTRY GROUP IN THE SAME LINE OF BUSINESS AS VERIZON COMMUNICATIONS' LOCAL ADVERTISING BUSINESS?

A. No. The parent's local advertising business receives its revenues by supplying local advertising to business and professional customers. In contrast, the companies in Mr. Parcell's publishing group receive their revenues by selling books, magazines, financial forms, entertainment, or data.

Q. WHAT DCF AND CAPM RESULTS DOES MR. PARCELL OBTAIN FOR THE PUBLISHING INDUSTRY GROUP THAT HE ALLEGES TO BE COMPARABLE IN RISK TO THE PARENT'S LOCAL ADVERTISING BUSINESS?

A. As shown on Exhibit __(DP-14), page 3 of 3, Mr. Parcell obtains an average DCF result of 14.2% and an average CAPM result of 11.6% for his publishing industry group.

Q. DO MR. PARCELL'S AVERAGE DCF RESULTS FAIRLY REPRESENT THE COST OF EQUITY FOR HIS PUBLISHING INDUSTRY GROUP?

A. No. In addition to not representing the appropriate cost of equity for Verizon NW's local advertising business, Mr. Parcell's average DCF results do not even fairly represent the cost of equity for his publishing industry group. First, the average DCF result for the publishing group is dominated by the unusually high DCF results for two companies: Deluxe with a DCF result of 35.7% and Reuters with a DCF result of 23.2%. Eliminating just these two outlier results from the average for the 13-company group reduces Mr. Parcell's average DCF result for the group by 280 basis points, from 14.2% to 11.5%, a result that is in line with Mr. Parcell's DCF result for his telecommunications holding company group. Second, the high DCF results Mr. Parcell obtains for Deluxe and Reuters arise because Mr. Parcell uses a retention growth rate of 65% for Deluxe and 42.5% for Reuters. In his application of the DCF model to his telecommunications holding company group, Mr. Parcell emphasizes the need to judge whether growth data are sustainable. However, in his application of the DCF model to the publishing industry group, Mr. Parcell ignores his own advice. Obviously, growth rates of 65% and 42.5% are not sustainable growth rates in the long run.

Q. HOW DOES MR. PARCELL'S AVERAGE CAPM RESULT FOR THE PUBLISHING GROUP COMPARE TO THE AVERAGE CAPM RESULT FOR HIS TELECOMMUNICATIONS HOLDING COMPANY GROUP?

A. Mr. Parcell's average CAPM result of 11.6% (11.4% if Deluxe and Reuters were not included), is less than the average CAPM result of 12.9% that Mr. Parcell obtains for his telecommunications holding company group.

Q. DO THE DCF AND CAPM RESULTS FOR MR. PARCELL'S PUBLISHING GROUP SUPPORT HIS CONCLUSION THAT THE PARENT'S UNREGULATED OPERATIONS ARE MORE RISKY THAN THE PARENT'S REGULATED DOMESTIC TELECOMMUNICATIONS OPERATIONS?

A. No. First, the companies in Mr. Parcell's publishing industry group are not in the same line of business as the parent's local advertising business, and Mr. Parcell has certainly provided no evidence that these companies are similar in risk to the parent's advertising business. Second, once the two extreme outlier results for Deluxe and Reuters are removed from his data, Mr. Parcell's average DCF and CAPM results for the publishing group are comparable, if not lower than, the DCF and CAPM results that Mr. Parcell obtains for his telecommunications holding company group.

Q. DO THE DCF AND CAPM RESULTS FOR MR. PARCELL'S PUBLISHING GROUP REFLECT A REASONABLE ESTIMATE OF THE REQUIRED RATE OF RETURN FOR THE PARENT'S LOCAL ADVERTISING BUSINESS?

A. No. As noted above, the parent's local advertising business receives its revenues from selling advertising whereas Mr. Parcell's publishing companies receive their revenues from selling magazines, books, financial forms, entertainment, and data. Since Mr. Parcell's publishing companies are not in the same lines of business as the parent's local

advertising business and since Mr. Parcell has provided no evidence that these companies have the same risk as the parent's local advertising business, his DCF and CAPM results have little relevance for determining the required rate of return for the parent's local advertising business.

Q. IN THIS PROCEEDING, DR. SELWYN AND MR. BROSCH HAVE ATTEMPTED TO USE DATA ON VERIZON DIRECTORY CORPORATION'S (VDC) ACCOUNTING RATE OF RETURN TO DRAW AN INFERENCE REGARDING ALLEGED EXCESS EARNINGS. IS THIS METHODOLOGY APPROPRIATE?

A. No. Accounting rates of return are poor indicators of economic profitability. Among their problems, accounting rates of return are based on book values rather than market values. For companies such as VDC, with few tangible assets, but large intangible assets, the accounting rate of return is an especially poor measure of economic profitability. Moreover, since VDC operates in a competitive market, it is not even necessary to calculate its economic rate of return because competitive forces will strongly restrain the company's ability to earn excess or monopoly profits.

Q. ON EXHIBIT___(DP-13), MR. PARCELL PRESENTS DATA COMPARING VARIOUS RISK MEASURES FOR THE S&P 500 COMPOSITE TO THE SAME RISK MEASURES FOR VERIZON COMMUNICATIONS AND HIS DOMESTIC TELECOMMUNICATIONS HOLDING COMPANY GROUP. HOW DO THE RISK MEASURES FOR THESE THREE GROUPS COMPARE TO THE SAME

RISK MEASURES FOR THE TWO INDUSTRIAL COMPANY GROUPS YOU USED TO ESTIMATE THE COST OF EQUITY?

A. As shown in Table 12 below, the Value Line Safety Rank, Beta, and Financial Strength ratings for my S&P Industrial group are 1.8, 0.98, and A+; for my Value Line proxy group, the values are 1.8, 0.93, and A+. These values indicate that my proxy industrial groups are less risky than Verizon Communications, Mr. Parcell's telecommunications group, and the S&P 500.

Table 12
Average Risk Ratings for Vander Weide Proxy Groups Compared to Parcell Proxy Group, the S&P 500, and Verizon Communications

Group	Safety Rank	Beta	Financial Strength
S&P 500	2.7	1.05	B++
Verizon Communications	2	1.00	A+
Parcell Telecom Group	2.3	1.03	A
Vander Weide S&P Industrial Group	1.8	0.98	A+
Vander Weide Value Line Proxy Group	1.8	0.93	A+

B. Capital Structure

Q. WHAT CAPITAL STRUCTURE DOES MR. PARCELL RECOMMEND FOR THE PURPOSE OF ESTIMATING VERIZON NW'S WEIGHTED AVERAGE COST OF CAPITAL?

A. Mr. Parcell recommends using the book value capital structure of Verizon Communications Inc. at June 30, 2004, which contains 44.9% common equity, 49.3% long-term debt, and 5.8% short-term debt.

Q. DOES MR. PARCELL RECOGNIZE OR ACKNOWLEDGE THAT FINANCIAL THEORY REQUIRES THE USE OF A MARKET VALUE CAPITAL STRUCTURE TO ESTIMATE A COMPANY'S COST OF CAPITAL?

A. No, he does not.

Q. WHY DOES FINANCIAL THEORY REQUIRE THE USE OF MARKET VALUE CAPITAL STRUCTURE WEIGHTS TO ESTIMATE A COMPANY'S WEIGHTED AVERAGE COST OF CAPITAL?

A. Financial theory requires the use of market value capital structure weights to calculate a company's weighted average cost of capital because: (1) the weighted average cost of capital is defined as the return investors expect to earn on a portfolio of the company's debt and equity securities; (2) investors measure the expected return and risk on their portfolio using market value weights, not book value weights; and (3) market values are the best measures of the amounts of debt and equity investors have invested in the company on a going forward basis.

Q. HOW DOES MR. PARCELL DEFEND HIS RECOMMENDATION TO USE A BOOK VALUE CAPITAL STRUCTURE FOR THE PURPOSE OF ESTIMATING VERIZON NW'S WEIGHTED AVERAGE COST OF CAPITAL WHEN FINANCIAL THEORY REQUIRES THE USE OF A MARKET VALUE CAPITAL STRUCTURE FOR THIS PURPOSE?

A. Mr. Parcell defends his recommendation to use book value capital structure weights to estimate Verizon NW's weighted average cost of capital on the grounds that book value

capital structure weights reflect the "actual financing" of the company's assets (see Parcell at p. 16).

Q. DO YOU AGREE WITH MR. PARCELL'S OPINION THAT A COMPANY'S BOOK VALUE CAPITAL STRUCTURE REFLECTS ITS "ACTUAL FINANCING" PATTERN?

A. No. While the book value of a company's debt is a reasonable approximation of the amount of debt the company has used to finance its operations, the book value of the company's equity is not. The book value of a company's equity reflects both the company's previous issuances of equity and the company's accumulated retained earnings since the inception of the company. Retained earnings are measured using accounting conventions that are designed to reflect a company's profits rather than the company's cash flows. By it very nature, the company's financing pattern must reflect the cash flows into and out of the company. Since retained earnings do not reflect cash flows, and the book value of the company's equity reflects primarily retained earnings, the book value of the company's equity does not reflect the company's actual equity financing over time.

Q. DOES A COMPANY'S BOOK VALUE CAPITAL STRUCTURE REFLECT A MARKET-DRIVEN RATIO OF DEBT AND EQUITY, AS MR. PARCELL SUGGESTS ON PAGE 16 OF HIS DIRECT TESTIMONY?

A. No. As discussed above, a company's book value capital structure reflects the company's accumulated retained earnings since its inception, which depend on the

accounting conventions the company used to record its historical earnings. There is nothing in a company's book value capital structure that can reasonably be said to be market driven. The only capital structure that can reasonably be said to be market driven is the company's market value capital structure.

C. Cost of Equity

1. Proxy Companies

Q. WHAT PROXY COMPANIES DOES MR. PARCELL USE TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Parcell uses both a group of six telecommunications holding companies and a group of six local natural gas distribution companies to estimate Verizon NW's cost of equity.

Q. WHAT COMPANIES DOES MR. PARCELL INCLUDE IN HIS TELECOMMUNICATIONS HOLDING COMPANY GROUP?

A. Mr. Parcell's telecommunications holding company group includes, ALLTEL, BellSouth, CenturyTel, SBC, Sprint, and Verizon.

Q. DO YOU AGREE WITH MR. PARCELL'S USE OF THESE TELECOMMUNICATIONS HOLDING COMPANIES TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. No. As I described in my rebuttal of Mr. Rothschild, telecommunications holding companies are poor proxies for the purpose of estimating Verizon NW's cost of equity because: (1) the DCF model assumes that proxy companies operate in stable economic

environments where investors can reasonably forecast future growth prospects, and this assumption does not apply to the telecommunications holding companies; (2) the telecommunications holding companies are less risky than Verizon NW's wireline telecommunications operations in Washington State because the holding companies can diversify their competitive, technological, and regulatory risks, while Verizon NW cannot; and (3) the telecommunications holding company group is too small to reduce the uncertainty in estimating the cost of equity.

Q. DO YOU AGREE WITH MR. PARCELL'S USE OF LOCAL NATURAL GAS DISTRIBUTION COMPANIES AS RISK PROXIES FOR VERIZON NW'S TELECOMMUNICATIONS BUSINESS IN WASHINGTON STATE?

A. No. Mr. Parcell's group of LDCs is a poor proxy for the purpose of estimating Verizon NW's cost of capital because the LDCs face significantly less competitive, technology, and regulatory risk than Verizon NW.

Q. IN YOUR DIRECT TESTIMONY, YOU RECOMMEND TWO INDUSTRIAL COMPANY GROUPS AS RISK PROXIES FOR VERIZON NW'S REGULATED TELECOMMUNICATIONS OPERATIONS IN WASHINGTON STATE. DO YOUR RECOMMENDED GROUPS OF PROXY COMPANIES OFFER TELECOMMUNICATIONS SERVICES?

A. No. Financial theory does not require that proxy companies be in the same line of business as the target, only that the proxy companies be comparable in risk to the target company. I demonstrate in my direct testimony that my proxy companies are not only a

conservative proxy for the risk of providing telecommunications services, but also are sufficiently large in number to reduce the uncertainty in estimating the cost of equity, and they operate on average in markets that are sufficiently stable to employ the DCF model to estimate the cost of equity.

2. DCF Model

Q. WHAT DCF MODEL DOES MR. PARCELL USE TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Parcell uses the same annual DCF model as Mr. Rothschild to estimate Verizon NW's cost of equity.

Q. DO YOUR CRITICISMS OF MR. ROTHSCHILD'S USE OF AN ANNUAL DCF MODEL ALSO APPLY TO MR. PARCELL'S DCF MODEL?

A. Yes.

Q. HOW DOES MR. PARCELL ESTIMATE THE GROWTH COMPONENT OF HIS DCF MODEL?

A. Mr. Parcell estimates the growth component of his DCF model from five indicators of dividends and earnings growth: (1) the five-year average of historical earnings retention growth; (2) the five-year average of historical growth in earnings per share, dividends per share, and book value per share; (3) 2007 – 2009 projected earnings retention growth, (4) 2002 – 2008 projected EPS, DPS, and BVPS growth; and (5) analysts' five-year

projected earnings growth. His final growth rate is an average of the growth rates obtained from these five sources.

Q. DO YOU AGREE WITH MR. PARCELL'S USE OF HISTORICAL GROWTH RATES TO ESTIMATE THE GROWTH COMPONENT OF THE DCF MODEL?

A. No. My studies indicate that a company's stock price is more highly correlated with analysts' growth rates than with historical growth rates. The correlation between analysts' growth rates and stock prices indicates that investors use the analysts' growth rates in making stock buy and sell decisions.

Q. WHAT IS RETENTION GROWTH?

A. Retention growth is a method of estimating the growth component of the DCF model that seeks to measure the growth that arises from retaining earnings within the company and reinvesting those earnings to earn a rate of return. Specifically, retention growth is the product of the company's retention ratio, "b," and the company's rate of return on equity, "r."

Q. HOW DOES RETENTION GROWTH DIFFER FROM THE "BR + SV" GROWTH METHOD USED BY MR. ROTHSCHILD?

A. The retention growth method differs from the "br + sv" method in that retention growth focuses only on growth from internal sources, "br," rather than growth from both internal and external sources, "br + sv."

Q. DO YOU AGREE WITH MR. PARCELL'S USE OF RETENTION GROWTH RATES TO ESTIMATE THE GROWTH COMPONENT OF THE DCF MODEL?

A. No. Retention growth has many of the same problems as the "br + sv" method, as I discussed above; namely, retention growth is logically circular because it requires knowledge of the company's rate of return on equity to estimate the company's cost of equity, at the same time that the cost of equity is used to estimate the allowed rate of return on equity through the regulatory process. In addition, the retention growth method is quite sensitive to the analyst's estimates of the retention rate and the rate of return on equity; and these inputs are difficult to estimate.

Q. MR. PARCELL ALSO USES ANALYSTS' GROWTH RATES TO ESTIMATE THE GROWTH COMPONENT OF THE DCF MODEL. DID MR. PARCELL USE THE MOST RECENT ANALYSTS' GROWTH ESTIMATES FOR THE TELECOMMUNICATIONS COMPANIES AVAILABLE AT THE TIME OF HIS TESTIMONY?

A. No. Mr. Parcell used growth estimates for his telecommunications companies that are significantly below the most recent estimates available at the time of his testimony. As shown in Table 13 below, Mr. Parcell's average growth rate for his proxy telecommunications company group is almost 90 basis points less than the most recent analysts' growth rates available at the time of his testimony.

Table 13
Mr. Parcell's Analysts' Growth Rates vs. Most Recent Growth Rates
Available at the Time of his Testimony

Company	Growth	I/B/E/S
ALLTEL Corp.	5.0%	7.1%
BellSouth Corp.	4.5%	5.0%
CenturyTel	4.4%	4.1%
SBC Communications Inc.	6.3%	7.1%
Sprint Corp.	13.0%	13.7%
Verizon Communications	5.2%	6.8%
Average	6.4%	7.3%

3. Mr. Parcell's CAPM

Q. HOW DOES MR. PARCELL USE THE CAPM TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. The CAPM requires estimates of the risk-free rate, the company-specific risk factor or beta, and either the required return or risk premium on the market portfolio. For the risk-free rate, Mr. Parcell uses the average yield on 20-year Treasury bonds for the period July through September 2004; for the company-specific risk factor or beta, Mr. Parcell uses the current Value Line beta for each company; and for the required return or risk premium on the market portfolio, Mr. Parcell employs three estimates. First, he uses the average earned rate of return for the S&P 500 for the period 1972 to 2002. Second, he uses an average of the arithmetic mean and geometric mean long-run return on the S&P 500 for the period 1926 - 2003, as reported by Ibbotson Associates. Third, Mr. Parcell uses the Ibbotson Associates' long-run average geometric mean risk premium on the market portfolio.

Q. DO YOU AGREE WITH MR. PARCELL'S APPLICATION OF THE CAPM?

A. No. I disagree particularly with Mr. Parcell's methods of estimating the required return or the risk premium on the market portfolio. Instead of Mr. Parcell's three methods for estimating the return on the market portfolio, I recommend that the return on the market portfolio should be estimated either by applying my recommended DCF methodology to the S&P Industrials or by using the Ibbotson Associates long-run arithmetic average risk premium on the market portfolio.

Q. WHY DO YOU DISAGREE WITH MR. PARCELL'S USE OF EARNED RATES OF RETURN ON BOOK EQUITY FOR THE S&P 500 TO ESTIMATE THE MARKET RETURN IN THE CAPM?

A. I disagree with Mr. Parcell's use of earned rates of return on book equity because the earned rate of return measures the accounting results of the firm's past operations in relationship to book value, whereas the CAPM requires an estimate of the expected future return on the market value of the S&P 500. The earned rate of return on book equity is an entirely different concept than the market rate of return required in the CAPM.

Q. WHY DO YOU DISAGREE WITH MR. PARCELL'S USE OF AN AVERAGE OF THE ARITHMETIC AND GEOMETRIC MEAN LONG-RUN RETURN ON THE S&P 500 TO ESTIMATE THE MARKET RETURN COMPONENT OF THE CAPM?

A. I disagree with Mr. Parcell's use of an average of the arithmetic and geometric mean returns because the arithmetic mean by itself provides the best estimate of the expected future return on the S&P 500. As Ibbotson Associates states in its 2004 Yearbook,

> The equity risk premium data presented in this book are arithmetic average risk premia as opposed to geometric average risk premia. The arithmetic average equity risk premium can be demonstrated to be most appropriate when discounting future cash flows. For use as the expected equity risk premium in either the CAPM or the building block approach, the arithmetic mean or the simple difference of the arithmetic means of stock market returns and riskless rates is the relevant number. This is because both the CAPM and the building block approach are additive models, in which the cost of capital is the sum of its parts. The geometric average is more appropriate for reporting past performance, since it represents the compound average return. [*Stocks, Bonds, Bills, and Inflation, Valuation Edition, 2004 Yearbook*, Ibbotson Associates, p. 71.]

Q. WHY DO YOU DISAGREE WITH MR. PARCELL'S USE OF THE AVERAGE GEOMETRIC MEAN RISK PREMIUM ON THE MARKET PORTFOLIO IN HIS CAPM APPLICATION?

A. I disagree with Mr. Parcell's use of the average geometric mean risk premium in the CAPM for essentially the same reason that I disagree with his use of the average of the arithmetic and geometric mean returns, namely, the arithmetic mean risk premium is the best estimate of the expected future risk premium in the context of the CAPM.

Q. WHAT CAPM RESULTS WOULD MR. PARCELL HAVE OBTAINED FOR HIS TELECOMMUNICATIONS HOLDING COMPANY GROUP IF HE HAD USED YOUR RECOMMENDED METHODS OF ESTIMATING THE RISK PREMIUM ON THE MARKET PORTFOLIO?

A. If Mr. Parcell had applied my recommended DCF methodology to the S&P 500 to estimate the market risk premium, he would have obtained a CAPM cost of equity equal to 13.86% [(5.07% + 1.03 x (13.6% – 5.07%) = 13.86%]. If Mr. Parcell had used the Ibbotson Associates' reported long-run arithmetic mean risk premium, he would have obtained a CAPM result of 12.49% [(5.07% + 1.03 x 7.2%) = 12.49%].[15]

4. Comparable Earnings

Q. WHAT IS THE COMPARABLE EARNINGS APPROACH TO ESTIMATING THE COST OF EQUITY?

A. The comparable earnings approach estimates the required rate of return on equity for the target company from data on the average earned rate of return on book equity for a group of comparable companies. Under the comparable earnings approach, the required rate of return on equity or cost of equity is equal to the average earned rate of return on book equity for the comparable companies.

Q. HOW DOES MR. PARCELL USE THE COMPARABLE EARNINGS APPROACH TO ESTIMATE VERIZON NW'S COST OF EQUITY?

A. Mr. Parcell estimates Verizon NW's cost of equity using the comparable earnings approach in three steps. First, he calculates the average earned rate of return on book equity for his telecommunications holding company group, his natural gas distribution group, and the S&P 500 over the period 1992 – 2001. Second, he calculates the average

[15] The 5.07% risk-free rate and 1.03 beta in these calculations are obtained from Mr. Parcell's Exhibit __(DP-10), p. 1 of 2.

market-to-book ratio for each of these groups to evaluate "investor acceptance of these returns." (Parcell at page 26.) Third, he uses his judgment to estimate a rate of return on book equity that, in his opinion, will produce a market-to-book ratio equal to 1.0.

Q. WHAT ARE THE AVERAGE EARNED RATES OF RETURN ON BOOK EQUITY FOR MR. PARCELL'S TELECOMMUNICATIONS GROUP, NATURAL GAS DISTRIBUTION GROUP, AND THE S&P 500 OVER THE PERIOD 1992 – 2001?

A. Mr. Parcell reports average earned rates of return on book equity for his telecommunications holding company group in the range 16.3% to 18.6%; for his natural gas distribution group, 11.0% to 11.1%; and for the S&P 500, 12.7% to 14.5%.

Q. DOES MR. PARCELL ALSO REPORT FORECASTED RATES OF RETURN ON EQUITY FOR HIS TELECOMMUNICATIONS GROUP AND HIS GAS DISTRIBUTION GROUP?

A. Yes. On page 27 of his testimony, Mr. Parcell reports forecasted rates of return on book equity for the telecommunications group in the range 12.6% to 14.5%, and for the gas distribution company group, in the range 11.0% to 11.4%.

Q. WHAT COST OF EQUITY DOES MR. PARCELL RECOMMEND FOR VERIZON NW'S TELECOMMUNICATIONS OPERATIONS BASED ON HIS COMPARABLE EARNINGS ANALYSIS?

A. Based on his comparable earnings analysis, Mr. Parcell recommends a cost of equity for Verizon NW's telecommunications operations in the range 10% – 11%.

Q. HOW DOES MR. PARCELL DEFEND RECOMMENDING A COST OF EQUITY OF ONLY 10% TO 11% BASED ON HIS COMPARABLE EARNINGS ANALYSIS, WHEN THE AVERAGE COMPARABLE RETURNS ON HIS TELECOMMUNICATIONS AND S&P 500 GROUPS RANGE FROM 12.6% TO 18.6%?

A. Mr. Parcell justifies recommending a rate of return on equity for Verizon NW in the range 10% to 11%, even though the average earned returns on book equity for his telecommunications and S&P 500 groups are in the range 12.6% to 18.6%, because he believes that: (1) market-to-book ratios in excess of 1.0 for the telecommunications and S&P 500 companies indicate that these companies are earning more than their costs of equity; and (2) a rate of return on equity in the range 10% to 11% will produce a market-to-book ratio of 1.0 for his natural gas distribution company group. On page 29 of his testimony, Mr. Parcell states:

> Based on the recent earnings and market-to-book ratios, I believe the comparable earnings analysis indicates that the cost of equity for local exchange operations is 10-11 percent. In reaching this conclusion, I relied primarily on the returns and market to book ratios of the natural gas distribution industry. The extremely high market to book ratios of the telecommunications group and S&P 500 group make it very difficult to evaluate past and projected return levels. Recent returns for the natural gas distribution industry of 11.0-11.1 percent have resulted in market-to-book ratios of 160 or over. Prospective returns of 11.0-11.4 percent have been accompanied by market-to-book ratios of 166 percent. As a result, it is apparent that returns below this level would result in market-to-book

ratios of well above 100 percent. An earned return of 10-11 percent or less should thus result in a market-to-book ratio of at least 100 percent.

Q. WHAT IS THE BASIC UNDERLYING ASSUMPTION OF MR. PARCELL'S COMPARABLE EARNINGS ANALYSIS?

A. Mr. Parcell's comparable earnings analysis is based on his underlying assumption that a market-to-book ratio above 1.0 is evidence that a company is earning more than its cost of equity, and a market-to-book ratio below 1.0 indicates that a company is earning less than its cost of equity.

Q. DO YOU AGREE WITH MR. PARCELL'S ASSUMPTION THAT A MARKET-TO-BOOK RATIO IN EXCESS OF 1.0 INDICATES THAT A COMPANY IS EARNING MORE THAN ITS COST OF EQUITY?

A. No. There are many examples of companies with market-to-book ratios in excess of 1.0 that are clearly earning less then their costs of equity.

Q. IS IT HIGHLY UNUSUAL FOR A COMPANY THAT IS CLEARLY EARNING LESS THAN ITS COST OF COMMON EQUITY CAPITAL TO HAVE A MARKET PRICE EXCEEDING THE BOOK VALUE OF ITS SHARES?

A. No. It is common for companies whose accounting rates of return on book equity are less than their costs of common equity capital to have market prices exceeding the book values of their shares.

Q. DO YOU HAVE ANY EVIDENCE THAT FIRMS WITH MARKET TO BOOK RATIOS GREATER THAN 1.0 MAY NOT BE EARNING RETURNS IN EXCESS OF THEIR COSTS OF EQUITY?

A. Yes. Companies with negative rates of return on equity are clearly not earning more than their costs of equity, because a company's cost of equity must be positive. Yet the Value Line universe of firms has 164 companies whose most recently reported rates of return on equity are negative and whose market-to-book ratios are greater than 1.0 (see Exhibit No. ____ (JHV-10)). The average market-to-book ratio for these companies is 3.23, and their average rate of return on book equity is *negative* 16.68%. Clearly, a company whose rate of return on common equity is negative cannot be earning more than its cost of equity capital. Yet, the average market-to-book ratio for this group of companies with negative earnings is approximately the same as the market-to-book ratio for the telecommunications holding company group which Mr. Parcell claims is earning more than its cost of equity.

In addition, as shown on Exhibit No. ____ (JHV-11), the Value Line universe of firms also has 201 companies that have market-to-book ratios above 1.0 and rates of return on book equity in the range 0 percent to 6% (6% is the approximate current yield on A-rated utility bonds). The average earned rate of return on equity for these companies is 3.58%, and the average market-to-book ratio, 2.41. Clearly these firms have market-to-book ratios greater than 1.0 even though they are earning significantly less than the return investors can earn on a less risky bond investment and therefore less than their costs of equity.

Q. ARE THERE ANY TELECOMMUNICATIONS SERVICE COMPANIES THAT HAVE MARKET-TO-BOOK RATIOS GREATER THAN 1.0 BUT THAT ARE CLEARLY EARNING LESS THAN THEIR COST OF EQUITY?

A. Yes. For example, Sprint Corp. has a market-to-book ratio of 2.56 and a rate of return on book equity of 2.28%; Telephone & Data Systems has a market-to-book ratio of 1.40 and a rate of return on book equity of 2.4%; and U.S. Cellular has a market-to-book ratio of 1.55 and a rate of return on book equity of 3.0%. Contrary to Mr. Parcell's assumption, these companies are clearly earning significantly less than their costs of equity, even though they have market-to-book ratios exceeding 1.0.

Q. HOW MANY COMPANIES ARE THERE IN THE VALUE LINE UNIVERSE OF COMPANIES WHICH YOU HAVE EXAMINED?

A. At December 2004, Value Line reports a market-to-book ratio for 1,585 companies.

Q. OUT OF THESE 1,585 COMPANIES, HOW MANY HAVE MARKET-TO-BOOK RATIOS OF LESS THAN 1?

A. Out of the 1,585 companies, only 85 have market-to-book ratios of less than 1.0.

Q. IN A COMPETITIVE ECONOMY SUCH AS OURS, IS IT LIKELY THAT ONLY 85 OUT OF 1,585 COMPANIES WOULD BE EARNING LESS THAN THEIR COSTS OF EQUITY, WHILE THE REMAINING COMPANIES ARE EARNING IN EXCESS OF THEIR COSTS OF EQUITY?

A. No. In a competitive economy such as ours, one would expect the average company to earn exactly its cost of equity. Thus, roughly half of the companies would be earning more than their costs of equity, and half earning less than their costs of equity.

Q. WHY DO THE VAST MAJORITY OF COMPANIES IN THE VALUE LINE UNIVERSE HAVE MARKET-TO-BOOK RATIOS GREATER THAN 1.0?

A. There are at least two reasons why the vast majority of companies in the Value Line universe have market-to-book ratios greater than 1.0. First, accounting rules require that, for book value purposes, most assets be measured in terms of the historical cost of these assets. In a world of positive inflation, the current market value of many assets is likely to exceed book value. Land purchased in 1920, for example, is likely to be worth considerably more today than the value reported on the firm's balance sheet. Second, accounting rules require companies to write off the value of their assets when the market value of the asset sinks below book value. However, accounting rules do not allow companies to increase the book value of assets when the market value of these assets exceeds book value. Because of the asymmetrical nature of accounting rules, the value of assets reported on a company's books tends to be less than its market value.

Q. WHAT CONCLUSIONS DO YOU DRAW FROM THESE LONG LISTS OF COMPANIES THAT HAVE NEGATIVE OR LOW RATES OF RETURN ON BOOK EQUITY AND MARKET-TO-BOOK RATIOS IN EXCESS OF 1.0?

A. I conclude that Mr. Parcell erred in rejecting the actual earned rates of return on book equity of his telecommunications group, his local natural gas distribution group, and his

S&P 500 group because their market-to-book ratios exceeded 1.0. As shown by the long list of companies with market-to-book ratios greater than 1.0, but negative or low earned rates of return on book equity, contrary to Mr. Parcell's assumption, a market-to-book ratio greater than 1.0 does not indicate that a company is earning more than its cost of equity.

Q. WHAT COST OF EQUITY SHOULD MR. PARCELL HAVE RECOMMENDED BASED ON HIS COMPARABLE EARNINGS ANALYSIS?

A. Mr. Parcell should have recommended a cost of equity in the range 12.6% to 18.6%, with a midpoint of 15.6%. As noted above, the rates of return on equity for the companies that are most comparable to Verizon NW, Mr. Parcell's telecommunications and S&P 500 groups, were in the range 12.6% to 18.6% for the entire period 1992 – 2001.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.