Exhibit No. DCP-1T
Dockets UE-090704/UG-090705
Witness: David C. Parcell

BEFORE THE WASHINGTON STATE
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant, v. PUGET SOUND ENERGY, INC., Respondent.	DOCKET UE-090704 and DOCKET UG-090705 *(consolidated)*

TESTIMONY

OF

DAVID C. PARCELL

ON BEHALF OF THE STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Cost of Capital

November 17, 2009
Revised November 18, 2009

structure with a 45.0 percent equity ratio. This is consistent with prior capital structures used by PSE and approved by this Commission. In my judgment, it reflects a capital structure that meets the Commission's standards of safety and economy.

The second step is a determination of the embedded cost rates of debt. I use a long-term debt cost of ~~6.49~~ 6.45 percent, as described above. I use the 2.47 percent cost of short-term debt contained 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 PSE. I apply each of these methodologies to three groups of proxy utilities. These three methodologies and my findings are:

Methodology	Range
Discounted Cash Flow	9.6-11.3%
Capital Asset Pricing Model	7.9-8.2%
Comparable Earnings	9.5-10.5%

Based upon these analyses, I conclude that the cost of common equity for PSE 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. This 10.0 percent return is also consistent with the results of my DCF analyses, which this Commission favors.

Combining these three elements into a weighted cost of capital, results in an overall rate of return of 7.89 percent.

unprecedented lows (reflecting an influx of capital into these "safe" investments). As a result, stock prices fell dramatically and corporate bond yields rose reflecting a reluctance of investors to own these securities. Over the past several months, the capital markets have largely improved such that the current yields on long-term corporate bonds have declined to levels less than those that existed prior to the late 2008-early 2009 financial crisis.

Q. Please explain why the financial crisis has not increased the cost of capital for utilities such as PSE.

A. First, it must be emphasized that depressed economic conditions and the recent financial crisis affected 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 was the case for PSE. This is because PSE is a regulated utility that sells a product that has few close substitutes. As such, PSE 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 has been to depress the profits of most enterprises. As a result, it is evident that capital costs decreased as a result of the recession. The decline in capital costs is reflected in my CAPM analysis that I describe later. In short, there is no justification at this time for increasing the profit level of a regulated utility such as PSE at the same time that other enterprises are experiencing lower profits and lower cost of capital.

A. Yes, I am aware of this. I note, on the other hand, that Moody's and Standard & Poor's initially put PE and PSE on review or CreditWatch with negative implications despite the proposed ring-fencing provisions. My Exhibit No. DCP-5 contains the documents in which ~~Moody's and~~ Standard & Poor's took this action.

Q. What have been the rating agencies reactions to the completion of the merger?

A. Standard & Poor's made the following comments on PSE in a January 16, 2009 RatingsDirect, just prior to the merger completion:

> On Jan. 16, 2009, Standard & Poor's Ratings Services raised its corporate credit rating on integrated electric and gas utility company Puget Sound Energy Inc. (PSE) to 'BBB' from 'BBB-', its secured ratings to 'A-' from 'BBB+', and its preferred stock and junior subordinated debt ratings to 'BB+' from 'BB'. At the same time, Standard & Poor's lowered its corporate credit rating on Puget Energy Inc. (Puget) to 'BB+' from 'BBB-'. Standard & Poor's removed all the ratings from CreditWatch with negative implications. The outlook is stable.
>
> The rating actions on PSE and Puget reflect their acquisition led by Macquarie Infrastructure Partners. All federal and state regualtory and shareholder approvals required for the merger have now been obtained, and the company expects the transaction to close by Feb. 6, 2009.
>
> Standard & Poor's placed the ratings on CreditWatch with negative implications on Oct. 26, 2007. The action followed the announcement that Puget has agreed to sell itself to a consortium of private investors led by Macquarie Infrastructure Partners, an affiliate of Macquarie Group Ltd. (A-/Negative/A-2) for $7.4 billion. The approved transaction is expected to increase total net debt by $850 million on consolidated basis while reducing debt at PSE.
>
> The upgrade of PSE and its related securities reflects Standard & Poor's view that plans to place an independent director on the board of directors of the utility company, coupled with other commitments, such as dividend restrictions, provides insulation to the utility company. In addition, the utility company's stand-alone financial metrics are expected to improve post-transaction as some debt is

Short-Term Debt	3.95%	
Long-Term Debt	48.05%	
Common Equity	48.00%	

This proposed capital structure contains a higher common equity ratio than the common equity requested by PSE in recent general rate cases (i.e., 45.0 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 PSE's cost of capital in this proceeding?

A. I recommend that the Commission use the same capital structure ratios requested by PSE in prior cases, which is 45.0 percent common equity (and includes short-term debt). This 45.0 percent common equity ratio is similar to that of the industry-wide electric and combination electric utilities I just cited. My Exhibit No. DCP-3 describes the derivation of my proposed capital structure.

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 balances safety (the preservation of investment quality credit ratings and access to capital) against economy (the lowest overall cost to attract and maintain capital). *WUTC v. Puget Sound Energy, Inc.*, Dockets UE-040640 and UG-040641, Order 06 at ¶27 (February 18, 2005). The Commission noted that the appropriate

I note that the individual DCF calculations shown on Exhibit No. DCP-11 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~~ DCP-11 indicate average (mean and median) DCF cost rates of 9.6 percent to 11.3 percent. The "high" DCF rates (i.e., using the highest growth rates only) are 11.9 percent to 12.8 percent on an average basis and 11.1 percent to 11.5 percent on a median basis, while the "low" DCF rates (i.e., using the lowest growth rates only) are 8.5 percent to 10.6 percent.

Q. What do you conclude from your DCF analyses?

A. This DCF analysis indicates a range of 9.6 percent to 11.3 percent for the proxy groups. This is approximated by the average/mean values. I give less weight to the lower end of the DCF results, as well as significantly less weight to the extreme upper ends of the groups (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 9.6 percent to 11.3 percent currently reflects the proper DCF cost for PSE. I specifically recommend 10.0 percent, because the DCF results are presently upwardly influenced by recent stock prices (i.e., higher yield).

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 (August-October, 2009) for 20-year U.S. Treasury bonds. Over this three month period, these bonds had an average yield of ~~4.28~~ 4.21 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

	Mean	Median
Proxy Group	8.2%	8.2%
S&P Group	8.2%	8.2%
Integrated Group	8.0%	7.9%

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

A. The CAPM results collectively indicate an equity cost of 7.9 percent to 8.2 percent for the ~~two~~ three groups of comparison utilities. I conclude that the CAPM cost of equity for PSE is 7.9 percent to 8.2 percent.

D. 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,

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 1992-2009 (i.e., the last eighteen 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: 2002-2009 (the current business cycle) and 1992-2001 (the most recent complete business cycle).

Q. Please describe your CE analysis.

A. Exhibit No. DCP-14 and Exhibit No. DCP-15 contain summaries of experienced returns on equity for several groups of companies.

Exhibit No. DCP-14 shows the earned returns on average common equity and market-to-book ratios for the ~~two~~ three groups of proxy utilities. These can be summarized as follows:

	Proxy Group	S&P Group	Integrated Group
Historic ROE			
Mean	8.3-10.9%	11.6-12.1%	10.0-10.5%
Median	8.6-11.4%	11.7-12.2%	10.4-12.4%
Historic M/B			
Mean	147-157%	167-174%	137-164%
Median	135-157%	161%	153-166%
Prospective ROE			
Mean	9.2-9.7%	12.1-12.2%	11.0-11.5%
Median	9.0-9.5%	11.5-12.0%	10.5-11.0%

These results indicate that historic returns of 8.3-~~12.2~~ 12.4 percent have been adequate to produce market-to-book ratios of 135-~~167~~174 percent for the groups of proxy utilities. Furthermore, projected returns on equity for 2010, and 2012-2014 are within a range of 9.0 percent to 12.2 percent for the utility groups. These relate to 2008 market-to-book ratios of 118 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 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-15 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 PSE?

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 8.3 percent to ~~12.2~~ 12.4 percent have resulted in market-to-book ratios of 135 and greater. Prospective returns of 9.0 percent to ~~12.1~~ 12.2 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

The major problem with Dr. Morin's DCF analyses is the fact that he has used only one indicator of growth – projections of EPS growth. As I indicated in my DCF analysis, it is customary and proper to use alternative measures of growth.

Dr. Morin's DCF analyses implicitly assume that investors rely exclusively on EPS projections in making investment decisions. This is a very dubious assumption and Dr. Morin has offered no evidence that it is correct. I note, for example, that Value Line – one of the sources of his growth rate estimates – contains many statistics, both of a historic and projected nature, for the benefit of investors who subscribe to this publication and presumably make investment decisions based at least in part from the information contained in Value Line. Yet, Dr. Morin would have us believe that Value Line subscribers and investors focus exclusively on one single number from this publication.

I note in this regard that the DCF model is a "cash flow" model. The cash flow to investors in a DCF framework is dividends. Dr. Morin's DCF model, in contrast, does not even consider dividend growth rates.

Q. Do you ~~disagree~~ with Dr. Morin's risk-adjustment for PSE's cost of equity?

A. No, I do not.

Q. Dr. Morin's testimony, on pages 57-59, cites his perception that PSE's "construction risk" makes the Company more risky than other electric utilities. He also states, on pages 60-61 that "regulatory lag" is a major risk factor faced by the Company. Are those assertions valid?