Exhibit No. __ (JSG-1T)
Docket No. UG-17____
Witness: J. Stephen Gaske

BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. CASCADE NATURAL GAS CORPORATION, Respondent.	DOCKET UG-17_____

CASCADE NATURAL GAS CORPORATION

DIRECT TESTIMONY OF J. STEPHEN GASKE

August 31, 2017

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

A. My name is J. Stephen Gaske and I am a Senior Vice President of Concentric Energy Advisors, Inc., 1300 19th Street NW, Suite 620, Washington, DC 20036.

Q. Would you please describe your educational and professional background?

A. I hold a B.A. degree from the University of Virginia and an M.B.A. degree with a major in finance and investments from George Washington University. I also earned a Ph.D. degree from Indiana University where my major field of study was public utilities and my supporting fields were finance and economics. A copy of my résumé is included as Exhibit No. __ (JSG-3) to this testimony.

Q. Have you presented expert testimony in other proceedings?

A. Yes. I have filed testimony or testified in more than 100 regulatory proceedings in North America. These submissions have included testimony on the cost of capital and capital structure issues for electric and natural gas distribution and oil and natural gas pipeline operations before more than a dozen federal, state, and provincial regulatory bodies in the U.S., Canada, and Mexico, including the Washington Utilities and Transportation Commission ("Commission"). In addition, I have testified or submitted testimony on issues such as cost allocation, rate design, pricing, regulatory principles, market power and generating plant economics before more than a dozen federal, state, and provincial regulatory bodies in the U.S. and Canada. During the course of my consulting career, I have conducted many studies on issues related to regulated industries and have served as an advisor to numerous clients on economic, competitive, and financial matters. I also have spoken and lectured before many professional groups including the American Gas Association and the Edison Electric Institute Rate Fundamentals courses.

I. INTRODUCTION

A. Scope and Overview

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

A. I have been asked by Cascade Natural Gas Corporation ("Cascade" or the "Company") to estimate the cost of common equity capital for the Company's natural gas distribution operations in the state of Washington. In this testimony, I calculate a range for the cost of common equity capital for Cascade's Washington natural gas distribution operations based on a Discounted Cash Flow ("DCF") analysis of a group of proxy companies that have risks similar to those of Cascade's Washington gas distribution operations. I then place the Company within the range of reasonableness established by the DCF analyses by comparing the risks of Cascade's Washington natural gas distribution operations to those of the proxy gas distribution companies and by considering several alternative benchmark analyses.

Q. What rate of return is Cascade requesting in this proceeding?

A. Based on its requested capital structure of 50 percent long-term debt and 50 percent common equity, Cascade is requesting the following rate of return:

Table 1: Requested Rate of Return – Washington Gas Distribution Operations

Source	Percent	Cost	Overall Rate of Return
Long-Term Debt	50.000%	5.295%	2.648%
Common Equity	50.000%	9.900%	4.950%
TOTAL	100.000%		7.598%

As my testimony discusses, an overall allowed rate of return of 7.598 percent, with a 9.9 percent return on common equity, represents the cost of capital for Cascade at this time.

Q. Please explain why your recommended return on common equity of 9.9 percent is reasonable in light of the settlement agreement in the 2015 rate case.

A. The settlement agreement that was approved by the Commission in July 2016 included an authorized return on common equity for Cascade's Washington natural gas distribution operations of 9.40 percent. The settlement agreement was a package deal that resulted from negotiations between Cascade and the various parties. The 9.40 percent authorized return on common equity did not represent an agreement by Cascade that its proposed return on equity was incorrect or unreasonable; rather, it was part of the overall resolution of the contested issues in the 2015 rate case.

B. Company Background

Q. Please describe Cascade's operations and those of its parent company, MDU Resources Group, Inc.

A. Cascade is a wholly-owned division of MDU Resources Group, Inc. ("MDU Resources") that is engaged in natural gas distribution in the states of Washington and Oregon. Within Washington, Cascade provides services to 210,000 residential, commercial and industrial customers in several non-contiguous service territories in western and central Washington. Cascade does not serve any large cities. Instead it serves approximately 50 communities in Washington, the largest of which are Bellingham, Mt. Vernon, Bremerton, Tri-Cities, and Yakima.

Through its division, Montana-Dakota Utilities Co. ("Montana-Dakota"), MDU Resources is engaged in the generation, transmission, and distribution of electricity, and the distribution of natural gas in the states of Montana, North Dakota, South Dakota, and Wyoming. MDU Resources also owns Great Plains Natural Gas Company, which distributes natural gas in the states of Minnesota and North Dakota, and Intermountain Gas Company, which distributes natural gas in the state of Idaho. MDU Resources also is

engaged in utility infrastructure construction services, natural gas gathering and transmission, and construction services and contracting.

Natural gas distribution assets comprised 33.4 percent[1] of MDU Resources' total assets in 2016, and natural gas distribution revenues comprised 18.6 percent[2] of total operating revenues. Washington accounted for 26.0 percent of the natural gas distribution operating sales revenues, while Idaho (34.0 percent), North Dakota 13.0 percent), Montana (8.0 percent), Oregon (8.0 percent), South Dakota (6.0 percent), Minnesota (3.0 percent) and Wyoming (2.0 percent) accounted for the other 74.0 percent of retail gas distribution operating sales revenues.[3]

Q. Would you please describe Cascade's Washington natural gas distribution service territory?

A. Cascade provides natural gas distribution service in Washington. The customer base in Washington is 87 percent residential customers and 13 percent commercial and industrial customers. Cascade's service territory consists of towns and small cities dotted throughout relatively sparsely populated areas. As such, the economy is heavily dependent on providing retail and other services for surrounding agricultural areas, and several cities are heavily dependent on military bases or government facilities.

Q. What is your understanding of the factors that are driving this rate case filing by Cascade?

A. Company witness Nicole A. Kivisto explains that the primary reasons for the filing are increased investment to replace aging infrastructure in order to enhance reliability and meet new federal safety standards, recovery of the amount in a deferral account for pipeline improvements to maintain Cascade's maximum allowable operating pressures ("MAOP"), and higher depreciation expense associated with the increased rate base additions. Ms.

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1 MDU Resources Group, 2016 SEC Form 10-K, at 81.
2 *Ibid.*, at 80.
3 *Ibid.*, at 12.

Kivisto testifies that Cascade's 2017 capital budget for Washington includes just over $47 million for planned investments. Of the $47 million in planned investments, $11 million will be used to replace segments of Cascade's highest risk pipeline and is included in the annual pipeline Cost Recovery Mechanism ("CRM"). The rate base included in this filing includes only $18 million of the remaining $36 million of investment.

II. FINANCIAL MARKET STUDIES

A. Criteria for a Fair Rate of Return

Q. Please describe the criteria which should be applied in determining a fair rate of return for a regulated company.

A. The United States Supreme Court has provided general guidance regarding the level of allowed rate of return that will meet constitutional requirements. In *Bluefield Water Works & Improvement Company v. Public Service Commission of West Virginia* (262 U.S. 679, 693 (1923)), the Court indicated that:

> 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.

The Court has further elaborated on this requirement in its decision in *Federal Power Commission v. Hope Natural Gas Company* (320 U.S. 591, 603 (1944)). There the Court described the relevant criteria as follows:

> 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.

Thus, the standards established by the Court in *Hope* and *Bluefield* consist of three requirements. These are that the allowed rate of return should be:

1. commensurate with returns on enterprises with corresponding risks;
2. sufficient to maintain the financial integrity of the regulated company; and
3. adequate to allow the company to attract capital on reasonable terms.

These legal criteria will be satisfied best by employing the economic concept of the "cost of capital" or "opportunity cost" in establishing the allowed rate of return on common equity. For every investment alternative, investors consider the risks attached to the investment and attempt to evaluate whether the return they expect to earn is adequate compensation for the risks undertaken. Investors also consider whether there might be other investment opportunities that would provide a better return relative to the risk involved. This weighing of alternatives and the highly competitive nature of capital markets causes the prices of stocks and bonds to adjust in such a way that investors can expect to earn a return that is just adequate for the risks involved. Thus, for any given level of risk, there is a return that investors expect in order to induce them to voluntarily undertake that risk and not invest their money elsewhere. That return is referred to as the "opportunity cost" of capital or "investor required" return.

Q. How should a fair rate of return be evaluated from the standpoint of consumers and the public?

A. The same standards should apply. When an unregulated entity faces competition, the pressure of that competition and consumer choices will combine to determine the fair rate of return. However, when regulation is appropriate, consumers and the public have a long-term interest in seeing that the regulated company has an opportunity to earn returns that are not so high as to be excessive, but that also are sufficient to encourage continued replacement and maintenance, as well as needed expansions, extensions, and new services. Thus, both the consumer and the public interest depend on establishing a return that will readily attract capital without being excessive.

Q. How are the costs of preferred stock and long-term debt determined?

A. For purposes of setting regulated rates, the current embedded costs of preferred stock and long-term debt are used in order to ensure that the company receives a return that is sufficient to pay the fixed dividend and interest obligations that are attached to these sources of capital.

Q. How is the cost of common equity determined?

A. The practice in setting a fair rate of return on common equity is to use the current market cost of common equity in order to ensure that the return is adequate to attract capital and is commensurate with returns available on other investments with similar levels of risk. However, determining the market cost of common equity is a relatively complicated task that requires analysis of many factors and some degree of judgment by an analyst. The current market cost of capital for securities that pay a fixed level of interest or dividends is relatively easy to determine. For example, the current market cost of debt for publicly-traded bonds can be calculated as the yield-to-maturity, adjusted for flotation costs, based on the current market price at which the bonds are selling. In contrast, because common stockholders receive only the residual earnings of the company, there are no fixed contractual payments which can be observed. This uncertainty associated with the dividends that eventually will be paid greatly complicates the task of estimating the cost of common equity capital. For purposes of this testimony, I have relied on several analytical approaches for estimating the cost of common equity. My primary approach relies on two DCF analyses. In addition, I have conducted two types of risk premium analyses, a market DCF analysis of the S&P 500, and a Capital Asset Pricing Model ("CAPM") analysis as benchmarks to assess the reasonableness of the DCF results. Each of these approaches is described later in this testimony.

B. <u>Interest Rates and the Economy</u>

Q. What are the general economic factors that affect the cost of capital?

A. Companies attempting to attract common equity must compete with a variety of alternative

investments. Prevailing interest rates and other measures of economic trends influence investors' perceptions of the economic outlook and its implications on both short- and long-term capital markets. Page 1 of Schedule 1 of Exhibit No.___(JSG-2) shows various general economic statistics. Real growth in Gross Domestic Product ("GDP") has averaged 2.6 percent annually during the past 30 years, 2.3 percent for the past 20 years, and 1.3 percent for the past 10 years. After increasing at an annual rate of 2.1 percent in the fourth quarter of 2016, the Bureau of Economic Analysis reported that the "second" estimate for the first quarter of 2017 was a real annual economic growth rate of 1.2 percent.[4] According to Blue Chip Economic Indicators, the consensus forecast for expected growth in real GDP is 2.2 percent in 2017[5] and 2.4 percent in 2018.[6] Likewise, the U.S. unemployment rate has improved in recent months to 4.3 percent for May 2017,[7] but the labor force participation rate for civilians 16 years and over was at 62.7 percent for May 2017, remaining near the lowest rate since the late 1970s.[8] Improvements in the U.S. unemployment rate contributed to the Federal Reserve's decision in June 2017 to raise its target range for the federal funds rate to a range between 1.00 – 1.25 percent for overnight loans to banks.[9]

In October 2014, the Federal Open Market Committee ("FOMC") ended its Quantitative Easing program, which provided extraordinary monetary stimulus for the U.S. economy for several years through asset purchases of mortgage-backed securities and Treasury bonds. However, the Federal Reserve's accommodative policy continues today. Specifically, in May the FOMC recently noted, "[the FOMC's] policy, by keeping the Committee's holdings of longer-term securities at sizable levels, should help maintain accommodative financial conditions."[10] But, in June, the FOMC announced a

4 U.S. Department of Commerce, Bureau of Economic Analysis, News Release, May 27, 2017.
5 Blue Chip Economic Indicators, Vol. 42, No. 6, June 10, 2017, at 2.
6 *Ibid.*, at 3.
7 U.S. Department of Labor, Bureau of Labor Statistics, News Release, June 2, 2017, at 1.
8 Ibid, at 2.
9 Statement of the Federal Open Market Committee, June 14, 2017.
10 Statement of the Federal Open Market Committee, May 3, 2017.

contemplated end to accommodative monetary policies later this year by gradually reducing the Federal Reserve's securities holdings by decreasing reinvestment of principal payments from those securities.[11] This new policy will begin to put upward pressure on interest rates by reducing the funds available in the market. According to the July 2017 issue of Blue Chip Financial Forecasts, approximately 81 percent of economists surveyed expect the Federal Reserve will begin to shrink the size of its balance sheet in the second half of 2017.[12]

In addition to the stated expectations of the FOMC, leading economists and market analysts are expecting additional increases in interest rates in the short and medium term. The July 2017 issue of Blue Chip Financial Forecasts surveyed market participants concerning their views regarding the magnitude and timing of future increases in short-term rates by the Federal Reserve. In response to the question regarding how much more the Federal Reserve will raise interest rates in 2017, 85 percent of those surveyed by Blue Chip expect an additional increase of 25 basis points and 9 percent expect an additional increase of 50 basis points.[13] In response to the same question for 2018, 22 percent of those surveyed expect a total increase of 50 basis points in 2018, 44 expect a total increase of 75 basis points, and 30 percent expect a total increase of 100 basis points.[14] The average yield on the 30-year U.S. Treasury bond in June 2017 was 2.80 percent. By contrast, the Blue-Chip consensus estimate projects that the average yield on the 30-year U.S. Treasury bond will increase to 4.30 percent for the period from 2019 through 2023.[15] Thus, the consensus estimate from leading economists is for an increase of 150 basis points in U.S. Treasury bond yields over the next several years.

As pages 2 and 3 of Schedule 1 of Exhibit No.___(JSG-2) show, interest rates on longer-term U.S. Treasury bonds and A-rated and Baa-rated public utility bonds have

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11 Statement of the Federal Open Market Committee, June 14, 2017.
12 Blue Chip Financial Forecasts, Vol. 36, No. 7, July 1, 2017, at 14.
13 Ibid.
14 Ibid.
15 Blue Chip Financial Forecasts, Vol. 36, No. 6, June 1, 2017, at 14.

increased substantially since July 2016. For example, between July 2016 and May 2017, the average yield on 30-year US Treasury bonds increased from 2.22 percent to 2.96 percent, the average yield on A-rated public utility bonds increased from 3.57 percent to 4.12 percent, and the average yield on Baa-rated public utility bonds increased from 4.16 percent to 4.50 percent.

Investors also are influenced by both the historical and projected level of inflation. As also shown on Page 1 of Schedule 1 of Exhibit No.___(JSG-2), during the past decade, the Consumer Price Index has increased at an average annual rate of 1.8 percent and the GDP Implicit Price Deflator, a measure of price changes for all goods produced in the United States, has increased at an average rate of 1.6 percent. According to Blue Chip Economic Indicators, the Consumer Price Index is forecasted to increase by 2.3 percent[16] and 2.2 percent[17] for 2017 and 2018, respectively.

Q. How are current economic conditions reflected in the equity markets?

A. The equity markets have recovered from the large stock market decline in 2008 and 2009, but the Federal Reserve's massive purchases of federal debt and mortgage-backed securities have created artificially low interest rates on government bonds and a potential stock market valuation bubble that increases the risks in the equity market.

C. Discounted Cash Flow ("DCF") Method

Q. Please describe the DCF method of estimating the cost of common equity capital.

A. The DCF method reflects the assumption that the market price of a share of common stock represents the discounted present value of the stream of all future dividends that investors expect the firm to pay. The DCF method suggests that investors in common stocks expect to realize returns from two sources: a current dividend yield plus expected growth in the value of their shares as a result of future dividend increases. Estimating the cost of capital with the DCF method, therefore, is a matter of calculating the current dividend yield and

[16] Blue Chip Economic Indicators, Vol. 42, No. 6, June 10, 2017, at 2.
[17] *Ibid.*, at 3.

estimating the long-term future growth rate in dividends that investors reasonably expect from a company.

The dividend yield portion of the DCF method utilizes readily-available information regarding stock prices and dividends. The market price of a firm's stock reflects investors' assessments of risks and potential earnings as well as their assessments of alternative opportunities in the competitive financial markets. By using the market price to calculate the dividend yield, the DCF method implicitly recognizes investors' market assessments and alternatives. However, the other component of the DCF formula, investors' expectations regarding the future long-run growth rate of dividends, is not readily apparent from stock market data and must be estimated using informed judgment.

Q. What is the appropriate DCF formula to use in this proceeding?

A. There can be many different versions of the basic DCF formula, depending on the assumptions that are most reasonable regarding the timing of future dividend payments. In my opinion, it is most appropriate to use a model that is based on the assumptions that dividends are paid quarterly and that the next annual dividend increase is a half year away. One version of this quarterly model assumes that the next dividend payment will be received in three months, or one quarter. This model multiplies the dividend yield by (1 + 0.75g). Another version assumes that the next dividend payment will be received today. This model multiplies the dividend yield by (1 + 0.5g). Since, on average, the next dividend payment is a half quarter away, the average of the results of these two models is a reasonable approximation of the average timing of dividends and dividend increases that investors can expect from companies that pay dividends quarterly. The average of these two quarterly dividend models is:

$$K = \frac{D_0(1 + 0.625g)}{P} + g$$

Where: K = the cost of capital, or total return that investors expect to receive;

P = the current market price of the stock;

D_0 = the current annual dividend rate; and

g = the future annual growth rate that investors expect.

In my opinion, this is the DCF model that is most appropriate for estimating the cost of common equity capital for companies that pay dividends quarterly, such as those used in my analysis.

D. Flotation Cost Adjustment

Q. Does the investor return requirement that is estimated by a DCF analysis need to be adjusted for flotation costs in order to estimate the cost of capital?

A. Yes. There are significant costs associated with issuing new common equity capital, and these costs must be considered in determining the cost of capital. Schedule 2 of Exhibit No.___(JSG-2) shows a representative sample of flotation costs incurred with 34 new common stock issues by natural gas distribution companies since January 2004. Flotation costs associated with these new issues averaged 4.09 percent.

This indicates that in order to be able to issue new common stock on reasonable terms, without diluting the value of the existing stockholders' investment, Cascade must have an expected return that places a value on its equity that is approximately 4.0 percent above book value. The cost of common equity capital is therefore the investor return requirement multiplied by 1.04.

One purpose of a flotation cost adjustment is to compensate common equity investors for past flotation costs by recognizing that their real investment in the company exceeds the equity portion of the rate base by the amount of past flotation costs. For example, the proxy companies generally have incurred flotation costs in the past and, thus, the cost of capital invested in these companies is the investor return requirement plus an adjustment for flotation costs. A more important purpose of a flotation cost adjustment is to establish a return that is sufficient to enable a company to attract capital on reasonable terms. This fundamental requirement of a fair rate of return is analogous to the well-understood basic principle that a firm, or an individual, should maintain a good credit rating

even when they do not expect to be borrowing money in the near future. Regardless of whether a company can confidently predict its need to issue new common stock several years in advance, it should be in a position to do so on reasonable terms at all times without dilution of the value of the existing investors' common equity. This requires that the flotation cost adjustment be applied to the entire common equity investment and not just a portion of it.

E. DCF Study of Natural Gas Distribution Companies

Q. Would you please describe the overall approach used in your DCF analysis of Cascade's cost of common equity for its Washington natural gas distribution operations?

A. Because Cascade's Washington natural gas distribution operations must compete for capital with many other potential projects and investments, it is essential that the Company have an allowed return that matches returns potentially available from other similarly risky investments. The DCF method provides a good measure of the returns required by investors in the financial markets. However, the DCF method requires a market price of common stock to compute the dividend yield component. Since Cascade is a subsidiary of MDU Resources and does not have publicly-traded common stock, a direct, market-based DCF analysis of Cascade's Washington natural gas distribution operations as a stand-alone company is not possible. As an alternative, I have used a group of natural gas distribution companies that have publicly-traded common stock as a proxy group for purposes of estimating the cost of common equity for Cascade's Washington natural gas distribution operations.

Q. How did you select a group of natural gas distribution proxy companies?

A. I started with the eleven companies that The Value Line Investment Survey ("Value Line") classifies as Natural Gas Utilities to ensure that the company is considered to be primarily engaged in the natural gas distribution business and that retention growth rate projections are available. From that group, I eliminated any companies that did not have investment-

grade credit ratings from either Standard & Poor's ("S&P") or Moody's Investors Service ("Moody's") because such companies are not sufficiently comparable in terms of business and financial risk to Cascade. In addition, I excluded any companies that did not pay dividends, or that did not have future growth rate estimates provided by either Zacks or Thomson First Call, or that were currently engaged in significant mergers or acquisitions. In order to ensure that the companies are primarily engaged in the natural gas distribution business, I eliminated any companies that did not derive at least 65 percent of their operating income from regulated natural gas distribution operations in 2016, or that did not have at least 65 percent of their total assets devoted to the provision of natural gas distribution service in 2016. As shown on page 1 of Schedule 3 of Exhibit No.___(JSG-2), seven companies met these criteria for inclusion in the proxy group.

Q. How did you calculate the dividend yields for the companies in your proxy group?

A. These calculations are shown on page 1 of Schedule 4 of Exhibit No.___(JSG-2). For the price component of the calculation, I used the average of the high and low stock prices for each month during the six-month period from November 2016 through April 2017. The average monthly dividend yields were calculated for each proxy group company by dividing the prevailing annualized dividend for the period by the average of the stock prices for each month. These dividend yields were then multiplied by the quarterly DCF model factor ($1 + 0.625g$) to arrive at the projected dividend yield component of the DCF model.

Q. Please describe the method you used to estimate the future growth rate that investors expect from this group of companies.

A. There are many methods that reasonably can be employed in formulating a growth rate estimate, but an analyst must attempt to ensure that the end result is an estimate that fairly reflects the forward-looking growth rate that investors expect. I developed two different DCF analyses of the proxy companies. In the first approach, I conducted a Basic DCF analysis that relied on analysts' earnings forecasts for the growth rate component of the model. My second approach used a combination of the analysts' earnings growth

projections and "sustainable growth" rate forecasts calculated from Value Line data (based on growth from earnings retention and stock issuances) to produce a Blended Growth Rate Analysis.

F. Basic DCF Analysis

Q. How did you estimate the expected future growth rate in your Basic DCF analysis?

A. In my Basic DCF analysis, I have estimated expected future growth based on long-term earnings per share growth rate forecasts of investment analysts, which are an important source of information regarding investors' growth rate expectations. This Basic DCF analysis assumes that the analysts' earnings growth forecasts incorporate all information required to estimate a long-term expected growth rate for a company. I have used the consensus estimates of earnings growth forecasts published by Zacks Investment Research and Thomson First Call (as reported on Yahoo! Finance) as the primary sources for analysts' forecasts in my calculations. As shown on page 2 of Schedule 4 of Exhibit No.___(JSG-2), the average of the analysts' long-term earnings growth rate estimates for the natural gas distribution proxy companies is 5.86 percent, and the median is 6.00 percent.

Q. How did you calculate the cost of capital using the Basic DCF analysis?

A. These calculations are shown on page 5 of Schedule 4 of Exhibit No.___(JSG-2). Again, the annual dividend yield is multiplied by the quarterly dividend adjustment factor (*1 + 0.625g*), and this product is added to the growth rate estimate to arrive at the investor-required return. Then, the investor return requirement is multiplied by the flotation cost adjustment factor, 1.04, to arrive at the Basic DCF estimate of the cost of common equity capital for the proxy companies. The Basic DCF analysis indicates a cost of common equity for the proxy companies in a range from 7.11 percent to 11.84 percent. In this analysis, the median for the group is 9.22 percent and the third quartile is 10.22 percent.

G. Blended Growth Rate Analysis

Q. How did you use your Blended Growth Rate Analysis to estimate investors' long-term growth rate expectations for the proxy companies?

A. The Blended Growth Rate approach combines: (i) Sustainable growth rates based on Value Line retention growth rate forecasts (B*R), plus earnings accretion from new shares (S*V); and (ii) consensus estimates of long-term earnings growth for each company from various investment analysts, as published by Zacks and Thomson First Call

Q. What approach did you use in calculating the expected long-term retention growth rate?

A. The long-term retention growth rate component is based on the calculation of retention growth rates using Value Line forecasts for each company.

Q. Please describe the retention growth rate component of your analysis.

A. I have relied upon Value Line projections of the retention growth rates that the proxy companies are expected to begin maintaining three to five years in the future. Although companies may experience extended periods of growth for other reasons, in the long-run, growth in earnings and dividends per share depends in part on the amount of earnings that is being retained and reinvested in a company. Thus, the primary determinants of growth for the proxy companies will be (i) their ability to find and develop profitable opportunities; (ii) their ability to generate profits that can be reinvested in order to sustain growth; and, (iii) their willingness and inclination to reinvest available profits. Expected future retention rates provide a general measure of these determinants of expected growth, particularly items (ii) and (iii).

Q. How can a company's earnings retention rate affect its future growth?

A. Retention of earnings causes an increase in the book value per share and, other factors being equal, increases the amount of income that is generated per share of common stock. The retention growth rate can be estimated by multiplying the expected retention rate (B) by the rate of return on common equity (R) that a company is expected to earn in the future.

For example, a company that is expected to earn a return of 12 percent and retain 75 percent of its earnings might be expected to have a growth rate of 9 percent, computed as follows:

0.75 x 12% = 9%

On the other hand, another company that is also expected to earn 12 percent but only retains 25 percent of its earnings might be expected to have a growth rate of 3 percent, computed as follows:

0.25 x 12% = 3%

Thus, the rate of growth in a firm's book value per share is primarily determined by the level of earnings and the proportion of earnings retained in the company.

Q. How can a company increase its earnings per share and future dividends by issuing new common stock?

A. Firms can grow through external financing by issuing new shares to investors and investing the proceeds to earn a return. If the new equity funds are invested to earn the same rate of return as the existing equity, this source of financing can increase earnings per share if the market price per share (M) is greater than the book value per share (B) so that the earnings of existing shareholders is increased. The amount of growth from external share issuances is represented as:

Growth from new issuances = S*V

Where:

S = the annual percentage increase in common equity from stock issuances;

V = the portion of the stock issuance that increases the book value of existing shareholders;

= 1 – (B/M).

Q. How did you calculate the expected future sustainable growth rates of the proxy companies?

A. For most companies, Value Line publishes forecasts of data that can be used to estimate

the retention rates that its analysts expect individual companies to have three to five years in the future. Since these retention rates are projected to occur several years in the future, they should be indicative of a normal expectation for a primary underlying determinant of growth that would be sustainable indefinitely beyond the period covered by analysts' forecasts. While companies may have either accelerating or decelerating growth rates for extended periods of time, the retention growth rates expected to be in effect three to five years in the future generally represent a minimum "cruising speed" that companies can be expected to maintain indefinitely. The derivation of Value Line's retention growth rate forecasts for each of the proxy companies is shown on page 3 of Schedule 4 of Exhibit No.___(JSG-2). The projected earnings per share and projected dividends per share can be used to calculate the percentage of earnings per share that is being retained and reinvested in the company. This earnings retention rate is multiplied by the projected return on common equity to arrive at the B*R portion of the projected sustainable growth rate. It is also necessary to account for projected earnings growth derived from issuing new shares by the proxy group companies. This is calculated by multiplying growth in equity from issuing new shares (S) times the portion of new equity that accrues to existing shareholders (V). The S*V portion of the projected sustainable growth rates for each of the proxy companies are also shown on page 3 of Schedule 4 of Exhibit No.___(JSG-2). The average sustainable growth rate, (B*R) + (S*V), for the proxy companies is 5.38 percent, and the median is 5.08 percent.

Q. How did you utilize the analysts' projected earnings growth rates and the projected sustainable earnings growth rates in estimating expected growth for the proxy companies in the Blended Growth Rate Analysis?

A. As shown on page 4 of Schedule 4 of Exhibit No.___(JSG-2), I calculated a weighted average of the analysts' projected earnings growth rates and the sustainable growth rates to derive long-term growth rate estimates for each of the proxy companies. In these calculations, I gave two-thirds weighting to the analysts' earnings growth rate projections

and one-third weighting to the projected sustainable growth rates. The average of the blended growth rates for the proxy companies is 5.70 percent, and the median is 5.92 percent.

Q. How did you utilize these Blended Growth Rate estimates in estimating the return on common equity capital that investors require from the proxy companies?

A. These calculations are shown on page 6 of Schedule 4 of Exhibit No.___(JSG-2). Again, the annual dividend yield for each company is multiplied by the quarterly dividend adjustment factor (*1 + 0.625g*), and this product is added to the growth rate estimate to arrive at the investor-required return. Finally, the investor return requirement is multiplied by the flotation cost adjustment factor, 1.04, to arrive at the cost of common equity capital for the proxy companies. This Blended Growth Rate Analysis indicates that the cost of common equity capital for the natural gas distribution proxy companies is in a range between 7.85 percent and 10.75 percent. In this analysis, the median for the group is 9.13 percent and the third quartile is 9.64 percent.

Q. Earlier you discussed the fact that the Federal Reserve Board has been setting interest rates and monetary policy in a way that artificially depresses yields on U.S. Treasury debt. What does this mean for the cost of common equity for gas distribution companies using the DCF model?

A. The DCF cost of equity results for regulated gas distribution companies are being affected by artificial factors in the current and projected capital markets, including the following two key factors: (1) the Federal Reserve's continuing accommodative monetary policy; (2) and the market's expectation for substantially higher interest rates.

Rising interest rates historically have had a negative effect on stock prices, especially for dividend paying stocks such as utilities. As interest rates increase, the return on gas utility equities may be less attractive to investors as compared with other investments of comparable risk. The market's expectation for rising interest rates suggests that the calculated cost of equity for the proxy companies using current market data is likely

to be an artificially depressed estimate of investors' required return at this time. For example, in two recent decisions, the FERC expressed concern that Federal Reserve actions may have artificially reduced current dividend yields for utilities and the results of the DCF model may not be representative of the true cost of capital at this time.[18]

H. Risk Premium Analysis

Q. Have you conducted additional analysis in determining the cost of equity capital for Cascade?

A. Yes. The risk premium approach provides a general guideline for determining the level of returns that investors expect from an investment in common stocks. Investments in the common stocks of companies carry considerably greater risk than investments in bonds of those companies since common stockholders receive only the residual income that is left after the bondholders have been paid. In addition, in the event of bankruptcy or liquidation of the company, the stockholders' claims on the assets of a company are subordinate to the claims of bondholders. This priority standing provides bondholders with greater assurances that they will receive the return on investment that they expect and that they will receive a return of their investment when the bonds mature. Accompanying the greater risk associated with common stocks is a requirement by investors that they can expect to earn, on average, a return that is greater than the return they could earn by investing in less risky bonds. Thus, the risk premium approach estimates the return investors require from common stocks by utilizing current market data that is readily available in bond yields and adding to those yields a premium for the added risk of investing in common stocks.

Investors' expectations for the future are influenced to a large extent by their knowledge of past results. Duff & Phelps annually publishes extensive data regarding the returns that have been earned on stocks, bonds and U.S. Treasury bills since 1926. Historically, the annual return on large company common stocks has exceeded the return

[18] Opinion No. 531, 147 FERC ¶ 61,234 (2014); aff'd in Opinion No. 531-B, 150 FERC ¶ 61,165 (March 3, 2015); and Opinion No. 551, 156 FERC, ¶ 61,234 (Sept. 28, 2016), para. 120-122.

on long-term corporate bonds by a premium of 570 basis points (5.7 percent) per year from 1926-2016.[19] When this premium is added to the average yield on Moody's corporate bonds in recent months of approximately 4.2 percent[20], the result is an investor return requirement for large company stocks of approximately 9.9 percent. However, investors in smaller companies expect higher returns over the long term, due to the additional business and financial risks that smaller companies face. According to Duff & Phelps, companies in the same size range as Cascade's Washington natural gas distribution operations have had a premium of 1,400 basis points (14.0 percent) over the average return on long-term corporate bonds.[21] When added to the recent average corporate bond yield, this size-related premium suggests an expected return of 18.2 percent. This analysis indicates that the rate of return that I am proposing in this proceeding would be low relative to the historic risk premiums earned by similarly-sized unregulated companies.

Q. Did you also perform a risk premium analysis that is specific to the natural gas distribution industry?

A. Yes, I did. Research studies provide empirical support for the proposition that equity risk premia generally increase as interest rates decrease, and vice versa. In fact, the data provided in Schedule 5, Exhibit No.___(JSG-2) produce statistical results that are consistent with existing research in this area. Using this data, I performed a linear regression to estimate the relationship between 30-year U.S. Treasury bonds and the risk premium required for regulated gas distribution companies. The resulting equation is presented in Schedule 5, Exhibit No.__(JSG-2) and re-created below:

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[19] Duff & Phelps Valuation Handbook, 2017 U.S. Guide to Cost of Capital, Exhibit 2.3. Calculation: (12.0 percent – 6.3 percent = 5.7 percent)

[20] Exhibit No.___(JSG-2), Schedule 1, at 3. The average yield on Moody's corporate bonds from November 2016 through April 2017 has been 4.24 percent.

[21] Duff & Phelps Valuation handbook, 2017 U.S. Guide to Cost of Capital, Exhibit 4.1. Duff & Phelps defines size ranges based on market capitalization. I calculated the implied market capitalization for Cascade's Washington natural gas distribution operations based on the Company's pro forma rate base (approximately $290 million) and the test year equity ratio (50.00 percent), which is based on the average equity ratio for Cascade for the last five years. This places Cascade's Washington natural gas distribution operations in Duff & Phelps' tenth decile. Calculation: 20.3 percent – 6.3 percent = 14.0 percent.

Intercept + Coefficient x Bond Yield = Risk Premium

0.08410 + (- 0.5560 x Bond Yield) = Risk Premium

The regression statistics indicate that this equation is statistically significant and the R-square reveals that approximately 80 percent of the variation in the risk premium is explained by the bond yield. The negative coefficient in the above equation demonstrates the inverse relationship between bond yields and the risk premium. For every change of 100 basis points in the bond yield, the risk premium changes by approximately 55 basis points in the opposite direction.

This Risk Premium analysis was conducted using three different risk-free rates: (1) the current average yield on 30-year Treasury bonds; (2) the near-term projected yields on 30-year Treasury bonds in 2017 and 2018; and (3) the longer-term projected yields on 30-year Treasury bonds from 2019-2023. Based on these three interest rates, the regression equation produces an average ROE estimate of 9.96 percent.

I. Market DCF Analysis

Q. What other analysis did you conduct in determining the cost of equity capital for Cascade?

A. For an additional benchmark of the reasonableness of my DCF results, I calculated the current required return for the companies contained in the S&P 500 Index. Using data provided by the Bloomberg Professional service, I performed a market capitalization-weighted DCF calculation on the S&P 500 companies based on the current dividend yields and long-term growth rate estimates as of April 28, 2017. These calculations are shown in Schedule 6 of Exhibit No.___(JSG-2). The current secondary market required ROE for the S&P 500 is 12.54 percent. This analysis demonstrates that the rate of return that I am proposing in this proceeding is low relative to the return required by investors who invest in the S&P 500.

J. Forward-Looking CAPM

Q. Many analysts would argue that gas distribution companies are less risky than the S&P 500 companies. Does this make the S&P 500 a poor benchmark for evaluating the DCF results?

A. No. The DCF required return for the S&P 500 is significantly greater than the return required for the natural gas distribution company proxy group, and the large magnitude of this difference is an indicator that the proxy company DCF results may be on the low side. Some analysts use the CAPM to adjust for differences in risk between the market average and a particular group of proxy companies. While I do not consider the CAPM to be a reliable measure of the cost of capital, one could use it to adjust the S&P 500 results to achieve a risk-adjusted benchmark for the natural gas distribution company proxy group. For example, Beta is frequently used as the measure of relative risk in the CAPM. As shown on Schedule 7 of Exhibit No.___(JSG-2), the average beta reported by Value Line for the proxy companies is 0.73.

Duff & Phelps recommends making a size adjustment to the CAPM results to reflect the differential in investors' return requirements for smaller and larger companies, as measured by market capitalization. On Schedule 8, page 2 of 2, of Exhibit No.___(JSG-2), I calculated the CAPM size premium for the proxy companies using the Duff & Phelps size premium data. The average size adjustment for my proxy group companies is 128 basis points. As shown on Schedule 8, page 1 of 2, of Exhibit No.___(JSG-2), using the Value Line beta estimates and the Duff & Phelps adjustments for CAPM size bias for my proxy companies, the median unbiased CAPM result for my proxy companies is 11.26 percent.

Thus, if one were to use the CAPM as a benchmark of a reasonable return, this benchmark suggests that my recommended ROE of 9.9 percent in this proceeding is a reasonable estimate of the cost of equity for Cascade at this time.[22]

K. Relative Risk Analysis

Q. Have you compared the risks faced by Cascade's Washington natural gas distribution operations with the risks faced by the proxy group of companies?

A. Yes. There are four broad categories of risk that concern investors. These include:

1. Business Risk;
2. Regulatory Risk;
3. Financial Risk; and,
4. Market Risk.

Q. Please describe the business risks inherent in the natural gas distribution industry.

A. Business risk refers to the ability of the firm to generate revenues that exceed its cost of operations. Business risk exists because forecasts of both demand and costs are inherently uncertain. Markets change and the level of demand for the firm's output may be sufficient to cover its costs at one time and later become insufficient. Sunk investments in long-lived natural gas distribution assets, for which cost recovery occurs over a period of thirty years or more, are subject to enormous uncertainties and risks that demand, costs, supply, and competition may change in ways that adversely affect the value of the investment.

Q. What are some of the business risks faced by Cascade's Washington natural gas distribution operations?

A. The Company's natural gas distribution operations in Washington face many of the same

[22] This CAPM calculation is identical to the one adopted by the U.S. Federal Energy Regulatory Commission. *Martha Coakley, et al. v. Bangor Hydro-Electric Company, et al.*, Opinion No. 531, 147 FERC ¶ 61,234 (2014); aff'd in Opinion No. 531-B, 150 FERC ¶ 61,165 (March 3, 2015); and *ABATE, et al. v. MISO, et al.*, Opinion No. 551, 156 FERC, ¶ 61,234 (Sept. 28, 2016), para. 120-122. Note that FERC used the CAPM only as a benchmark, but set the allowed rate of return above the median indicated by a DCF analysis of proxy companies because of the current abnormal financial market conditions. While Opinion No. 531 was recently remanded to the FERC by the D.C. Circuit Court, the Court's decision did not question the finding by the FERC that capital market conditions were anomalous.

business risks that are associated with other natural gas distribution companies. However, Cascade's Washington natural gas distribution operations face some particular risks that distinguish the Company from the proxy group of distribution companies, including its smaller size, generally lower incomes in the cities and towns that it serves, and the undiversified nature of the local economies in the Company's service territory.

As shown on page 1 of Schedule 3 of Exhibit No.___(JSG-2), Cascade's Washington natural gas distribution operations are significantly smaller than the operations of any of the proxy companies and a fraction of the size of the typical proxy company. For example, the 2017 test year adjusted rate base of Cascade's Washington natural gas distribution operations is equal to only 5.2 percent of the fiscal year-end 2016 total assets of the median proxy company. Similarly, Cascade's Washington natural gas distribution 2017 test year requested operating revenues and operating income are only 11.8 percent and 7.9 percent of the year-end 2016 level for the median proxy company, respectively. Thus, depending upon the measure of size, the typical proxy company is somewhere between 8 and 19 times the size of Cascade's Washington natural gas distribution operations. The Company's smaller size has significant implications for business risks. Duff & Phelps has documented the significantly higher returns that generally have been associated with small companies.

With its relatively small revenue base, Cascade's Washington natural gas distribution operations are subject to greater risk that a major employer or industry, such as a government facility or refinery, might downsize or close. Events such as these could significantly affect overall employment and income in the towns served. Factors that negatively influence the local economy can reduce demand for Cascade's Washington natural gas distribution service and adversely impact investments in facilities used to provide those services.

Q. In July 2016, Cascade was allowed to implement a full revenue-per-customer decoupling mechanism. Does this decoupling mechanism reduce the Company's risk profile relative to the proxy group?

A. No. Because the ROE recommendation is established for a company based on its risk profile relative to the proxy group, it is necessary to consider whether the companies in the proxy group also have revenue decoupling mechanisms or another comparable form of volumetric risk protection. Schedule 9 of Exhibit No.___(JSG-2) shows that 66.7 percent of the operating utilities held by the proxy companies have some form of volumetric protection (e.g., revenue decoupling mechanisms, straight fixed-variable rate design, formula rate plans). On that basis, Cascade has similar volumetric risk as the proxy group companies, and no adjustment to the authorized return on equity capital is necessary.

Considering only its smaller size, Cascade's Washington natural gas distribution operations might require a return that is approximately 100 basis points higher than the return required for the typical proxy company. In addition, the Company's operations are concentrated in smaller towns and cities with local economies that are generally less diversified than those of the proxy companies. In summary, Cascade's Washington natural gas distribution operations are riskier than the operations of the proxy companies.

Q. What are the regulatory risks faced by Cascade's Washington natural gas utility operations?

A. Regulatory risk is closely related to business risk and might be considered just another aspect of business risk. To the extent that the market demand for a natural gas distribution company's services is sufficiently strong that the company could conceivably recover all of its costs, regulators may nevertheless set the rates at a level that will not allow for full cost recovery. In effect, the binding constraint on natural gas distribution companies is often posed by regulation rather than by the working of market forces. One purpose of regulation is to provide a substitute for competition where markets are not workably competitive. As such, regulation often attempts to replicate the type of cost discipline and

risks that might typically be found in highly competitive industries.

Moreover, there is the perceived risk that regulators may set allowed returns so low as to effectively undermine investor confidence and jeopardize the ability of natural gas distribution companies to finance their operations. Thus, in some instances, regulation may substitute for competition and in other instances it may limit the potential returns available to successful competitors. In either case, regulatory risk is an important consideration for investors and has a significant effect on the cost of capital for all firms in the natural gas distribution industry.

The regulatory environment can significantly affect both the access to, and cost of capital in several ways. As noted by Moody's, "[f]or rate-regulated utilities, which typically operate as a monopoly, the regulatory environment and how the utility adapts to that environment are the most important credit considerations."[23] Moody's further noted that:

> Utility rates are set in a political/regulatory process rather than a competitive or free-market process; thus, the Regulatory Framework is a key determinant of the success of utility. The Regulatory Framework has many components: the governing body and the utility legislation or decrees it enacts, the manner in which regulators are appointed or elected, the rules and procedures promulgated by those regulators, the judiciary that interprets the laws and rules and that arbitrates disagreements, and the manner in which the utility manages the political and regulatory process. In many cases, utilities have experienced credit stress or default primarily or at least secondarily because of a break-down or obstacle in the Regulatory Framework – for instance, laws that prohibited regulators from including investments in uncompleted power plants or plants not deemed "used and useful" in rates, or a disagreement about rate-making that could not be resolved until after the utility had defaulted on its debts.[24]

Regulatory Research Associates ("RRA") recently lowered its rating for the WUTC to Average / 3, which is one notch below average on the nine-point scale.[25] RRA notes that the "regulatory environment in Washington is, on balance, somewhat more restrictive

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[23] Moody's Investors Service, *Regulated Electric and Gas Utilities*, December 23, 2013, at 9.
[24] *Ibid.*
[25] Regulatory Research Associates, Washington Commission Profile, accessed May 31, 2017.

than average from an investor viewpoint."[26] In particular, RRA notes that "authorized equity returns, some of which were approved following settlements, have been below prevailing industry averages when established."[27] This RRA rating suggests that Cascade's Washington natural gas distribution operations should be considered to have slightly above average regulatory risk.

Q. Would you please describe Cascade's relative financial risks?

A. Financial risk exists to the extent that a company incurs fixed obligations in financing its operations. These fixed obligations increase the level of income which must be generated before common stockholders receive any return and serve to magnify the effects of business and regulatory risks. Fixed financial obligations also increase the probability of bankruptcy by reducing the company's financial flexibility and ability to respond to adverse circumstances. One possible indicator of investors' perceptions of relative financial risk in this case might be obtained from credit ratings.

Page 2 of Schedule 3 of Exhibit No.___(JSG-2) shows the credit ratings assigned by S&P and Moody's to each of the companies in the comparison group and Cascade. The median S&P credit rating for companies in the proxy group is A-. By comparison, Cascade's long-term rating from S&P is BBB+. This suggests that the perceived business and financial risk of Cascade's bonds is slightly higher than that of the typical company in the comparison group.

The capital structure data on Schedule 10 of Exhibit No.___(JSG-2) show that Cascade's filed common equity ratio of 50.00 percent is very close to the 49.84 percent median for the proxy companies as of March 31, 2017, suggesting average financial risk. However, the Company's below-average credit rating suggests that a higher common equity ratio would be required to offset Cascade's above-average business risks.

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[26] *Ibid.*
[27] *Ibid.*

Q. Would you please describe Cascade's market risks?

A. Market risk is associated with the changing value of all investments because of business cycles, inflation, and fluctuations in the general cost of capital throughout the economy. Different companies are subject to different degrees of market risk largely as a result of differences in their business and financial risks. Overall, the market risk of Cascade's Washington natural gas distribution business is comparable to that of the companies in the natural gas distribution comparison group.

Q. How do the overall risks of the proxy companies compare with the risks faced by Cascade's Washington natural gas distribution operations?

A. Cascade's Washington natural gas distribution operations face overall risks that are above the median relative to those of the proxy companies. Cascade has above-average business risks due primarily to its small size relative to the proxy companies and its exposure to a relatively undiversified local economy and slightly above-average regulatory risks. Standard & Poor's comments: "Somewhat offsetting [the strong business risk profile for regulated U.S. utilities] are the company's small customer base in its lightly populated two-state service territory and per capita income in its service territories that is slightly weaker than the national average."[28]

The greater business and regulatory risk lead me to conclude that investors appraise the overall risks of Cascade's Washington natural gas distribution operations to be above average relative to the risks of the proxy companies. Consequently, Cascade's Washington natural gas distribution business requires an allowed rate of return that is significantly above the median of the range for the companies in the proxy group indicated by my DCF analyses.

[28] Standard and Poor's Global Ratings, *Cascade Natural Gas Corp*., Research Update, December 18, 2014, at 4.

III. SUMMARY AND CONCLUSIONS

Q. Please summarize the results of your cost of capital study.

A. I conducted two DCF analyses on a group of natural gas distribution companies that have a range of risks that is roughly comparable to those of Cascade's Washington natural gas distribution operations. These results are summarized as follows:

Table 2: Summary of DCF Results

	Basic DCF Analysis	Blended Growth Rate DCF Analysis
High	11.84%	10.75%
3rd Quartile	10.22%	9.64%
Median	9.22%	9.13%
1st Quartile	7.82%	8.01%
Low	7.11%	7.85%

In addition, I conducted two risk premium analyses, a market DCF analysis of the S&P 500, and a size-adjusted CAPM analysis to test the reasonableness of my DCF analyses. Those results are summarized as follows:

Table 3: Benchmark Risk Premium and Market DCF Analyses

	Return
Risk Premium (Long-Term Corporate Bonds)	
vs. Large Company Stocks	9.9%
vs. Small Company Stocks	18.2%
Gas Utility Risk Premium (Regression of Authorized ROEs against 30-yr Treasury yields)	10.0%
Market DCF (S&P att0)	12.5%
Forward-Looking CAPM	11.3%

My risk premium, market DCF and CAPM analyses suggest that the median DCF results generally are low relative to current market benchmarks. In particular, the median

DCF return estimates are below the 10.0 percent risk premium return, but the top of those DCF ranges are considerably above 10.0 percent. Similarly, the median DCF estimates for the natural gas distribution proxy companies are well below the 12.5 percent market DCF estimate for the S&P 500 companies and the 11.3 percent size-adjusted CAPM estimate for the natural gas distribution proxy companies.

Q. What rate of return on common equity do you recommend for Cascade's Washington natural gas distribution operations in this proceeding?

A. My analyses indicate that an appropriate rate of return on common equity for Cascade's Washington natural gas distribution operations at this time is 9.9 percent, which is between the median and third quartile of the range for my Basic DCF analysis and consistent with the Risk Premium analyses. This recommended return reflects my assessment that the overall risks of Cascade's Washington natural gas distribution operations are above average relative to those of the proxy companies, and the fact that the DCF results appear to be low relative to the other benchmarks at this time. Although the Company has average financial risk relative to the proxy companies, it has above average business risks and slightly above average regulatory risk. In addition to its small size relative to the proxy companies, Cascade's Washington natural gas distribution operations are exposed to risks associated with relatively undiversified local economies. Thus, an allowed rate of return approximately equal to the average utility risk premium (10.0 percent) in my study is appropriately positioned to reflect the risks faced by Cascade's Washington natural gas distribution operations relative to the risks faced by the proxy companies, and also to reflect current conditions in the financial market.

Q. Does this conclude your Prepared Direct Testimony?

A. Yes.