Exhibit No. ___ T (DCP-1T)
Dockets UE-090134/UG-090135
and UG-060518 (consolidated)
Witness: David C. Parcell

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,	)	**DOCKETS UE-090134 and UG-090135** ***(consolidated)***
Complainant,	)	
v.	)	
AVISTA CORPORATION, d/b/a AVISTA UTILITIES,	)	
Respondent.	)	
. . . . .	)	
In the Matter of the Petition of	)	**DOCKET UG-060518**
AVISTA CORPORATION, d/b/a AVISTA UTILITIES,	)	**(*consolidated*)**
For an Order Authorizing Implementation of a Natural Gas Decoupling Mechanism and to Record Accounting Entries Associated With the Mechanism.	)	
. . . . .	)	

TESTIMONY OF

DAVID C. PARCELL

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Cost of Capital

August 17, 2009

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LIST OF EXHIBITS

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is David C. Parcell. I am President and Senior Economist of Technical Associates, Inc. My business address is Suite 601, 1051 East Cary Street, Richmond, Virginia 23219.

Q. Please summarize your educational background and professional experience.

A. I hold B.A. (1969) and M.A. (1970) degrees in economics from Virginia Polytechnic Institute and State University (Virginia Tech) and a M.B.A. (1985) from Virginia Commonwealth University. I have been a consulting economist with Technical Associates since 1970. I have provided cost of capital testimony in public utility ratemaking proceedings dating back to 1972. In connection with this, I have previously filed testimony and/or testified in over 430 utility proceedings before some 40 regulatory agencies in the United States and Canada. I have filed testimony in several proceedings in Washington in recent years, including the 2007 Avista rate proceedings. Exhibit No. ___(DCP-2) provides a more complete description of my education and relevant work experience.

Q. What is the purpose of your testimony in this proceeding?

A. I have been retained by the Staff of the Washington Utilities and Transportation Commission ("UTC") to evaluate the cost of capital aspects of the filing of Avista

Corp. ("Avista" or "the Company") in these dockets. I have performed independent studies and am making recommendations of the current cost of capital for Avista.

Q. Have you prepared an exhibit in support of your testimony?

A. Yes, I have. Exhibit No. ___ (DCP-2) through Exhibit No. ___ (DCP-15) represents the analyses that support my cost of capital recommendation. This exhibit was prepared either by me or under my direction. The information contained in this exhibit is correct to the best of my knowledge and belief.

II. RECOMMENDATIONS AND SUMMARY

Q. What is your overall cost of capital recommendation in this proceeding?

A. My overall cost of capital recommendation for Avista is 8.13 percent, as is shown on Exhibit No. __ (DCP-3) and can be summarized as follows:

	Percent	Cost	Return
Total Debt	54.6%	6.57%	3.59%
Common Equity	45.4%	9.50-10.50%	4.31-4.77%
Total	100.00%		7.90-8.35%
			8.13% mid-point Recommendation

Q. Please compare your 8.13 percent estimate to the Company's proposed cost of capital.

A. Avista requests a return on common equity of 11.0 percent and overall rate of return of 8.68 percent. My cost of capital recommendation differs from Avista's request in

two respects. First, my 10.0 percent cost of equity differs from Avista's 11.0 percent request.

Second, Avista is requesting a *pro forma* capital structure. It estimates that the Company's equity ratio will be 47.51 percent at December 31, 2009. I am proposing a 45.4 percent equity ratio based upon the actual (December 31, 2008) capital structure of Avista. As I explain later, a 45.4 percent equity ratio is more appropriate to use than the projected capital structure. In addition, the Company's actual year-end capital structure is more consistent with the capital structures of other publicly-traded combination electric and gas companies.

Q. Please summarize your cost of capital analyses and related conclusions for Avista.

A. This proceeding is concerned with Avista's regulated electric and natural gas distribution utility operations in the State of Washington. My analyses are concerned with the Company's total cost of capital for its regulated operations. The first step I undertake in the determination of Avista's cost of capital is the development of an appropriate capital structure. As I just mentioned, I recommend use of the Company's actual December 31, 2008 capital structure, with a 45.4 percent equity ratio.

The second step is a determination of the embedded cost rate of debt. I use the cost of 6.57 percent, as shown in the Company's application.

The third step is the estimation of the cost of common equity. I employ three recognized methodologies to estimate the cost of equity for Avista. I apply each of these methodologies to two groups of proxy utilities. These three methodologies and my findings are:

Methodology	Range
Discounted Cash Flow	9.8-10.9%
Capital Asset Pricing Model	8.1-8.4%
Comparable Earnings	9.5-10.5%

Based upon these analyses, I conclude that the cost of common equity for Avista is within a range of 9.5 percent to 10.5 percent. For purposes of this case, I recommend that the Commission authorize a 10.0 percent return on equity, the mid-point of my estimated range.

Combining these three elements into a weighted cost of capital results in an overall rate of return of 8.13 percent, the mid-point of a range of 7.90 percent to 8.35 percent.

Q. Are you aware that, in recent orders, the UTC indicated that it expects cost of capital witnesses to demonstrate that any change in return on equity (from that determined in the most recent case for the same Company) be supported by testimony describing the nexus between the changed circumstances in the capital markets and the recommendation to change the return on equity?

A. Yes, I am. I have reviewed the UTC's decision in Dockets UE-060266 and UG-060267. In that order, the UTC stated at paragraph 84: "Little of the extensive

testimony offered on this subject focuses squarely on what might have changed in the capital markets or at PSE in the last 18 months to justify a change in the ROE set by the Commission in February of 2005."

Q. How have capital costs changed since the last Avista rate order to justify a decrease in the Company's authorized return on equity?

A. Over the past year, the US and global economies, as well as capital markets, have been in a depressed state. Following the collapse of the sub-prime mortgage market in 2007, the economy fell into a recession (probably the most serious recession since the Great Depression of the 1930s) which persists in mid-2009. Beginning in September of 2008, and lasting through March of 2009, the capital markets practically came to a halt, as investors shied away from stocks and corporate bonds and invested only in the safest of investments – U.S. Treasury securities. As a result of this "flight to safety", rates on U.S. Treasuries fell to unprecedented lows (reflecting an influx of capital into these "safe" investments), while stocks fell dramatically and corporate bond yields rose (reflecting a reluctance of investors to own these securities).

It should be emphasized that the "flight to safety" reflected investor pessimism about the prospects for the economy and corporate earnings. In fact, corporate earnings in 2008 and 2009 to date have been much lower than prior years, with numerous bankruptcies and the demise of many long-standing and venerable firms. This also reflects a decline in the cost of capital, as evidenced by the demise

of corporate profits, reductions in dividends and lower yields on "safe" securities, such as U.S. Treasuries. In addition, yields on other investments, such as bank CDs, have declined to low levels. This is also a demonstration of the decline in the opportunity cost of capital.

Q. Please explain what you mean by "opportunity cost of capital" and how that relates to a Commission-determined return on common equity for ratemaking purposes?

A. The opportunity cost principle provides that a utility and its investors should be afforded an opportunity (not a guarantee) to earn a return commensurate with returns they could expect to achieve on investments of similar risk. The opportunity cost principle is consistent with the fundamental premise, on which regulation rests, namely, to act as a surrogate for competition.

In addition, the opportunity cost principle implies that consideration should be given to returns on other types of investments, such as CDs and stock returns. The fact that these are lower currently implies that these investments have lower opportunity costs.

Q. Please explain how the recent and current economic and financial crises impact the cost of equity for Avista.

A. This decline in the opportunity cost of capital affects the cost of capital for Avista, and therefore it should be reflected in the determination of Avista's cost of capital.

Indeed, investors are currently experiencing lower returns on their investments, partly as a result of reduced and/or eliminated dividends and lower rates on government securities and bank CD rates. Stocks of regulated utilities such as Avista are not immune to this market impact.

Q. Please explain why the financial crisis does not increase the cost of capital for utilities such as Avista.

A. First, it must be emphasized that depressed economic conditions and the financial crisis affect virtually all sectors of the economy – households, small businesses, larger commercial and industrials – and, in most cases, the impact on those sectors is greater than is the case for Avista. This is because Avista is a regulated utility that sells a product that has few close substitutes. As such, Avista and utilities in general are partially, if not largely, insulated from the impacts of depressed economic conditions.

Second, the major impact of such a significant recession will be to depress the profits of most enterprises. As a result, it is to be expected that capital costs will decrease if a significant recession continues. The decline in the CAPM costs, which I describe later, demonstrates this. In short, there is no justification for increasing the profit level of a regulated utility such as Avista at the same time that other enterprises are experiencing lower profits.

Third, the United States and global governments have, and are taking extraordinary measures to avoid, a further worsening of the current market

circumstance. Most of these measures are designed to put liquidity into the credit markets and make credit more accessible again, and, in the process, restore more confidence to the financial markets. Avista, like other corporations, should benefit from these measures. Likewise, Avista's ratepayers should not be expected to incur high rates, through a higher cost of capital, resulting from these measures.

Q. Based upon these trends and the UTC's stated preference to track cost of equity changes to capital market changes, what is the most appropriate cost of equity for Avista at this time?

A. Given the fact that capital opportunity costs have generally declined from the time Avista's last return on equity was established by the UTC, as well as the declining economic environment in the U.S., the Commission should set Avista's cost of equity at no more than 10.0 percent. This is near the lower end of my DCF findings (the UTC prefers DCF), and it is consistent with the findings of my Comparable Earnings ("CE") analyses. I believe a 20 basis point reduction from the 10.2 percent cost of equity the Commission determined in the 2007 Avista rate case is appropriate, given changes in the capital markets since that case was decided.

III. ECONOMIC/LEGAL PRINCIPLES AND METHODOLOGIES

Q. What are the primary economic and legal principles that establish the standards for determining a fair rate of return for a regulated utility?

A. Public utility rates are normally established in a manner designed to allow the recovery of their costs, including capital costs. This is frequently referred to as "cost of service" ratemaking. Traditionally, the rates for regulated public utilities have been primarily established using the "rate base - rate of return" concept. Under this method, utilities are allowed to recover a level of operating expenses, taxes, and depreciation deemed reasonable for rate-setting purposes, and are granted an opportunity to earn a fair rate of return on the assets utilized (i.e., rate base) in providing service to their customers.

The rate base is derived from the asset side of the utility's balance sheet as a dollar amount, and the rate of return is developed from the liabilities/owners' equity side of the balance sheet, as a percentage. The revenue impact of the cost of capital is thus derived by multiplying the rate base by the rate of return (including income taxes).

The rate of return is developed from the cost of capital, which is estimated by weighting the capital structure components (i.e., debt, preferred stock, and common equity) by their respective percentages in the appropriate capital structure and multiplying these ratios by the respective cost rates of capital. This is also known as the "weighted cost of capital."

Technically, "fair rate of return" is a legal and accounting concept that refers to an *ex post* (after the fact) earned return on an asset base, while the cost of capital is an economic and financial concept which refers to an *ex ante* (before the fact)

expected or required return on a liability base. In regulatory proceedings, however, the two terms are often used interchangeably, as I have done in my testimony.

From an economic standpoint, if a utility earns a fair rate of return, that normally means that if the utility is efficient and economically managed, it will be able to maintain its financial integrity, attract capital, and earn a return comparable to that earned by similar risk investments. These concepts are derived from economic and financial theory and are generally implemented using financial models and economic concepts.

Although I am not a lawyer, and I do not offer a legal opinion, my testimony is based on my understanding that two United States Supreme Court decisions provide the main standards for a fair rate of return. The first decision is *Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923). In this decision, the Court stated:

> What annual rate will constitute **just compensation** depends upon many circumstances and must be **determined by** the **exercise of fair and enlightened judgment**, having regard to all relevant facts. A **public utility** is entitled to such rates as will permit it to **earn a return** on the value of the property which it employs for the convenience of the public equal to that **generally being made** at the same time and in the same general part of the country on **investments in other business undertakings** which are **attended by corresponding risks and uncertainties**; but it has no **constitutional right to profits** such as are realized or anticipated in **highly profitable enterprises or speculative ventures**. The **return** should be reasonably sufficient to assure confidence in the **financial soundness** of the utility, and should be adequate, **under efficient and economical management**, to maintain and **support its credit** and **enable it to raise the money** necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for

> investment, the money market, and business conditions generally. **[Emphasis added.]**

It is my understanding that the *Bluefield* decision established the following standards for a fair rate of return: comparable earnings, financial integrity, and capital attraction, and notes the changing level of required returns over time, and assumes that the utility is operated in an efficient manner.

The second decision is *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1942). In that decision, the Court stated:

> The rate-making process under the [Natural Gas] Act, i.e., the fixing of 'just and reasonable' rates, involves a **balancing** of the **investor** and **consumer interests** . . . . From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the **return** to the equity **owner** should be **commensurate** with **returns** on **investments** in **other enterprises having corresponding risks**. That return, moreover, should be sufficient to assure confidence in the **financial integrity** of the enterprise, so as to **maintain its credit** and to **attract capital**. **[Emphasis added.]**

The *Hope* case is also frequently credited with establishing the "end result" doctrine, which maintains that the methods utilized to develop a fair return are not important as long as the end result is reasonable.

The three economic and financial parameters in the *Bluefield* and *Hope* decisions - comparable earnings, financial integrity, and capital attraction - reflect the economic criteria encompassed in the "opportunity cost" principle of economics.

Q. How can these parameters be employed to estimate the cost of capital for a utility?

A. Neither the courts nor economic/financial theory have developed exact and mechanical procedures for precisely determining the cost of capital. This is the case because the cost of capital is an opportunity cost and is prospective-looking, which means that it must be estimated.

There are several different methodologies, using different sets of market and financial data, to assist in estimating the cost of equity capital. These include the Discounted Cash Flow ("DCF"), Capital Asset Pricing Model ("CAPM"), Comparable Earnings ("CE") and Risk Premium ("RP") methods. Each of these methods (or models) are different, but, if properly employed, can be used in estimating the cost of common equity for a regulated utility.

Q. Which methods do you employ in your analyses of the cost of common equity of Avista in this proceeding?

A. I utilize three methodologies to estimate Avista's cost of common equity: the DCF, CAPM, and CE methods. I have not employed a RP model in my analyses, although it should be noted that the CAPM is a version of the RP methodology. I describe each of these methodologies in more detail later in my testimony.

IV. GENERAL ECONOMIC CONDITIONS

Q. Are economic and financial conditions important in determining the cost of capital for Avista?

A. Yes. The costs of capital for both fixed-cost (debt and preferred stock) components and for common equity, are determined in part by current and prospective economic and financial conditions. At any given time, each of the following factors has an influence on the costs of capital: the level of economic activity (i.e., growth rate of the economy), the stage of the business cycle (i.e., recession, expansion, or transition), the level of inflation, and expected economic conditions. My understanding is that this position is consistent with the *Bluefield* decision, where the Court noted: "[a] rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally."

Q. What indicators of economic and financial activity have you evaluated in your analyses?

A. I have examined several sets of economic statistics from 1975 to the present. I chose this time period because it permits the evaluation of economic conditions over three full business cycles plus the current cycle to date, allowing for an assessment of changes in long-term trends. This period also approximates the beginning and continuation of active rate case activities by public utilities.

A business cycle is commonly defined as a complete period of expansion (recovery and growth) and contraction (recession). A full business cycle is a useful and convenient period over which to measure levels and trends in long-term capital costs because it incorporates the cyclical (i.e., stage of business cycle) influences, and thus, permits a comparison of structural (or long-term) trends.

Q. Please describe the timeframe of the three prior business cycles and the most recent cycle.

A. The three prior complete cycles and most recent cycle cover the following periods:

Business Cycle	Expansion Cycle	Contraction Period
1975-1982	Mar. 1975-July 1981	Aug. 1981-Oct. 1982
1982-1991	Nov. 1982-July 1990	Aug. 1990-Mar. 1991
1991-2001	Apr. 1991-Mar. 2001	Apr. 2001-Nov. 2001
Current	Dec. 2001-Nov. 2007	Dec. 2007-Present

Source: National Bureau of Economic, Research, "Business Cycle Expansions and Contractions."

Q. Do you have any general observations concerning the recent trends in economic conditions and their impact on capital costs over this broad period?

A. Yes, I do. As I will describe below, until the end of 2007, the U.S. economy had enjoyed general prosperity and stability over the period since the early 1980s. This period had been characterized by longer economic expansions, relatively tame contractions, relatively low and declining inflation, and declining interest rates and other capital costs.

Over the past two years, on the other hand, the economy has declined significantly, initially as a result of the 2007 collapse of the "sub-prime" mortgage

market and the related liquidity crises in the financial sector of the economy. Subsequently, this financial crisis intensified with a more broad-based decline, initially based on a substantial increase in petroleum prices and a dramatic decline in the U.S. financial sector, culminating with the collapse and/or bailouts of a significant number of venerable institutions such as Bear Stearns, Lehman Brothers, Merrill Lynch, Freddie Mac, Fannie Mae, AIG and Wachovia. The recession has also witnessed the demise of national entities, such as Circuit City, and the declared bankruptcy of automotive manufacturers, such as Chrysler and General Motors.

This crisis has been described as the worst financial crisis since the Great Depression. The U.S. and other governments are in the process of implementing unprecedented actions to attempt to correct or minimize its scope and effects; as of this time, the consequences of these governmental initiatives are unclear.

There is also a universal acceptance that the economy is in a serious recession. The impacts of a severe recession on cost of capital is likely to be characterized by lower utility growth and declining capital costs due to a decline in corporate profits and expected earnings growth. Clearly, this is not an environment in which it is sensible or appropriate to increase the profitability of a regulated company such as Avista.

Q. Please describe recent and current economic and financial conditions and their impact on the costs of capital.

A. My Exhibit No. ____ (DCP-4), shows several sets of relevant economic data for the time period: pages 1 and 2 contain general macroeconomic statistics; pages 3 and 4 show interest rates; and pages 5 and 6 contain financial market statistics.

Pages 1 and 2 show that the U.S. economy ended 2007 as the sixth year of an economic expansion but, as indicated previously, it was then entering a decline. This is indicated by the growth in real (i.e., adjusted for inflation) Gross Domestic Product ("GDP"), industrial production, and the increase in the unemployment rate, which is currently approaching 10 percent on a national basis.

The rate of inflation is also shown on pages 1 and 2. As is reflected in the Consumer Price Index ("CPI"), for example, inflation rose significantly during the 1975-1982 business cycle, and reached double-digit levels in 1979-1980. The rate of inflation declined substantially in 1981, and remained at or below 6.1 percent during the 1983-1991 business cycle. Since 1991, the CPI has been 4.1 percent or lower. The 0.1 percent rate of inflation in 2008 was the lowest level of the past thirty years. This is indicative of virtually no inflation, which should also be reflective of lower capital costs.

Q. What have been the trends in interest rates over this time period?

A. Pages 3 and 4 show several series of interest rates. Rates rose sharply to record levels in 1975-1981 when the inflation rate was high and generally rising. Interest rates declined substantially in conjunction with inflation rates throughout the

remainder of the 1980s and throughout the 1990s. Interest rates declined even further from 2000-2005 and generally recorded their lowest levels since the 1960s.

During the past several years and up until the later half of 2008, long-term interest rates remained low by historic standards. Most recently, the Federal Reserve has lowered the Federal Funds rate (i.e., short-term rate) on several occasions; currently it is 0.25 percent, an all-time low. The fourth quarter of 2008 and first quarter of 2009 experienced a pronounced decline in short-term rates and long-term U.S. Treasury Securities yields and an increase in corporate bond yields, creating a "spread" between government and corporate bond yields unprecedented in recent financial history. This reflects the "flight to safety" I have mentioned.

On the other hand, I note that there is recent evidence that investors appear to have an appetite for accepting some risk again, as stock prices have improved and there has been a tightening in spreads between corporate debt vs. U.S. Treasury debt.

Q. What does this exhibit show for the trends in common share prices?

A. Pages 5 and 6 show several series of common stock prices and ratios. These ratios indicate that share prices were essentially stagnant during the high inflation/interest rate environment of the late 1970s and early 1980s. On the other hand, the 1983-1991 business cycle and the most recent cycles witnessed a significant upward trend in stock prices. Since the beginning of the current financial crisis, on the other hand, stock prices have declined precipitously and have been very volatile. Stock prices in 2008 and early 2009 were down significantly from 2007 levels, reflecting the

financial/economic crises. Beginning in the second quarter of 2009, prices have recovered somewhat but still remain well below the levels prevailing prior to the current recession.

Q. What conclusions should the Commission draw from your discussion of economic and financial conditions depicted in your data?

A. It is apparent that recent economic and/or financial circumstances are radically different from any that have prevailed since at least the 1930s. The recent deterioration in stock prices and the decline in U.S. Treasury bond yields, and the increase in corporate bond yields reflected the "flight to safety," describes the reluctance of investors to purchase common stocks and corporate bonds while moving their money into the very safe government bonds. On the other side of this flight to safety is the negative perceptions of the recent decline, which has significantly reduced the value of most retirement accounts, investment portfolios and other assets; i.e., a decline in investor expectations of returns, including stock returns.

Q. Given the recent uncertainty in the capital markets, why isn't it reasonable to conclude that the cost of capital for equities has increased?

A. This "flight to safety" should not be interpreted to reflect an increase in the cost of capital. Rather, it more properly reflects an "availability of capital" since investors have recently been unwilling to invest in any assets other than U.S. Treasury

securities. As I noted previously, the opportunity cost of capital, as measured by the recent and current returns of unregulated firms, has been the lowest in recent memory. Clearly, this cannot be claimed to reflect an increase in the cost of capital for a regulated firm such as Avista.

V. AVISTA'S OPERATIONS AND RISKS

Q. Please summarize Avista and its operations.

A. Avista is a public utility that generates and delivers electricity and natural gas through its generation, transmission, and distribution systems to customers in Washington, Oregon, and Idaho. Avista, in its present form, is a public utility that owns two primary subsidiaries:

- Avista Utilities - an operating division of Avista that delivers electricity and natural gas in Washington, Oregon, and Idaho; and,
- Advantage IQ - a provider of facility information and cost management services.

Until 2007, Avista had an unregulated subsidiary (Avista Energy, Inc.) that was engaged in energy marking. Avista Energy was sold in 2007.

Q. What are the recent segment ratios of Avista's operations?

A. These are shown on my Exhibit No. ___(DCP-5), which indicates the following ratios for each Avista business segment:

Year	Operating Revenues	Net Income	Capital Expenditures	Assets
2006	84%	79%	98%	
2007	91%	114%*	98%	94%
2008	94%	95%	98%	95%

* Denotes negative net income for sum of all other segments.

This demonstrates that the Avista Utilities segment accounts for the vast majority of Avista's operations. This indicates that the utility operations of the Company dominate its activities, especially following the sale of the Avista Energy assets in 2007.

Q. What are the current debt ratings of Avista?

A. The present debt ratings of Avista are shown on page 1 of Exhibit No. ___(DCP-6) and are as follows:

	Secured	Unsecured
Fitch	BBB	BBB-
Moody's	Baa1	Baa3
Standard & Poor's	BBB+	BBB-

Q. What have been the trends in Avista's bond ratings?

A. This is shown on page 2 of Exhibit No. ___(DCP-6), and the trend proves two points. First, Avista experienced a decrease in its credit ratings in 2001. As I indicate below, the two primary reasons for the 2001 downgrades were the 2000 to 2001 "western energy crises," which led to Avista incurring large deferred energy accounts, and its non-regulated operations. However, the Company's credit ratings were raised in 2007 and 2008, primarily due to the sale of Avista Energy.

Q. What comments did the rating agencies make in connection with these credit rating changes?

A. The rating agencies concluded that the 2000 reductions in Avista's credit ratings were largely due to the Company's non-regulated operations. For example, in July 2000, S&P downgraded Avista's debt to BBB from BBB+. In a July 31, 2000, RatingsDirect on Avista, S&P stated:

> The rating actions reflect a weakened financial profile resulting from substantial power trading losses, accompanied by increased business risk by the company's regulated utility operations. In addition, continued funding needs related to Avista's nonregulated ventures and a change in the company's nonregualted nationwide trading strategy during 1999 have contributed to increased risk in the company's business profile.

More recently, S&P increased Avista's outlook to "positive" in connection with the sale of Avista Energy. This reflects the rating agencies' recognition that the elimination of Avista's non-regulated operations would reduce the Company's risk exposure. In an April 17, 2007, RatingsDirect, S&P stated:

> Standard & Poor's Ratings Services revised to positive the outlook on Avista Corp.'s rating following the company's announcement today that it intends to sell the assets of Avista Energy, its trading and marketing interest, to CoralEnergy Holdings, L.P. a subsidiary of Shell. The sale, for the net book value of the trading portfolio, plus adjustments for fixed assets and natural gas inventory, is scheduled to close at the end of the second quarter or early in the third quarter of this year. If completed, the company's exit from the trading business is expected to free up about $180 million in cash that is currently dedicated to the these operations. The company has indicated that it will use some of the funds to reduce debt at Avista Utilities.
>
> An **exit** from **energy and trading** operations is expected to **reduce** Avista Corp.'s consolidated business **risks** and **could result in an improvement in the company's business profile score**. Avista's current business profile score is '6' (satisfactory) on a 10-point scale

> where '1' is excellent. Absent Avista Energy, consolidated operations are characterized by generally stable regulatory environments, low-cost hydroelectric generation, competitive rates, and operating and regulatory diversity provided by combined electric and gas utility operations in Washington, Idaho, and Oregon. [Emphasis added]

Moody's upgraded Avista's credit rating from Ba1 to Baa3 on December 20, 2007. As was the case for S&P, Moody's upgrade reflected the proposed sale of Avista Energy and the corresponding reduction in the Company's risk. In its upgrade announcement, Moody's stated:

> The upgrades of Avista's ratings primarily reflect the sale of its unregulated subsidiary, Avista Energy, Inc., and the use of sale proceeds initially to reduce debt, in line with our expectations. "Historically, it has been Moody's opinion that Avista needed to maintain stronger credit metrics than might otherwise be necessary for its former ratings in light of its higher degree of business risk; however, without Avista Energy, the company's current and expected key credit metrics should be adequate to support a Baa3 senior unsecured rating, according to Moody's Global Rating Methodology for Regulated Electric Utilities," said Kevin Rose, Vice President and Senior Analyst.
>
> "The rating actions also take into account the recent approval by the Washington Utilities and Transportation Commission (WUTC) of a settlement agreement to resolve Avista's latest general rate case, which we believe provides Avista with reasonable rate relief and an improved opportunity to bolster the utility division's earned returns on its investments in the Washington jurisdiction," said Rose.

Q. How do Avista's bond ratings compare to other electric and combination utilities?

A. As I indicated in a previous answer, Avista has triple B bond ratings on both its secured debt and on its unsecured debt. Below is a table depicting the bond rating

data of the 60 electric utilities and combination gas/electric utilities covered by AUS Utility Reports:

Moody's Rating	Number of Companies	S&P Rating	No. of Companies
Aa2	1		
Aa3	2	AA-	2
A1	4	A+	1
A2	8	A	8
A3	12	A-	18
Baa1	10*	BBB+*	9
Baa2	15	BBB	11
Baa3	1	BBB-	5
Ba or less	1	BB	1
NR	6	NR	5

* Avista's rating.

This comparison indicates that Avista's current ratings are similar to the most common rating categories of combination electric utilities.

VI. CAPITAL STRUCTURE AND COST OF DEBT

Q. What is the importance of determining a proper capital structure in a regulatory framework?

A. A utility's capital structure is important because the concept of rate base – rate of return regulation requires that a utility's capital structure be determined and utilized in estimating the total cost of capital. Within this framework, it is proper to ascertain whether the utility's capital structure is appropriate relative to its level of business risk and relative to other utilities.

As I discussed in Section III of my testimony, the purpose of determining the proper capital structure for a utility is to help ascertain its capital costs. The rate base – rate of return concept recognizes the assets employed in providing utility services and provides for a return on these assets by identifying the liabilities and common equity (and their cost rates) used to finance the assets. In this process, the rate base is derived from the asset side of the balance sheet and the cost of capital is derived from the liabilities/owners' equity side of the balance sheet. The inherent assumption in this procedure is that the dollar values of the capital structure and the rate base are approximately equal and the former is utilized to finance the latter.

The common equity ratio (i.e., the percentage of common equity in the capital structure) is the capital structure item which normally receives the most attention. This is the case because common equity: (1) usually commands the highest cost rate; (2) generates associated income tax liabilities; and, (3) causes the most controversy since its cost cannot be precisely determined.

Q. How have you evaluated the capital structure of Avista?

A. I have first examined the five year historic (2004-2008) capital structure ratios of Avista. These are shown on Exhibit No. ___ (DCP-7). Here are the common equity ratios for Avista between 2004 and 2008:

	Including S-T Debt	Excluding S-T Debt
2004	38.6%	40.0%
2005	38.4%	39.7%
2006	44.9%	45.0%
2007	46.2%	46.2%
2008	45.4%	51.3%

This chart indicates that Avista's common equity ratio has generally increased over the period. However, the increase in the equity ratio partly reflects the sale of Avista Energy and the use of a portion of these proceeds to reduce the debt of Avista. Stated differently, the lower equity ratios prior to 2007 reflected the unregulated operations of Avista.

Q. How do these equity ratios for Avista compare to those of investor-owned electric utilities?

A. Exhibit No. ___ (DCP-8) shows the average common equity ratios (including short-term debt in capitalization) for the two groups of electric utilities covered by AUS Utility Reports. These are:

Year	Electric	Combination Gas And Electric
2004	47%	43%
2005	44%	47%
2006	45%	44%
2007	47%	46%
2008	45%	43%

These average common equity ratios were higher than those of Avista prior to 2005 (i.e., when Avista had significant unregulated operations), but are generally similar to Avista's common equity ratio after the sale of Avista Energy.

Q. What capital structure ratios has Avista requested in this proceeding?

A. The Company requests use of a pro forma capital structure for the period ending December 31, 2009, as follows:

Total Term Debt	52.49%
Common Equity	47.51%

This capital structure contains a higher common equity ratio than the Company's actual ratio at December 31, 2008 (i.e., 45.4 percent). It is also higher than the average common equity ratios of publicly-traded combination electric/gas utilities.

Q. What capital structure should the Commission use to develop Avista's cost of capital in this proceeding?

A. I recommend that the Commission use Avista's actual capital structure ratios at the end of 2008, which is 45.4 percent common equity (and includes short-term debt). Even this 45.4 percent common equity ratio exceeds that of the industry-wide electric and combination electric utilities I just cited.

Q. What is your understanding of this Commission's recent policy on the proper capital structure to use to determine the cost of capital?

A. It is my understanding that the Commission's policy on determining a capital structure (as set forth in the 2005 PacifiCorp rate case – Docket Nos. UE-050684 and UE-050412) is to "balance safety (the preservation of investment quality credit ratings and access to capital) against economy (the lowest overall cost to attract and maintain capital)." The Commission noted that the appropriate capital structure can

either be the Company's historical capital structure, the projected capital structure, or a hypothetical capital structure.

Q. Is your recommended capital structure consistent with this policy?

A. Yes. The historical capital structure that I use reflects recent actual ratios and is consistent with the capital structures of other utilities. I also believe that the actual capital structure that I propose provides a "balance of safety and economy" as cited above.

Q. What is the cost rate of debt in the company's application?

A. The Company's filing cites the following cost rates:

Short-Term Debt	4.56%
Long-Term Debt	7.115%
Variable Rate Debt	2.07%
Total Debt	6.566%

I use this 6.57 percent total debt rate in my cost of capital analyses.

VII. SELECTION OF PROXY GROUPS

Q. How have you estimated the cost of common equity for Avista?

A. Avista is a publicly-traded company. Consequently, market information is available for Avista's common stock, and it is possible to directly apply cost of equity models using that information. However, it is generally preferable to analyze groups of

comparison or "proxy" companies as a substitute for Avista to determine its cost of common equity. The use of proxy companies is also preferable to use of only a single company, because a group of companies provides for a balancing or averaging of statistics for multiple companies deemed to be of similar risk to the subject company.

Therefore, I examined two proxy groups for comparison to Avista. I selected one group of electric utilities similar to Avista using the criteria listed on my Exhibit No. ___ (DCP-9). These criteria are as follows:

(1) Market Cap of $500 million to $5 billion;
(2) Electric revenues 50% or greater;
(3) Common equity ratio 40% or greater;
(4) Value Line Safety of 1, 2 or 3;
(5) S&P and Moody's bond ratings of BBB;
(6) S&P stock ranking of B or B+; and,
(7) Has paid dividends for 5 years.

I also include Avista in my proxy group because it meets these criteria and, as I noted earlier, Avista is now primarily a regulated utility.

Second, I conducted studies of the cost of equity for the "Utility Proxy Group" selected by Avista's witness Dr. Avera. It is my intention that, by using both my own proxy group and Dr. Avera's proxy group, the proxy group selection does not form a major controversy in the cost of equity process. I note, on the other hand, that I regard my proxy group to be more appropriate than Dr. Avera's proxy group

since my group was selected based on risk and operating characteristics more directly reflective of Avista.

VIII. DISCOUNTED CASH FLOW ANALYSIS

Q. What is the theory and methodological basis of the discounted cash flow model?

A. The discounted cash flow (DCF) model is one of the oldest, as well as the most commonly-used, models for estimating the cost of common equity for public utilities. It is my understanding that the UTC's policy is to place primary reliance on DCF results in setting the cost of capital for the utilities it regulates. The DCF model is based on the "dividend discount model" of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows.

The most common variant of the DCF model assumes that dividends are expected to grow at a constant rate. This variant of the dividend discount model is known as the constant growth or Gordon DCF model. In this framework cost of capital is derived by the following formula:

$$K = \frac{D}{P} + g$$

where: K = discount rate (cost of capital)
P = current price
D = current dividend rate
g = constant rate of expected growth

This formula essentially recognizes that the return expected or required by investors is comprised of two factors: the dividend yield (current income) and expected growth in dividends (future income).

Q. Please explain how you have employed the DCF model.

A. I have utilized the constant growth DCF model. In doing so, I have combined the current dividend yield for each group of proxy utility stocks described in the previous section with several indicators of expected dividend growth.

Q. How did you derive the dividend yield component of the DCF equation?

A. There are several methods that can be used for calculating the dividend yield component. These methods generally differ in the manner in which the dividend rate is employed; i.e., current versus future dividends or annual versus quarterly compounding of dividends. I believe the most appropriate dividend yield component is the version listed below:

$$Yield = \frac{D_0(1+0.5g)}{P_0}$$

This dividend yield component recognizes the timing of dividend payments and dividend increases.

The P_0 in my yield calculation is the average (of high and low) stock price for each proxy company for the most recent three month period (May-July, 2009). The D_0 is the current annualized dividend rate for each proxy company.

Q. How have you estimated the dividend growth component of the DCF equation?

A. The dividend growth rate component of the DCF model is usually the most crucial and controversial element involved in using this methodology. The objective of estimating the dividend growth component is to reflect the growth expected by investors that is embodied in the price (and yield) of a company's stock. As such, it is important to recognize that individual investors have different expectations and consider alternative indicators in deriving their expectations. This is evidenced by the fact that every investment decision resulting in the purchase of a particular stock is matched by another investment decision to sell that stock. Obviously, since two investors reach different decisions at the same market price, their expectations differ.

A wide array of indicators exists for estimating the growth expectations of investors. As a result, it is evident that no single indicator of growth is always used by all investors. It therefore is necessary to consider alternative indicators of dividend growth in deriving the growth component of the DCF model.

I have considered five indicators of growth in my DCF analyses. These are:

1. 2004-2008 (5-year average) earnings retention, or fundamental growth (per Value Line);

2. 5-year average of historic growth in earnings per share ("EPS"), dividends per share ("DPS"), and book value per share ("BVPS") (per Value Line);

3. 2009, 2010, and 2012-2014 projections of earnings retention growth (per Value Line);

4. 2006-2008 to 2012-2014 projections of EPS, DPS, and BVPS (per Value Line); and

5. 5-year projections of EPS growth as reported in First Call (per Yahoo! Finance).

I believe this combination of growth indicators is a representative and appropriate set with which to begin the process of estimating investor expectations of dividend growth for the groups of proxy companies. I also believe that these growth indicators reflect the types of information that investors consider in making their investment decisions. As I indicated previously, investors have an array of information available to them, all of which should be expected to have some impact on their decision-making process.

Q. Please describe your initial DCF calculations.

A. Exhibit No. ___ (DCP-10), presents my DCF analysis. Page 1 shows the calculation of the "raw" (i.e., prior to adjustment for growth) dividend yield for each company in the proxy group. Pages 2 and 3 show the growth rate for the groups of proxy companies. Page 4 shows the "raw" DCF calculations, which are presented on several bases: mean, median, and high values. These results can be summarized as follows:

			Mean		Median	
	Mean	Median	Low	High	Low	High
Proxy Group	9.8%	10.0%	8.3%	11.8%	8.4%	11.5%
Avera Group	10.9%	10.6%	10.0%	11.8%	9.0%	11.3%

I note that the individual DCF calculations shown on Exhibit No. ___(DCP-10) should not be interpreted to reflect the expected cost of capital for the proxy groups; rather, the individual values shown should be interpreted as alternative information

considered by investors. The individual DCF calculations also demonstrate how the focus on a single growth rate, i.e. EPS projections, can produce a DCF conclusion that is not reflective of a broader perspective of available information.

The DCF results in Exhibit No. ___(DCP-10) indicate average (mean and median) DCF cost rates of 9.8 percent to 10.9 percent. The "high" DCF rates (i.e., using the highest growth rates only) are 11.8 percent on an average basis and 11.3 percent to 11.5 percent on a median basis, while the "low" DCF rates (i.e., using the lowest growth rates only) are 8.3 percent to 10.0 percent. I also note that the DCF results for Avista (9.5 percent) are less than the average/median values for the proxy groups.

Q. What do you conclude from your DCF analyses?

A. This DCF analysis indicates a range of 9.8 percent to 10.9 percent for the proxy groups. This is approximated by the average/mean values. I give less weight to the lower end of the mean/median results, as well as less weight to the extreme upper ends of the groups (i.e., mean results, which are impacted by outlier results).

Q. Which portion of the DCF range do you recommend at this time?

A. I believe that the lower portion of the 9.8 percent to 10.9 percent currently reflects the proper DCF cost for Avista. I specifically recommend 10.0 percent, because the DCF results are presently upwardly influenced by recent stock prices (i.e., higher yield).

IX. CAPITAL ASSET PRICING MODEL ANALYSIS

Q. Please describe the theory and methodological basis of the capital asset pricing model.

A. The Capital Asset Pricing Model is a version of the risk premium method. The CAPM describes and measures the relationship between a security's investment risk and its market rate of return. The CAPM was developed in the 1960s and 1970s as an extension of modern portfolio theory ("MPT"), which studies the relationships among risk, diversification, and expected returns.

Q. How is the CAPM derived?

A. The general form of the CAPM is:

$$K = R_f + \beta(R_m - R_f)$$

where: K = cost of equity

R_f = risk free rate

R_m = return on market

β = beta

R_m-R_f = market risk premium

As noted previously, the CAPM is a variant of the risk premium method. I believe the CAPM is generally superior to the simple risk premium method because the CAPM specifically recognizes the risk of a particular company or industry (i.e., beta), whereas the simple risk premium method assumes the same risk premium for all companies exhibiting similar bond ratings.

Q. What groups of companies have you utilized to perform your CAPM analyses?

A. I have performed CAPM analyses for the same groups of proxy utilities evaluated in my DCF analyses.

Q. Please explain the risk-free rate as used in your CAPM and indicate what rate you employed.

A. The first term of the CAPM is the risk-free rate (R_f). The risk-free rate reflects the level of return that can be achieved without accepting any risk.

In CAPM applications, the risk-free rate is generally recognized by use of U.S. Treasury securities. Two general types of U.S. Treasury securities are often utilized as the R_f component - short-term U.S. Treasury bills and long-term U.S. Treasury bonds.

I have performed CAPM calculations using the three month average yield (May-July, 2009) for 20-year U.S. Treasury bonds. Over this three month period, these bonds had an average yield of 4.37 percent.

Q. What is beta and what betas did you employ in your CAPM?

A. Beta is a measure of the relative volatility (and thus risk) of a particular stock in relation to the overall market. Betas of less than 1.0 are considered less risky than the market, whereas betas greater than 1.0 are more risky. Utility stocks traditionally have had betas below 1.0. I utilized the most recent Value Line betas for each company in the groups of proxy utilities.

Q. How did you estimate the market risk premium component in your CAPM analysis?

A. The market risk premium component (R_m-R_f) represents the investor-expected premium of common stocks over the risk-free rate, or government bonds. For the purpose of estimating the market risk premium, I considered alternative measures of returns of the S&P 500 (a broad-based group of large U.S. companies) and 20-year U.S. Treasury bonds.

First, I have compared the actual annual returns on equity of the S&P 500 with the actual annual yields of U.S. Treasury bonds. Exhibit No. __ (DCP-11) shows the return on equity for the S&P 500 group for the period 1978-2007 (all available years reported by S&P). This exhibit also indicates the annual yields on 20-year U.S. Treasury bonds, as well as the annual differentials (i.e., risk premiums) between the S&P 500 and U.S. Treasury 20-year bonds. Based upon these returns, I conclude that this version of the risk premium is about 6.45 percent.

I have also considered the total returns (i.e., dividends/interest plus capital gains/losses) for the S&P 500 group as well as for the long-term government bonds, as tabulated by Morningstar (formerly Ibbotson Associates), using both arithmetic and geometric means. I have considered the total returns for the entire 1926-2008 period, which are as follows:

	S&P 500	L-T Gov't Bonds	Risk Premium
Arithmetic	11.7%	6.1%	5.6%
Geometric	9.6%	5.7%	3.9%

I conclude from this that the expected risk premium is about 5.32 percent (i.e., average of all three risk premiums). I believe that a combination of arithmetic and geometric means is appropriate since investors have access to both types of means and, presumably, both types are reflected in investment decisions and thus stock prices and cost of capital.

Exhibit No. ___ (DCP-12) shows my CAPM calculations using the risk premium. The results are:

	Mean	Median
Proxy Group	8.2%	8.1%
Avera Group	8.1%	8.4%

Q. What is your conclusion concerning the CAPM cost of equity?

A. The CAPM results collectively indicate a cost of 8.1 percent to 8.4 percent for the two groups of comparison utilities. I conclude that the CAPM cost of equity for Avista is 8.1 percent to 8.4 percent.

X. COMPARABLE EARNINGS ANALYSIS

Q. Please describe the basis of the comparable earnings methodology.

A. The comparable earnings ("CE") method is derived from the "corresponding risk" standard of the *Bluefield* and *Hope* cases that I discussed earlier. This method is thus based upon the economic concept of opportunity cost. As previously noted, the cost

of capital is an opportunity cost: the prospective return available to investors from alternative investments of similar risk.

The CE method is designed to measure the returns expected to be earned on the original cost book value of similar risk enterprises. Thus, this method provides a direct measure of the fair return, because the CE method translates into practice the competitive principle upon which regulation is based.

The CE method normally examines the experienced and/or projected returns on book common equity. The logic for examining returns on book equity follows from the use of original cost rate base regulation for public utilities, which uses a utility's book common equity to determine the cost of capital. This cost of capital is, in turn, used as the fair rate of return which is then applied (multiplied) to the book value of rate base to establish the dollar level of capital costs to be recovered by the utility. This technique is thus consistent with the rate base methodology used to set utility rates.

Q. How have you employed the CE methodology in your analysis of Avista's common equity cost?

A. I conducted the CE methodology by examining realized returns on equity for several groups of companies and evaluating the investor acceptance of these returns by reference to the resulting market-to-book ratios. In this manner, it is possible to assess the degree to which a given level of return equates to the cost of capital. It is generally recognized for utilities that market-to-book ratios of greater than one (i.e.,

100%) reflect a situation where a company is able to attract new equity capital without dilution (i.e., above book value). As a result, one objective of a fair cost of equity is the maintenance of stock prices just above book value.

I would further note that the CE analysis, as I have employed it, is based upon market data (through the use of market-to-book ratios) and is thus essentially a market test. As a result, my analysis is not subject to the criticisms occasionally made by some who maintain that past earned returns do not represent the cost of capital. In addition, my analysis uses prospective returns and thus is not confined to historical data.

Q. What time periods have you examined in your CE analysis?

A. My CE analysis considers the experienced equity returns of the proxy groups of utilities for the period 1992-2008 (i.e., the last seventeen years). The CE analysis requires that I examine a relatively long period of time in order to determine trends in earnings over at least a full business cycle. Further, in estimating a fair level of return for a future period, it is important to examine earnings over a diverse period of time in order to avoid any undue influence from unusual or abnormal conditions that may occur in a single year or shorter period. Therefore, in forming my judgment of the current cost of equity I have focused on two periods: 2002-2008 (the current business cycle) and 1992-2001 (the most recent complete business cycle).

Q. Please describe your CE analysis.

A. Exhibit No. ___(DCP-13) and Exhibit No. ___(DCP-14) contain summaries of experienced returns on equity for several groups of companies.

Exhibit No. ___(DCP-13) shows the earned returns on average common equity and market-to-book ratios for the two groups of proxy utilities. These can be summarized as follows:

	Proxy Group	Avera Group
Historic ROE		
Mean	9.4-11.1%	10.8-11.2%
Median	9.4-11.7%	10.2-12.0%
Historic M/B		
Mean	145-155%	165%
Median	151-157%	145-158%
Prospective ROE		
Mean	7.8-8.8%	10.3-11.3%
Median	8.0%	9.5-10.5%

These results indicate that historic returns of 9.4-12.0 percent have been adequate to produce market-to-book ratios of 145-165 percent for the groups of proxy utilities. Furthermore, projected returns on equity for 2009, 2010, and 2012-2014 are within a range of 7.8 percent to 11.3 percent for the utility groups. These relate to 2008 market-to-book ratios of 113 percent or higher.

Q. Have you also reviewed earnings of unregulated firms?

A. Yes. As an alternative, I also examined a group of largely unregulated firms. I have examined the Standard & Poor's 500 Composite group, since this is a well recognized group of firms that is widely utilized in the investment community and is

indicative of the competitive sector of the economy. Exhibit No. ___(DCP-14) presents the earned returns on equity and market-to-book ratios for the S&P 500 group over the past sixteen years. As this Exhibit indicates, over the two periods this group's average earned returns ranged from 13.9 percent to 14.7 percent with market-to-book ratios ranging between 284 percent and 341 percent.

Q. How can the above information be used to estimate the cost of equity for Avista?

A. The recent earnings of the proxy utility and S&P 500 groups can be utilized as an indication of the level of return realized and expected in the regulated and competitive sectors of the economy.

Q. What return on equity is indicated by the CE analysis?

A. Based on the recent earnings and market-to-book ratios, I believe the CE analysis indicates that the cost of equity for the proxy utilities is no more than 9.5 percent to 10.5 percent (10.00 percent mid-point). Recent returns of 9.4 percent to 12.0 percent have resulted in market-to-book ratios of 145 and greater. Prospective returns of 7.8 percent to 11.3 percent result in anticipated market-to-book ratios of over 100 percent. An earned return of 9.5 percent to 10.5 percent should thus result in a market-to-book ratio of over 100 percent. As I indicated earlier, the fact that market-to-book ratios substantially exceed 100 percent indicates that historic and

prospective returns of over 10.5 percent reflect earnings levels that exceed the cost of equity for those regulated companies.

Please also note that my CE analysis is not based on a mathematic formula approach, as are the DCF and CAPM methodologies. Rather, it is based on recent trends and current conditions in equity markets. Further, it is based on the direct relationship between returns on common stock and market-to-book ratios of common stock. In utility rate setting, a fair rate of return is based on the utility's assets (i.e., rate base) and the book value of the utility's capital structure. As stated earlier, maintenance of a financially stable utility's market-to-book ratio at 100%, or a bit higher, is fully adequate to maintain the utility's financial stability. On the other hand, a market price of a utility's common stock that is 150 percent or more above the stock's book value is indicative of earnings that exceed the utility's reasonable cost of capital. Thus, actual or projected earnings do not directly translate into a utility's reasonable cost of equity. Rather, they must be viewed in relation to the market-to-book ratios of the utility's common stock.

My 9.5 percent to 10.5 percent CE recommendation is not designed to result in market-to-book ratios as low as 1.0 for Avista. Rather, it is based on current market conditions and the proposition that ratepayers should not be required to pay rates based on earnings levels that result in excessive market-to-book ratios.

XI. RETURN ON EQUITY RECOMMENDATION

Q. Please summarize the results of your three cost of equity analyses.

A. The three different methodologies produce the following estimated ranges for Avista's cost of equity capital:

Discounted Cash Flow	9.8-10.9%
Capital Asset Pricing Model	8.1-8.4%
Comparable Earnings	9.5-10.5%

Q. What is your cost of equity recommendation for Avista?

A. It is my understanding that the UTC places the heaviest reliance on the DCF method to determine the cost of equity for the utilities it regulates. Accordingly, my recommendation places more emphasis on the DCF findings of 9.8 percent to 10.9 percent or a 10.0 percent approximate lower end. I note that the results of my CE analyses (9.5 percent to 10.5 percent) corroborate my DCF findings. My specific finding for Avista is 10.0 percent, which gives primary consideration to the 10.0 percent low end of my DCF findings, but also is consistent with my CE results.

Q. Why are your CAPM results significantly lower than your DCF results?

A. CAPM results are lower than the DCF results, and have been lower than CAPM results in recent years. The two reasons for the lower CAPM results are the current relatively low yields on U.S. Treasury bonds (i.e., risk-free rate) and a lower risk premium that reflects the decline in stock prices in 2008.

Q. Does this mean that CAPM results should be discarded?

A. No. These currently lower CAPM results are only one-half of the impact of recent economic conditions. The other impact is on the DCF results, which are somewhat higher currently due to the higher yields attributable to the decline in stock prices. It would not be proper to disregard the lower CAPM results while not discounting the higher DCF results. This confirms my 10.0 percent cost of equity estimate for Avista.

XII. TOTAL COST OF CAPITAL

Q. What is the total cost of capital for Avista?

A. Avista's total cost of capital is 8.13 percent. Exhibit No. ___ (DCP-3) reflects the total cost of capital for the Company using my proposed capital structure and cost of debt along with the range of common equity costs my DCF analysis supports. The resulting total cost of capital is a range of 7.90 percent to 8.35 percent (8.13 percent with my recommended 10.0 percent cost of equity).

Q. Does your cost of capital recommendation provide the Company with a sufficient level of earnings to maintain its financial integrity?

A. Yes, it does. Exhibit No. ___ (DCP-15) shows the pre-tax coverage that would result if Avista earned my cost of capital recommendation. As the results indicate, my recommended range would produce a coverage level within the benchmark range for

a BBB rated utility. In addition, the debt ratio is within the benchmark for a BBB rated utility.

XIII. COMMENTS ON COMPANY TESTIMONY

Q. Have you reviewed the testimony of Avista witness William Avera?

A. Yes, I have. Dr. William E. Avera is the Company's cost of equity witness.

Q. Please summarize your understanding of Dr. Avera's cost of equity analyses.

A. Dr. Avera's cost of equity findings can be summarized as follows:

	Utility Proxy Group	Non-Utility Proxy Group
DCF	11.5-13.4%	13.1-13.5%
CAPM	11.2%	11.5%
Comparable Earnings	11.6%	
Cost of Equity	11.3-13.3%	

Q. Do you have any comments concerning Dr. Avera's DCF analyses and conclusions?

A. My primary disagreement with Dr. Avera's DCF analysis is his exclusive reliance on analysts' forecasts of EPS growth in his DCF analyses. There are several reasons why it is not proper to rely exclusively on EPS forecasts.

First, it is not realistic to believe that investors rely exclusively on a single factor, such as analysts' forecasts, in making their investment decisions. Investors

have an abundance of available information to assist them in evaluating stocks and EPS forecasts are only one of many such statistics.

Second, Value Line, one of the sources of EPS projections, publishes a large number of individual company data and ratios. Presumably these are published for the consideration of subscribers/investors. It is also apparent that Value Line publishes both historic and forecast data – yet Dr. Avera considers only one factor, and only the forecast version of this factor.

Third, the vast majority of information available to investors, by both individual companies in the form of annual reports and offering circulars, and by investment publications such as Value Line, is historic data. It is neither realistic nor logical to maintain that investors only consider projected (estimated) data to the exclusion of historic (actual) data.

Fourth, there have been a number of academic studies that indicate that analysts' forecasts of EPS have been overly-optimistic in the past. See, for example, a 1998 article (in the *Financial Analysts Journal*, Vol. 54, No. 6, Nov./Dec. 1998, 35-42) titled "Why So Much Error In Analysts' Earnings Forecasts?," by Vijay Kumer Chopra. In this article, the author concluded "Analysts' forecasts of EPS and growth in EPS tend to be overly optimistic." He concluded that analysts' forecasts of EPS over the past 13 years have been more than twice the actual growth rate. Investors are aware of the propensity of analysts to over-estimate EPS forecasts. In addition, the presumption that investors rely only on a single projection implies that

investors are unsophisticated and unable to make their own decisions. This also is not rational.

Fifth, the experience over the past two years should be a clear signal to investors that analysts cannot accurately predict EPS levels. Hardly any security analysts predicted the decline in profits that occurred in 2008 and 2009 to date.

Sixth, the well-publicized financial debacles of Enron and WorldCom demonstrate dramatically how analysts are often either unwilling or incapable of discerning potentially disastrous impacts of a company's projected EPS, and how even current earnings can be distorted by the complex financial machinations of large, aggressive corporations.

Finally, during 2003, ten of the nation's largest securities firms agreed to pay a record $1.4 billion in penalties to settle U.S. government charges involving investor abuses, many of which resulted from analysts' forecasts and recommendations that the government charged were biased and subject to conflicts-of-interests. This settlement largely grew out of a New York State investigation and reflects the national, and even international, scope of the negative perceptions of analysts' forecasts and recommendations. These, and other, similar investigations and complaints have underscored a growing awareness that analysts' estimates cannot be considered an unbiased source of growth expectations by investors, and this understanding has important implications for a DCF analysis that exclusively incorporates any such estimates.

In summary, investors are now very much aware of recent scandals involving security analysts, including the Enron and WorldCom debacles, conflicts of interest that have resulted in settlements, fines, and public admonishments, as well as other negative connotations related to the reliability of analysts' forecasts. These problems clearly call into question the reliance of analysts' forecasts as the only source of growth in a DCF context. The landscape has changed in recent years and investors have ample reasons to doubt the reliability of such forecasts at the present time.

Q. Are EPS projections generally higher than the alternative indicators of growth available to investors?

A. Yes, they are. It is apparent from the data in my Exhibit No. ___(DCP-10) that EPS projections are generally the highest indicators of growth. Again, it is not realistic to believe that all investors rely exclusively on this single source of data.

Q. What are your comments regarding Dr. Avera' CAPM risk premium analysis?

A. Dr. Avera's CAPM uses the following input for his utility proxy group:

Market risk premium	10.0%
Risk free rate	3.2%
Beta	Value Line

My primary concern with Dr. Avera's CAPM analysis is his 10.0 percent risk premium. This is particularly excessive and greatly exceeds the experienced risk premium described earlier in my testimony (and previously used by Dr. Avera in Avista proceedings). His 10.0 percent risk premium is derived by comparing DCF

calculations for the S&P 500 and suffers from the same flaw of his DCF cost for his electric proxy group – exclusive reliance on EPS projections. I note that the S&P 500 has had total returns since 1926 of only 11.7 percent on an arithmetic basis and 9.6 percent on a geometric basis, well below the 13.2 percent he calculated on his WEA-9. A 13.2 percent level is particularly problematic in the current recessionary environment.

Q. Do you have any comments about Dr. Avera's expected earnings analysis?

A. Yes, I do. Dr. Avera's expected earnings analysis is based on his observations that Value Line projections of electric utility returns on equity (as of late 2008) were 10.5 percent. I note that my Exhibit No. ___(DCP-12) indicates that this utility group has recent market-to-book ratios well above 150 percent in recent years. This indicates that his 10.5 percent ROE exceeds the cost of capital for these utilities.

Q. Does Dr. Avera provide any reasoning as to why Avista's return on equity should have increased from 10.2 percent in 2007 to 11.0 percent currently?

A. No, he does not. As such, he does not provide the Commission any indications of changes in the capital markets since recent Washington utility return on equity awards were established, as the Commission has requested.

Q. Does this conclude your response testimony?

A. Yes, it does.