WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

                     Complainant,

   v.

PUGET SOUND ENERGY, INC.,

                     Respondent.

Docket No. UE-060266
Docket No. UG-060267

DIRECT TESTIMONY OF MICHAEL P. GORMAN

ON BEHALF OF

THE INDUSTRIAL CUSTOMERS OF NORTHWEST UTILITIES

REDACTED VERSION

(Confidential Information Removed)

July 19, 2006

| 1 | **Q.** | **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.** |

1   **Q.**   **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2   **A.**   My name is Michael Gorman, and my business address is 1215 Fern Ridge Parkway,

3   Suite 208, St. Louis, MO 63141-2000.

4   **Q.**   **WHAT IS YOUR OCCUPATION?**

5   **A.**   I am a consultant in the field of public utility regulation and a principal in the firm of

6   Brubaker & Associates, Inc., energy, economic, and regulatory consultants.

7   **Q.**   **PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
8   **EXPERIENCE.**

9   **A.**   These are set forth in Exhibit No. ___ (MPG-2).

10   **Q.**   **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

11   **A.**   I am appearing on behalf of the Industrial Customers of Northwest Utilities ("ICNU").

12   **Q.**   **WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

13   **A.**   I will recommend a fair return on common equity and an overall rate of return for Puget

14   Sound Energy, Inc. ("PSE" or the "Company").

15   **Q.**   **PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.**

16   **A**.   I recommend the Washington Utilities and Transportation Commission ("Commission")

17   award PSE a return on common equity of 9.9% and an overall rate of return of 8.17%, as

18   shown on my Exhibit No. ___ (MPG-3).

19   I recommend the rejection of PSE's projected capital structure. The Company's

20   actual test year capital structure is reasonable and should be used to set rates.

21   My recommended return on equity for PSE is based on constant growth

22   Discounted Cash Flow ("DCF"), Risk Premium ("RP"), and Capital Asset Pricing Model

23   ("CAPM") analyses.

1   I demonstrate that my recommended return on equity and proposed capital

2   structure for PSE will provide PSE an opportunity to realize cash flow financial

3   coverages and a balance sheet strength that conservatively support PSE's current bond

4   rating. Consequently, my recommended return on equity represents fair compensation

5   for PSE's investment risk, and it will preserve PSE's financial integrity and credit

6   standing.

7   I respond to PSE witness Dr. Roger Morin's recommended 11.25% return on

8   equity, which includes a 0.25% add-on return to reflect his opinion that PSE has higher

9   risk than his proxy group. Dr. Morin's recommended return on equity is excessive and

10   should be rejected.

11   **ELECTRIC UTILITY INDUSTRY MARKET PERSPECTIVE**

12   **Q.   PLEASE DESCRIBE THE MARKET'S PERCEPTION OF THE ELECTRIC**
13   **UTILITY INDUSTRY OVER THE LAST SEVERAL YEARS.**

14   **A.**   I believe Standard & Poor's ("S&P") captures the sentiment of the investment market

15   toward the electric utility industry experienced over the last several years. In 2001, S&P

16   stated it recorded 81 downgrades to utility credit ratings, with only 29 upgrades. S&P

17   stated in 2002 that the credit rating activity in the electric utility industry was negative

18   due to: 1) weakening financial profiles; 2) loss of investor confidence which affected the

19   industry's liquidity and financial flexibility; 3) heightened business risk derived from

20   more investments outside the traditional regulated utility business; 4) corporate

21   restructuring and mergers and acquisitions; and 5) certain regulatory difficulties.

1   S&P attributed most of the 2002 liquidity and credit erosion in the industry to

2   heavy debt funded investments in higher risk nonregulated activities, and the loss of

3   management credibility due to accounting and trading irregularities.[1]

4   Importantly, this negative perception of the energy industry over the last several

5   years has been improved considerably because the industry has reverted to a "back to

6   basics" business model. As part of the back to basics business model, utilities have been

7   shedding nonregulated activities and using the asset sale proceeds to retire debt. Also,

8   utilities have adopted corporate governance policies that have helped regain the

9   confidence of the market.

10   In 2005, S&P revised its industry outlook by stating that the industry's leading

11   indicators of credit rating trends show that there are nearly twice as many stable outlooks

12   as negative outlooks. S&P credits this improved credit quality and liquidity enhancement

13   to improving credit rating metrics, resulting primarily from a reduction of high-cost debt

14   and elimination of higher risk non-utility investments, and the industry's shift to a back to

15   basics business model, which concentrates on core competencies, debt reduction, and risk

16   management.[2]

17 **OVERVIEW OF PSE**

18 **Q.   PLEASE PROVIDE A BRIEF OVERVIEW OF PSE AND ITS INVESTMENT**
19   **CHARACTERISTICS.**

20 **A.**   PSE is owned by Puget Energy. Puget Energy has been in the process of divesting

21   nonregulated investments and focusing on its regulated utility business. PSE's current

22   senior secured bond rating from S&P and Moody's is "BBB" and "Baa2," respectively.

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[1]   Exh. No. ___ (MPG-4) at 2-9.
[2]   Id. at 10-12.

1   PSE's parent company, Puget Energy's, corporate credit rating from S&P and Moody's is

2   "BBB-" and Ba1, respectively.[3/]

3   **PSE'S PROPOSED CAPITAL STRUCTURE**

4   **Q.   WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO**
5   **DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS**
6   **IN THIS PROCEEDING?**

7   **A.**   PSE's proposed capital structure is shown below in Table 1.

TABLE 1

PSE's Proposed Capital Structure
(March 31, 2007)

Description	Percent of Total Capital
Short-Term Debt	2.67%
Long-Term Debt	47.88%
Trust Preferred	0.70%
Preferred Stock	3.75%
Common Equity	45.00%
Total Financial Capital Structure	100.00%

Source: Exhibit No. ___ (DEG-1CT) at 3.

8   **Q.   IS THE COMPANY'S PROPOSED CAPITAL STRUCTURE REASONABLE**
9   **FOR SETTING RATES IN THIS PROCEEDING?**

10   **A.**   No. The Company's proposed capital structure is based on a hypothetical equity ratio

11   created by PSE's plan to increase equity ████████████████████████

12   ████████████████.[4/] I recommend the rejection of the Company's proposed

13   capital structure because it includes adjustments that are not known and measurable.

14   Further, the adoption of PSE's actual capital structure, as set forth in the direct testimony

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[3/]   Puget Energy Inc., 2005 Securities and Exchange Form 10K at 59 (Feb. 27, 2006).
[4/]   Exh. No. ___ (DEG-1CT) at 10.

1   of PSE witness Donald Gaines at page 5, is reasonable because it reflects a reasonable

2   balance of debt and equity.[5/] The Company's actual test year capital structure is shown

3   below in Table 2.

<div style="text-align: center;">

TABLE 2

**PSE's Actual Capital Structure
(December 31, 2005)**

</div>

Description	Percent of Total Capital
Short-Term Debt	0.90%
Long-Term Debt	49.71%
Trust Preferred	5.22%
Preferred Stock	0.04%
Common Equity	44.13%
Total Financial Capital Structure	100.00%

Source: Exhibit No. ___ (DEG-1CT) at 5.

4 **Q.   WHY DO YOU RECOMMEND THE USE OF THE COMPANY'S ACTUAL**
5 **TEST YEAR CAPITAL STRUCTURE RATHER THAN THE COMPANY'S**
6 **PROPOSED CAPITAL STRUCTURE?**

7 **A.**   The Company's actual test year capital structure represents its actual cost of service at

8   December 31, 2005.   Further, the Company's actual capital structure represents a

9   reasonable mix of debt and equity and produces a reasonable overall rate of return.

10   While the projected increase in common equity in the Company's test year capital

11   structure is largely attributable to a projected ████████████████████████

12   ██

[5/]   Exh. No. ___ (DEG-1CT) at 5.

1   ▮▮▮▮,[6/] this projected equity is not supported and is not a known and measurable

2   change to the Company's cost of service. For this reason, I reject the Company's

3   forecasted capital structure, and accept its actual capital structure at year-end 2005.

4 **Q.** **HAS PSE BEEN CONSISTENTLY INCREASING ITS EQUITY RATIO SINCE**
5   **ITS LAST FEW RATE PROCEEDINGS?**

6 **A.** Yes. As Mr. Gaines explains in his testimony, PSE's actual equity ratio has increased

7   from around 38% on September 30, 2005, to 44.1% by year-end 2005. This increase in

8   common equity ratio is attributable to retained earnings and a $310 million equity

9   issuance of its parent company that was infused in utility operations. This actual equity

10   buildup is reflected in the year-end 2005 capital structure.

11   Accordingly, PSE witness Mr. Gaines contends that the Company plans to

12   continue to increase its common equity ratio to strengthen its bond rating and improve its

13   access to external capital.

14 **Q.** **SHOULD THE COMMISSION REQUIRE PSE TO EVALUATE ALL OPTIONS**
15   **OF FINANCING ITS UTILITY PLANT TO IMPROVE ITS CREDIT RATING?**

16 **A.** Yes. PSE's objective to improve its credit rating by reducing debt should consider all

17   options available to realize this goal. Importantly, it may be possible for PSE to reduce

18   debt leverage and strengthen its credit rating financial metrics by issuance of permanent

19   preferred equity, rather than only increasing its common equity capital. Mr. Gaines

20   recognizes this when he acknowledges that traditional perpetual preferred equity

21   securities are given significant equity credit in a review of PSE's credit financial metrics

22   evaluations.[7/]

[6/]   Exh. No. ___ (DEG-6C) at 2.
[7/]   Exh. No. ___ (DEG-1T) at 31.

1	I recommend the Commission require PSE to complete a thorough capital funding

2	plan that investigates the cost of all options available to improve its credit rating. This

3	would include an investigation into the greater use of permanent preferred equity

4	securities.

5	This is a prudent investigation because preferred equity securities are lower cost

6	than common equity; therefore, if PSE uses preferred equity securities to reduce

7	outstanding debt, it can strengthen its credit rating by minimizing its debt leverage risk at

8	a lower cost, compared to using common equity securities to reduce outstanding debt.

9	**Q.	ARE YOU PROPOSING ANY ADJUSTMENTS TO PSE'S ESTIMATED**
10	**EMBEDDED COST OF SHORT-TERM DEBT, LONG-TERM DEBT, AND**
11	**PREFERRED STOCK?**

12	**A.**	No.

13	**RETURN ON COMMON EQUITY**

14	**Q.	PLEASE	DESCRIBE	THE	FRAMEWORK	FOR	DETERMINING	A**
15	**REGULATED COMPANY'S COST OF COMMON EQUITY.**

16	**A.**	In general, determining a fair cost of common equity for a regulated utility has been

17	framed by two decisions of the U.S. Supreme Court, Bluefield Water Works &

18	Improvement Co. v. Public Serv. Comm'n of West Virginia, 26 U.S. 679 (1923) and

19	Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

20	These decisions identify the general standards to be considered in establishing the

21	cost of common equity for a public utility. Those general standards are that the

22	authorized return should: 1) be sufficient to maintain financial integrity; 2) attract capital

23	under reasonable terms; and 3) be commensurate with returns investors could earn by

24	investing in other enterprises of comparable risk.

| 1 | Q. | PLEASE DESCRIBE WHAT IS MEANT BY "UTILITY'S COST OF COMMON |
| 2 | | EQUITY." |

3   A.   The utility's cost of common equity is the return investors expect, or require, in order to

4   make an investment. Investors expect to achieve their return requirement from receiving

5   dividends and from stock price appreciation.

| 6 | Q. | PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE |
| 7 | | COST OF COMMON EQUITY FOR PSE. |

8   A.   I have used several models based on financial theory to estimate PSE's cost of common

9   equity. These models are: 1) the constant growth discounted cash flow model ("DCF");

10   2) the bond yield plus equity risk premium model; and 3) a capital asset pricing model

11   ("CAPM"). I have applied these models to a group of publicly traded utilities that I have

12   determined represent the investment risk of an electric and gas utility similar to PSE. I

13   discuss this comparable utility group below.

| 14 | Q. | HOW DID YOU DEVELOP A DCF ANALYSIS AND RISK PREMIUM |
| 15 | | ESTIMATES FOR PSE? |

16   A.   I developed a proxy group of utility companies that reasonably proxy the investment risk

17   of PSE. I developed this group by starting with all electric utility companies followed by

18   the Value Line Investment Survey. I then screened this group of companies to include

19   only those companies that meet the following criteria:

20   1.   A secured senior credit rating between "BBB-" and "A-" from "S&P" and "Baa3"
21   to "A3" from Moody's, as published in the AUS Utility Reports.

22   2.   All the companies have common equity ratios within the range of 40% to 60% by
23   Value Line and AUS Utility Reports.

1	3.	I limited the group to companies that have S&P business profile scores in the range of 3 to 6.[8/] This indicates that PSE has relatively average, to below average, business risk for an integrated electric utility company.
2		
3		

| 4 | 4. | Available growth rate estimates from Zack's Advisors, Reuters and Thompson Financial (First Call). |
| 5 | | |

| 6 | 5. | Are not involved in mergers or acquisition activities. |

| 7 | 6. | Have not suspended their dividends over the last two years. |

8 **Q. HOW DOES THE RISK OF THE GROUP YOU SELECTED COMPARE TO**
9 **THAT OF PSE?**

10 **A.** As shown below, I believe my proposed proxy group is a reasonable risk proxy for PSE.

11 As demonstrated on my Exhibit No. ___ (MPG-5), the comparable group has an average

12 senior secured investment bond rating from S&P and Moody's of "BBB+"and "Baa1,"

13 respectively. The group's bond rating is comparable to PSE's senior secured rating of

14 "BBB" from S&P and "Baa2" from Moody's. The group has a common equity ratio of

15 49% from Value Line, and a common equity ratio of 46% from AUS Utility Reports.

16 This compares to a 44% common equity ratio I propose for PSE.

17 My proxy group has slightly less financial risk as evidenced by a slightly higher

18 common equity ratio than my proposed capital structure for PSE. However, the proxy

19 group has greater business risk, as demonstrated by a somewhat higher S&P business

20 profile score than PSE. The average business profile of the electric comparable group is

21 5, which is slightly above (higher risk) PSE's business profile of 4.

22 On the basis of total risk, I believe PSE's combination of financial and operating

23 risk is reasonably comparable to my proxy group.

[8/] S&P evaluates a company's business risk on a scale of 1 to 10, with 1 being the lowest risk and 10 being the highest risk.

1 **DISCOUNTED CASH FLOW MODEL**

2 **Q. PLEASE DESCRIBE THE DCF MODEL.**

3 **A.** The DCF model posits that a stock price is valued by summing the present value of

4 expected future cash flows discounted at the investor's required rate of return ("ROR") or

5 cost of capital. This model is expressed mathematically as follows:

6 $$Po = \frac{D1}{(1+K)^1} + \frac{D2}{(1+K)^2} \ldots \frac{D\infty}{(1+K)\infty} \quad \text{where} \qquad \text{(Equation 1)}$$

7

8 $\quad$ Po = Current stock price

9 $\quad$ D = Dividends in periods 1 - ∞

10 $\quad$ K = Investor's required return

11 This model can be rearranged in order to estimate the discount rate or investor

12 required return, "K." If it is reasonable to assume that earnings and dividends will grow

13 at a constant rate, then Equation 1 can be rearranged as follows:

14 $\quad$ K = D1/Po + G $\qquad\qquad\qquad$ (Equation 2)

15 $\quad$ K = Investor's required return
16 $\quad$ D1 = Dividend in first year
17 $\quad$ Po = Current stock price
18 $\quad$ G = Expected constant dividend growth rate

19 Equation 2 is referred to as the "constant growth" annual DCF model.

20 **Q. PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF**
21 **MODEL.**

22 **A.** As shown under Equation 2 above, the DCF model requires a current stock price,

23 expected dividend, and expected growth rate in dividends.

24 **Q. WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR**
25 **CONSTANT GROWTH DCF MODEL?**

26 **A.** I relied on the average of the weekly high and low stock prices over a 13-week period

27 ending July 7, 2006. An average stock price is less susceptible to market price variations

1   than is a spot price.   Therefore, an average stock price is less susceptible to aberrant

2   market price movements, which may not be reflective of the stock's long-term value.

3   A 13-week average stock price is short enough to contain data that reasonably

4   reflects current market expectations, but is not too short a period to be susceptible to

5   market price variations that may not be reflective of the security's long-term value.

6   Therefore, in my judgment, a 13-week average stock price is a reasonable balance

7   between the need to reflect current market expectations and to capture sufficient data to

8   smooth out aberrant market movements.   I used the most recently paid quarterly

9   dividend, as reported in the Value Line Investment Survey.   This dividend was

10   annualized (multiplied by 4) and adjusted for next year's growth to produce the D1 factor

11   for use in Equation 2 above.

12 **Q.   WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR DCF**
13 **MODEL?**

14 **A.**   There are several methods one can use in order to estimate the expected growth in

15   dividends.   However, for purposes of determining the market-required return on common

16   equity, one must attempt to estimate what the consensus of investors is about the

17   dividend or earnings growth rate, and not what an individual investor or analyst may use

18   to form individual investment decisions.

19   Security analysts' growth estimates have been shown to be more accurate

20   predictors of future returns than growth rates derived from historical data[9] because they

21   are more reliable estimates, and assuming the market generally makes rational investment

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[9]   *See, e.g.*, David Gordon et al., *Choice Among Methods of Estimating Share Yield*, The Journal of Portfolio
       Management Spring 1989.

1   decisions, analysts' growth projections are the most likely growth estimates that are built

2   into stock prices.

3   For my constant growth DCF analysis, I have relied on a consensus, or mean, of

4   professional security analysts' earnings growth estimates as a proxy for the investor

5   consensus dividend growth rate expectations. I used the average of three sources of

6   customer growth rate estimates, including Zack's Advisor, Reuters, and Thomson

7   Financial or First Call. All consensus analyst projections used were available on July 11,

8   2006, as reported on the internet. Each consensus growth rate projection is based on a

9   survey of security analysts. The consensus estimate is a simple arithmetic average or

10   mean of surveyed analysts' earnings growth forecasts. A simple average of the growth

11   forecast gives equal weight to all surveyed analysts' projections. It is problematic to

12   determine whether any particular analyst's forecast is most representative of general

13   market expectations. Therefore, a simple average, or arithmetic mean, of analyst

14   forecasts is a good proxy for market consensus expectations. The growth rates I used in

15   my DCF analyses are shown on Exhibit No. ___ (MPG-6).

16   **Q.   WHAT ARE THE RESULTS OF YOUR ANNUAL CONSTANT GROWTH DCF**
17   **MODEL?**

18   **A.**   As shown on Exhibit No. ___ (MPG-7), the DCF return for my comparable group is

19   9.6%.

20   **Q.   DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR**
21   **DCF ANALYSIS?**

22   **A.**   Yes. I believe the results of my constant growth DCF analysis, and a DCF analysis in

23   general in today's marketplace, reflect rational investment financial metrics and reflect

24   today's very low cost capital market. Therefore, the DCF results are reasonable.

1 **Q. WHY DO YOU BELIEVE YOUR DCF REFLECTS CONSERVATIVE GROWTH**
2   **PROJECTIONS?**

3 **A.** The consensus analysts' growth rate for my comparable group is 4.77%. First, this

4   growth rate is reasonably consistent with five-year projected GDP growth of 5.2%, and

5   considerably higher than the five-year projected GDP inflation growth of 2.4%.[10]

6   Utilities' dividend growth cannot sustain a growth rate that exceeds the growth

7   rate of the overall economy. The growth rate of the utility's service territory is the proxy

8   for the sustainable long-term growth rate of earnings. Utilities invest in plant to meet

9   sales growth, and sales growth in turn is tied to economic activity. Hence, nominal GDP

10   growth is a proxy for the highest sustainable long-term growth rate of the utility.

11   However, growth of utility companies has historically been tied to the growth rate

12   of inflation. This is because utilities typically pay out a very high percentage of earnings

13   as dividends, thus limiting the reinvestment of earnings and the growth to their company

14   business platforms. The growth rate used in my DCF analysis is much higher than

15   expected inflation rates, and nears the maximum sustainable growth estimate as proxied

16   by the GDP growth factor. This clearly indicates a very strong and relatively high growth

17   rate used in my DCF estimate.

18   Moreover, my proxy group's projected growth rate of 4.77% is considerably

19   higher than the historical growth rate the proxy group has achieved over the last five to

20   ten years, and that projected over the next three to five years. As shown on Exhibit No.

21   ___ (MPG-8), the historical dividend growth of my proxy group is substantially lower

22   than the nominal GDP growth.

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[10]   Exh. No. ___ (MPG–4) at 14.

1	**Q.**	**WHY DO YOU BELIEVE THE DCF YIELD REFLECTS CURRENT LOW-COST**
2		**CAPITAL MARKETS?**

3   **A.**   The DCF yields for my utility group is 4.78%. This yield is comparable to the current

4   five-year Treasury note yield of 4.96%, and slightly lower than the projected five-year

5   Treasury note yield of 5.1%. Hence, the DCF yield reasonably reflects both current and

6   projected interest rates.

7	**Q.**	**WHY DO YOU BELIEVE YOUR DCF REFLECTS RATIONAL COMPANY**
8		**FINANCIAL METRICS AND DIVIDEND EXPECTATIONS?**

9   **A.**   The dividend fundamentals of companies included in my comparable groups show strong

10   and consistent earnings strength in relation to dividends. This indicates that current and

11   projected earnings support dividends and permit the continued predictable growth in

12   dividends.

13   For example, my comparable group has a 2005 dividend payout ratio of

14   approximately 74.5%, and dividend to book ratios of approximately 6.4%. The dividend

15   payout ratio represents the percentage of earnings paid out as dividends. Traditionally,

16   utility companies have paid out approximately 70% of their earnings as dividends. Value

17   Line's projected dividend to book and payout ratio for my comparable group is 6.1% and

18   63%, respectively. Hence, a payout ratio of around 63% suggests that the companies'

19   earnings will support dividends and retain earnings to produce earnings and dividend

20   growth going forward.

21   Also, a dividend to book ratio of 6.4% indicates that these dividend payments are

22   affordable in today's low capital cost environment. In essence, companies need to earn

23   6.4% on their book value in order to produce earnings to pay their dividends. With

1   authorized returns dropping in response to significant declines in capital market costs,

2   these low-cost dividends will be supported by today's lower authorized equity returns.

3 **RISK PREMIUM MODEL**

4 **Q.   PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

5 **A.**   This model is based on the principle that investors require a higher ROR to assume

6   greater risk. Common equity investments have greater risk than bonds because bonds

7   have more security of payment in bankruptcy proceedings than common equity, and the

8   coupon payments on bonds represent contractual obligations. In contrast, companies are

9   not required to pay dividends on common equity, or to guarantee returns on common

10   equity investments. Therefore, common equity securities are considered to be more risky

11   than bond securities.

12   This risk premium model is based on two estimates of an equity risk premium.

13   First, I estimated the difference between the required return on utility common equity

14   investments and Treasury bonds. The difference between the required return on common

15   equity and the bond yield is the risk premium. I estimated the risk premium on an annual

16   basis for each year over the period 1986 through 2005. The common equity required

17   returns were based on regulatory commission-authorized returns for electric utility

18   companies. Authorized returns are typically based on expert witnesses' estimates of the

19   contemporary investor-required return.

20   The second equity risk premium method is based on the difference between

21   regulatory commission-authorized returns on common equity and contemporary "A"

22   rated utility bond yields. This time period from 1986 through 2005 was selected because

23   over that period public utility bond yields have consistently traded at a premium to book

1   value. This is illustrated on my Exhibit No. ___ (MPG-9), where the market to book

2   ratio since 1986 for the electric utility industry was consistently above 1.0. Therefore,

3   over this time period, regulatory authorized returns were sufficient to support market

4   prices that at least exceeded book value. This is an indication that regulatory authorized

5   returns on common equity supported a utility's ability to issue additional common stock,

6   without diluting existing shares. This further indicates that utilities were able to access

7   equity markets without a detrimental impact on current shareholders.

8   Based on this analysis, as shown on Exhibit No. ___ (MPG-10), the average

9   indicated equity risk premium of authorized electric utility common equity returns over

10   U.S. Treasury bond yields has been 5.0%. Of the 20 observations, 14 indicated risk

11   premiums fall in the range of 4.4% to 5.9%. Since the risk premium can vary depending

12   upon market conditions and changing investor risk perceptions, I believe using an

13   estimated range of risk premiums provides the best method to measure the current return

14   on common equity using this methodology.

15   As shown on Exhibit No. ___ (MPG-11), the average indicated authorized electric

16   utility common equity returns over contemporary Moody's utility bond yields over the

17   period 1986 through 2005 was 3.6%. Removing the three highest and lowest risk

18   premium estimates produces an electric equity risk premium in the range of 3.0% to

19   4.4%.

20 **Q.   BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED**
21 **TO ESTIMATE PSE'S COST OF EQUITY IN THIS PROCEEDING?**

22 **A.**   The equity risk premium should reflect the relative market perception of risk in the utility

23   industry today. I have gauged investor perceptions in utility risk today on Exhibit No.

1	___ (MPG-12). On that exhibit, I show the yield spread between utility bonds and
2	Treasury bonds over the last 25 years. As shown on this exhibit, the current utility bond
3	yield spreads for "A" rated and "Baa" rated utility bonds are 1.08% and 1.33%,
4	respectively. These utility bond yield spreads over Treasury bond yields are among the
5	lowest yield spreads in the last 25 years, and are below the 25-year average "A" and
6	"Baa" yield spreads of 1.58% and 1.95%, respectively. Hence, this comparison of utility
7	bond yield spreads indicates the market perception of utility risk to be below the average
8	industry risk over this historical time period.
9	Recognizing a robust nature and the current market's low-risk valuation of utility
10	investments, I believe it is appropriate to use an average market equity risk premium to
11	estimate the current market-required return on equity. Hence, I relied on a market equity
12	premium over Treasury bonds of 5.0%, and an equity risk premium over utility bond
13	yields of 3.6%, as described above.

14 **Q. HOW DID YOU ESTIMATE PSE'S COST OF COMMON EQUITY WITH THIS**
15 **MODEL?**

16	**A.**	I added a projected long-term Treasury bond yield to my estimated equity risk premium
17		over Treasury yields. Blue Chip Financial Forecasts projects the 30-year Treasury bond
18		yield to be 5.3%, and a 10-year Treasury bond to be 5.3%.[11] Using the projected 30-year
19		bond yield of 5.3%, and an electric equity risk premium of 5.0%, produces an estimated
20		common equity return of 10.3%.
21		I next added my equity risk premium over utility bond yields to a current 13-week
22		average yield on "Baa" rated utility bonds for the period ending July 7, 2006, of 6.60%.

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[11]   Exh. No. ___ (MPG-4) at 16.

1   These current "Baa" utility bond yields are developed on Exhibit No. ___ (MPG-13).

2   Adding the utility bond equity premium of 3.6% to a "Baa" rated bond yield of 6.60%

3   produces a cost of equity in the range of 10.2%.

4   My risk premium analyses produce an average return estimate of 10.3%.

5   **CAPITAL ASSET PRICING MODEL**

6   **Q.   PLEASE DESCRIBE THE CAPM.**

7   **A.**   The CAPM method of analysis is based upon the theory that the market required ROR for

8   a security is equal to the risk-free ROR, plus a risk premium associated with the specific

9   security. This relationship between risk and return can be expressed mathematically as

10   follows:

11        $Ri = Rf + Bi \times (Rm - Rf)$ where:

12   Ri =   Required return for stock i
13   Rf =   Risk-free rate
14   Rm =   Expected return for the market portfolio
15   Bi =   Beta - Measure of the risk for stock;

16   The stock-specific risk term in the above equation is beta. Beta represents the investment

17   risk that cannot be diversified away when the security is held in a diversified portfolio.

18   When stocks are held in a diversified portfolio, firm-specific risks can be eliminated by

19   balancing the portfolio with securities that react in the opposite direction to firm-specific

20   risk factors (e.g., business cycle, competition, product mix, and production limitations).

21   The risks that cannot be eliminated when held in a diversified portfolio are

22   nondiversifiable risks. Nondiversifiable risks are related to the market in general and are

23   referred to as systematic risks. Risks that can be eliminated by diversification are

24   regarded as nonsystematic risks. In a broad sense, systematic risks are market risks, and

1		nonsystematic risks are business risks. The CAPM theory suggests that the market will
2		not compensate investors for assuming risks that can be diversified away. Therefore, the
3		only risk that investors will be compensated for are systematic or nondiversifiable risks.
4		The beta is a measure of the systematic or nondiversifiable risks.
5	**Q.**	**PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**
6	**A.**	The CAPM requires an estimate of the market risk-free rate, the company's beta, and the
7		market risk premium.
8 9	**Q.**	**WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?**
10	**A.**	I used Blue Chip Financial Forecasts' projected 30-year Treasury bond yield of 5.3%.
11		The current 30-year bond yield is 5.1%.[12]
12 13	**Q.**	**WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE OF THE RISK-FREE RATE?**
14	**A.**	Treasury securities are backed by the full faith and credit of the United States
15		government. Therefore, long-term Treasury bonds are considered to have negligible
16		credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of
17		common stock. As a result, investor-anticipated long-run inflation expectations are
18		reflected in both common stock required returns and long-term bond yields. Therefore,
19		the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a
20		long-term bond yield is a reasonable estimate of the nominal risk-free rate included in
21		common stock returns.
22		Treasury bond yields, however, do include risk premiums related to unanticipated
23		future inflation and interest rates. Therefore, a Treasury bond yield is not a risk-free rate.

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[12]   Exh. No. ___ (MPG-4) at 16.

1		Risk premiums related to unanticipated inflation and interest rates are systematic or
2		market risks. Consequently, for companies with betas less than one, using the Treasury
3		bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an
4		overstated estimate of the CAPM return.
5	**Q.**	**WHAT BETA DID YOU USE IN YOUR ANALYSIS?**
6	**A.**	I relied on a beta estimate from my comparable group of 0.80, as shown on my Exhibit
7		No. ___ (MPG-14). I would normally rely on the group average beta; however, in this
8		instance, the group contains companies with beta estimates of greater than one. This
9		suggests that the regulated operations of those entities have risks greater than that of the
10		overall market. I reject this premise. The companies included in this group are
11		experiencing financial distress largely due to issues outside of current regulated
12		operations. Specifically, many of the companies incurred significant losses on highly
13		leveraged nonregulated investments that did not perform well or failed.
14		In this case, I relied primarily on the beta estimate for Puget Energy as a proxy for
15		a reasonable beta for PSE in this case. Puget Energy is the parent company of PSE, and
16		conservatively reflects the market's assessment of the risk of PSE. Further, a beta
17		estimate of 0.80 is, in my judgment, a very conservative or high beta estimate for the risk
18		of a regulated utility.
19	**Q.**	**ARE YOU AWARE OF OTHER RATE OF RETURN WITNESSES USING**
20		**INFORMED JUDGMENT TO SELECT THE BETA IN A CAPM ESTIMATE,**
21		**WHEN THEY FIND THE ELECTRIC UTILITY GROUP BETA TO BE**
22		**UNRELIABLE FOR ESTIMATING A REGULATED ENTITY'S AUTHORIZED**
23		**RETURN ON EQUITY?**
24	**A.**	Yes. PSE witness Dr. Morin in several cases rejected the utility group beta estimate
25		because he felt it was not reflective of the risk of the utility industry. Dr. Morin rejected

1   an electric utility group beta estimate and instead relied on other proxy groups or his

2   judgment to select a beta estimate for his CAPM study in the following cases:

3   MidAmerican Energy Company before the Illinois Commerce Commission in Docket

4   No. 01-0447; Central Illinois Light Company before the Illinois Commerce Commission

5   in Docket No. 99-0119; and Detroit Edison Company before the Michigan Public Service

6   Commission in Case No. U-13808. In those cases, Dr. Morin specifically rejected his

7   electric utility proxy group's betas and used alternative means for estimating an

8   appropriate beta estimate for use in his electric utility CAPM return studies.

9 **Q.   HOW DID YOU DERIVE YOUR MARKET PREMIUM ESTIMATE?**

10 **A.**   I derived two market premium estimates, a forward-looking estimate and one based on a

11   long-term historical average.

12   The forward-looking estimate was derived by estimating the expected return on

13   the market (S&P 500) and subtracting the risk-free rate from this estimate. I estimated

14   the expected return on the S&P 500 by adding an expected inflation rate to the long-term

15   historical arithmetic average real return on the market. The real return on the market

16   represents the achieved return above the rate of inflation.

17   The Ibbotson and Associates' <u>Stocks, Bonds, Bills and Inflation 2006 Year Book</u>

18   publication estimates the historical arithmetic average real market return over the period

19   1926 through 2005 as 9.1%. A current five-year consensus analyst inflation projection,

20   as measured by the Consumer Price Index, is 2.3%.[13]   Using these estimates, the

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[13]   Exh. No. ___ (MPG-4) at 16.

1   expected market return is 11.6%.[14] The market premium then is the difference between

2   the 11.6% expected market return, and my 5.3% risk-free rate estimate, or 6.3%.

3   The historical estimate of the market risk premium was also estimated by

4   Ibbotson and Associates in the <u>Stock, Bonds, Bills and Inflation, 2006 Year Book</u>. Over

5   the period 1926 through 2005, Ibbotson's study estimated that the arithmetic average of

6   the achieved total return on the S&P 500 was 12.3%, and the total return on long-term

7   Treasury bonds was 5.8%. The indicated equity risk premium is 6.5% (12.3% - 5.8% =

8   6.5%).

9   **Q.   WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**

10   **A.**   As shown on Exhibit No. ___ (MPG-15), based on the prospective market risk premium

11   of 6.3%, and historical market risk premium estimate of 6.5%, a risk free rate of 5.3%,

12   and a beta of 0.80, the CAPM estimated return on equity is 10.4%.

13   **RETURN ON EQUITY SUMMARY**

14   **Q.   BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON**
15   **EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON**
16   **EQUITY DO YOU RECOMMEND FOR PSE?**

17   **A.**   Based on my analyses, I estimate PSE's current market cost of equity to be 9.9%.

TABLE 3

Return on Common Equity Summary

Description	Percent
Constant Growth DCF	9.6%
Risk Premium	10.3%
CAPM	10.4%

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[14] $(1.023) * (1.091) - 1 = 11.6\%$

1		My recommended return on equity of 9.9% is at the mid-point of my estimated
2		return on equity range for PSE of 9.6% to 10.4%. The high end of my estimated range is
3		based on my CAPM and risk premium analyses, and the low end of my estimated range
4		is based on my DCF analysis.

5 **FINANCIAL INTEGRITY**

6 **Q.** **WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT**
7 **PSE'S CURRENT BOND RATING FROM S&P?**

8 **A.** Yes. I have reached this conclusion by comparing the key credit rating financial ratios

9 for PSE at my proposed capital structure and return on equity to S&P's benchmark

10 financial ratios for an "A" rated utility and "BBB" rated utility with a business profile

11 score of 4.

12 **Q.** **PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS**
13 **IN ITS CREDIT RATING REVIEW.**

14 **A.** S&P evaluates a utility's credit rating based on an assessment of its financial and

15 business risks. A combination of financial and business risks equates to the overall

16 assessment of the Company's total credit risk exposure. S&P publishes a matrix of

17 financial ratios that defines the level of financial risk as a function of the level of business

18 risk.

19 S&P rates a utility's business risk based on a business profile scale on which a

20 score of 1 indicates the lowest risk and 10 indicates the highest risk. Integrated electric

21 utilities typically have a business profile score from S&P of 4, 5, or 6, while T&D

22 electric utilities' profile scores primarily range from 2 to 4.

1   S&P publishes ranges for three primary financial ratios that it uses as guidance in

2   its credit review for utility companies. The three primary financial ratio benchmarks it

3   relies on in its credit rating process include: 1) funds from operations ("FFO") to debt

4   interest expense; 2) FFO to total debt; and 3) total debt to total capital.

5 **Q.** **HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE**
6   **REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?**

7 **A.** I calculated each of S&P's financial ratios based on PSE's cost of service for retail

8   operations and PSE's off-balance sheet debt for the 2007 rate year.

9   While S&P would be concerned with total Puget Energy consolidated financial

10   ratios in its credit review process, my investigation in this proceeding is to judge the

11   reasonableness of my proposed cost of capital for setting rates in PSE's utility operations.

12   Hence, I am attempting to determine whether the rate of return and cash flow generation

13   opportunity reflected in my proposed utility rates for PSE will support PSE's current

14   secured "BBB" and unsecured "BBB-" investment grade bond ratings and financial

15   integrity.

16 **Q.** **HOW DID YOU ARRIVE AT PSE'S TEST YEAR OFF-BALANCE SHEET DEBT**
17   **EQUIVALENT?**

18 **A.** In a confidential response to WUTC Staff Data Request ("DR") No. 070, PSE provided a

19   spreadsheet it used to develop the S&P purchased power debt equivalent. In his

20   testimony, PSE witness Mr. Gaines stated that S&P has recently estimated PSE's off-

21   balance sheet debt equivalence to be approximately $402 million.[15] That estimate was

22   for all obligations after 2004, per PSE's response to WUTC Staff DR No. 070.

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[15]   Exh. No. ___ (DEG-1CT) at 8.

1   Using the spreadsheet provided in PSE's confidential response to WUTC Staff

2   DR No. 070, I removed the cash flows for calendar years 2005 and 2006 from the present

3   value future PPA contractual obligations to estimate a debt equivalent for calendar year

4   2007, the rate effective year in this case. In essence, PSE's off-balance sheet debt

5   equivalent will be amortized and reduced as time goes on. Hence, its off-balance sheet

6   debt obligation will decrease from the $402.7 million referenced by Mr. Gaines for

7   calendar year 2004, down to an estimated ███████ for calendar year 2007. This

8   modified estimate, again, is produced by adjusting the time period under study. Mr.

9   Gaines' estimate included all capacity and fixed purchased power agreement ("PPA")

10   payments for 2005 and beyond. My modified PPA debt equivalent is based on the

11   Company's cash flows for 2007 and beyond.

12 **Q. PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS**
13   **FOR PSE.**

14 **A.** The S&P financial metric calculations for PSE are developed on my Exhibit No. ___

15   (MPG-16).

16   As shown on my Exhibit No. ___ (MPG-16), based on an equity return of 9.9%,

17   PSE will be provided an opportunity to produce a FFO to debt interest expense of 3.6x.

18   This FFO to interest coverage ratio is consistent with S&P's benchmark ratio guideline of

19   4.2x to 3.5x for an "A" rated utility company with a business profile score of 4.

20   At my proposed capital structure, PSE's adjusted total debt ratio to total capital is

21   58%. This is within S&P's "BBB" rated utility range of 52% to 62% for a "BBB" utility.

1   Finally, PSE's retail operations FFO to total debt coverage at a 9.9% equity return

2   would be 18%, which is again within S&P's financial metric range of 12% to 20% for a

3   "BBB" rated utility company with a business profile score of 4.

4   At my proposed capital structure and return on equity, PSE's financial metrics are

5   supportive of a strong "BBB" utility bond rating with a business profile score of 4.

6 **RESPONSE TO PSE WITNESS ROGER MORIN**

7 **Q. WHAT RATE OF RETURN ON COMMON EQUITY IS PSE REQUESTING IN**
8   **THIS PROCEEDING?**

9 **A.** PSE is requesting a return on common equity of 11.25%. This return on common equity

10   is supported by PSE witness Dr. Rodger Morin. Dr. Morin estimates an 11.0% return on

11   equity to be appropriate for his two proxy groups. The first proxy group is composed of

12   electric companies, and the second proxy group is composed of gas local distribution

13   companies ("LDCs"). Dr. Morin then adds 0.25% to his proxy groups' estimated returns

14   to reflect his belief that PSE has higher risk than his proxy groups. The analyses Dr.

15   Morin relied on and the indicated return from each analysis are shown below in Column

16   1 of Table 4.

TABLE 4

Summary of Dr. Morin's ROE Estimates

Description	Result (1)	Adjusted Result (2)
CAPM (Ref: 4.7)	11.2%	9.98%
CAPM (Ref: 5.3)	11.8%	10.58%
ECAPM (Ref: 4.7)	11.5%	9.98%
ECAPM (Ref: 5.3)	12.1%	10.58%
Average CAPM	**11.7%**	**10.28%**
Risk Premium Electric (Ref: 4.7)	10.6%	9.7%
Risk Premium Electric (Ref: 5.3)	11.2%	10.3%
Risk Premium Natural Gas (Ref: 4.7)	10.7%	9.7%
Risk Premium Natural Gas (Ref: 5.3)	11.3%	10.3%
Allowed Risk Premium (Ref: 4.7)	10.7%	9.7%
Allowed Risk Premium (Ref: 5.3)	11.0%	10.3%
Average Risk Premium	**10.9%**	**10.2%**
DCF Puget Value Line Growth	10.7%	
DCF Puget Zack's Growth	10.9%	10.4%
DCF Gas and Electric Utilities Value Line Growth	10.1%	
DCF Gas and Electric Utilities Zack's Growth	10.1%	9.9%
DCF LDC Gas Value Line Growth	11.2%	
DCF LDC Gas Zack's Growth	9.6%	9.4%
Average DCF	**10.4%**	**9.8%**

_____

Source: Exhibit No. ___ (RAM-1T) at 57.

1   As described in detail below, Dr. Morin's ROE estimates should be adjusted as

2   shown in Column 2 of Table 4. Based on these adjustments, Dr. Morin's return on equity

3   estimates support a return on equity for PSE in the range of 9.8% to 10.3%.

1 **Q.** **IS DR. MORIN'S PROPOSED 0.25% PSE-SPECIFIC ADD-ON ROE**
2 **ADJUSTMENT FOR HIS PERCEPTION OF GREATER RISK REASONABLE?**

3 **A.** No. Dr. Morin claims his 0.25% return on equity premium for PSE is reasonable relative

4 to his proxy group, because he believes that PSE has higher construction risk, purchased

5 power cost recovery risk, regulatory risk, and financial risk. However, this proposed risk

6 premium should be rejected for several reasons.

7 First, Dr. Morin, while identifying claimed higher risk at PSE, never provided any

8 analysis that showed that PSE's risk for any of these items was greater than that of his

9 proxy groups. Hence, his conclusion that PSE has greater risk is based on nothing more

10 than Dr. Morin's unsubstantiated assertion.

11 While PSE is in the midst of a large construction program, this is not unusual in

12 today's marketplace. Indeed, the utility industry in general is in the midst of significant

13 construction programs and many utilities are attracting capital to make significant

14 investments in generation, transmission, and distribution assets. The bottom line is that

15 the utility industry is now in a construction cycle, and the utility industry in general has

16 greater construction risk today than it had a few years ago. PSE is no exception, and this

17 risk is reflected in Dr. Morin's proxy groups, utility bond yields, and utility contemporary

18 risk data. Hence, this risk is reflected in his proxy electric utility group.

19 PSE does have off-balance sheet debt risk; however, no witness from PSE has

20 illustrated that PSE's off-balance sheet debt equivalent risk is any greater than that of any

21 utility included in Dr. Morin's proxy group. Hence, this analysis is completely

22 unsupported and without merit. S&P and Moody's both assign off-balance sheet debt

1   equivalent evaluations to all utilities' purchased power agreements. This is not unique to

2   PSE. Hence, this risk is reflected in Dr. Morin's electric proxy group.

3   Dr. Morin's assertion of regulatory uncertainty for PSE is not supported by

4   credible evidence. He has not provided any independent party's assertion that the

5   regulatory risk in Washington is any different than the regulatory risk for companies in

6   his proxy group. Hence, his claim that PSE has greater regulatory risk is again without

7   merit and unsubstantiated.

8   While PSE does have a below industry average bond rating, the risk of this bond

9   rating can be reflected through the selection of an appropriate proxy group. This is

10   precisely what I have done in my determination of a fair return for PSE, consistent with

11   determining a fair return on equity from Dr. Morin's proxy groups. There is no need for

12   an external adjustment to the proxy groups' estimated return on equity. Again, Dr.

13   Morin's proposed return on equity add-on premium is unreasonable and should be

14   rejected.

15   **Q.   IS DR. MORIN'S RECOMMENDED RETURN ON EQUITY FOR HIS PROXY**
16   **GROUP OF 11.0%, BEFORE HIS PSE 0.25% RISK ADD-ON, SUPPORTED BY**
17   **REASONABLE APPLICATIONS OF FINANCIAL MODELS?**

18   **A.**   No. Dr. Morin's recommended return of 11.0% is overstated, and his analyses overstate

19   a fair return due to his use of inappropriate data and/or adjustments.

20   **Q.   ARE DR. MORIN'S DCF AND CAPM ANALYSES BASED ON PROXY UTILITY**
21   **GROUPS THAT ARE REASONABLE RISK PROXIES TO PSE?**

22   **A.**   No. Dr. Morin's proposed proxy groups include companies with significantly more risk

23   than PSE. Inclusion of high-risk companies in his electric distribution and gas

24   distribution proxy groups biases his analyses and increase his return on equity estimates.

1   Dr. Morin's electric group included companies with significant nonregulated

2   business risk. This nonregulated risk is clearly reflected in these companies' S&P

3   business profile scores. For example, three of the companies (Exelon, PPL Corp., and

4   Public Service Enterprise) have S&P business profile scores of 7. These are significantly

5   higher than PSE's business profile score of 4. These high business profile scores are

6   reflective of these companies' significant exposure to the risk of nonregulated

7   investments. Dr. Morin's group also includes companies that have below investment

8   grade credit ratings. These include Avista Corp., TECO Energy, and Unisource Energy.

9   While PSE's corporate credit rating is at the minimum investment grade bond rating, that

10   credit rating is stable. Further, Puget Energy has been making strides to improve the

11   credit rating of its utility affiliate by minimizing its investment in higher risk

12   nonregulated companies.   This is helping to stabilize the credit rating of PSE.

13   Accordingly, including companies that have below investment grade corporate credit

14   ratings increases the risk of the overall group to a level that is not reasonably comparable

15   to that of PSE.

16   Setting this important issue aside, with appropriate adjustments to Dr. Morin's

17   CAPM, risk premium, and DCF studies, his analysis would support a return on equity for

18   PSE of no more than 10.0%.

19 **Q.   PLEASE DESCRIBE DR. MORIN'S CAPM ANALYSIS.**

20 **A.**   Dr. Morin uses a risk free rate in the range of 4.7% and 5.3%, a market risk premium of

21   7.5%, and a beta of 0.83 to derive a CAPM estimate in the range of 10.9% to 11.5%. He

22   then adds 0.3% to his CAPM return estimate for flotation costs, to produce a range of

23   11.2% to 11.8% (Morin at 33).

| 1 | **Q.** | **WHAT ISSUES DO YOU TAKE WITH DR. MORIN'S CAPM ANALYSIS?** |

1   **Q.**   **WHAT ISSUES DO YOU TAKE WITH DR. MORIN'S CAPM ANALYSIS?**

2   **A.**   Dr. Morin's CAPM analysis return estimate of 11.2% to 11.8% is overstated and

3   unreasonable. Dr. Morin's CAPM return estimate is overstated due to his use of an

4   unreasonably high market risk premium of 7.5% and a beta of 0.83. As set forth below, a

5   more reasonable estimate of the market risk premium and utility beta would reduce Dr.

6   Morin's CAPM return estimate down to 10.0% to 10.6%, excluding flotation costs.

7   As set forth below, Dr. Morin's proposed flotation cost adjustment is

8   inappropriate and not based on PSE-specific costs. Therefore, this adjustment should be

9   excluded as it is not a known and measurable PSE cost, and it is not appropriate for

10   setting regulated utility rates.

11 **Q.**   **WHY IS DR. MORIN'S CAPM ANALYSIS INFLATED DUE TO HIS MARKET**
12   **RISK PREMIUM ESTIMATE?**

13 **A.**   Dr. Morin used a 7.5% market risk premium. This market risk premium is based on the

14   average of Ibbotson & Associates' market risk premium derived from that total return on

15   stocks, less the income return on bonds of 7.2%, and Dr. Morin's use of Value Line data

16   to estimate a S&P 500 market risk premium of 7.7%.[16]

17   Dr. Morin's use of a 7.2% market risk premium based on historical data is not

18   based on the actual total achieved returns on equity investments versus Treasury bond

19   investments over the historical period. Indeed, Dr. Morin relies on skewed data in order

20   to increase the actual achieved market risk premium from 6.6%, as he notes at page 29 of

21   his testimony, up to 7.2%.

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[16]   Exh. No. ___ (RAM-1T) at 29.

1   Dr. Morin argues that use of the <u>income</u> Treasury bond return, instead of a <u>total</u>

2   Treasury bond return, is a better estimate of the expected market risk premium because

3   realized capital gains and losses on Treasury bonds are not anticipated by investors. This

4   argument is without merit. Unanticipated Treasury bond capital gains/losses are caused

5   predominately by unanticipated changes in inflation and interest rate expectations. These

6   market risks impact the capital gains and losses for both equity and bond investments.

7   Therefore, these risks should not be ignored for bonds, especially when they are captured

8   in the equity returns. The relevant issue is to establish a market risk premium that is the

9   difference in expected returns by investing in the market versus Treasury bonds. An

10   unbiased actual observation of the total achieved returns of investing in equities relative

11   to investing in bonds indicates a market risk premium of 6.6%. However, more recent

12   evidence indicates a market risk premium of 6.5%.

13   The relevant issue in establishing a market risk premium is the premium equity

14   investors command for uncertain market risks (including interest rates and inflation) in

15   relationship to low-risk Treasury bond investments. The additional risk reflected by the

16   market expected return will be captured in the market risk premium by an unbiased

17   assessment to total achieved returns on market equities versus the same return for

18   Treasury bonds.

19   Moreover, Dr. Morin's proposed method of relying on total achieved equity

20   returns plus the income return on Treasury bonds does not produce the market risk

21   premium based on comparable time periods. Specifically, the total achieved return on

22   equity is based entirely on historical information. In significant contrast, the income

23   return on bonds is the expected return investors would receive on the bond investment if

1		they were to hold it to maturity. Hence, it is a forward-looking expected return. As such,

1   they were to hold it to maturity. Hence, it is a forward-looking expected return. As such,

2   Dr. Morin is producing a market risk premium through inconsistent time periods for his

3   equity market index and his Treasury bonds. The market return is based on historical

4   data, while the bond returns are based on expected forward-looking returns. Developing

5   a market risk premium based on inconsistent time periods biases the analysis and

6   overstates the market risk premium.

7   For these reasons, using true historical Treasury bond achieved returns produces

8   an estimated market risk premium of 6.6% by properly considering total returns of both

9   equity investors and bond investors.

10   **Q.**   **IS DR. MORIN'S FORWARD MARKET RISK PREMIUM REASONABLE?**

11   **A.**   No. Dr. Morin's forward-looking risk premium of 7.7% is also flawed. Dr. Morin

12   estimates this market risk premium by projecting a return on the S&P 500 at 13%, and

13   subtracting his estimated market risk premium of 5.3% to produce a market risk premium

14   of 7.7%. Dr. Morin's 13% projected return on the market is, however, flawed. Indeed,

15   he bases his yield component on only the dividend paying stocks included in the S&P

16   500, but produces a dividend in earnings growth by considering over 5,000 companies

17   followed by the Value Line Investment Survey. Hence, his method of estimating the

18   dividend yield is significantly different from his method of estimating the projected

19   growth in the market. His growth rate reflects far more companies that may or may not

20   be reasonably comparable to the companies he relies on to estimate the dividend yield.

21   Hence, his growth rate is not compatible with his dividend yield estimate. Therefore, this

22   flawed market return estimate should be rejected.

| 1 | **Q.** | **IS THE BETA ESTIMATE USED BY DR. MORIN OF 0.83 REASONABLE?** |

2 **A.** No. The beta estimate is based on the companies shown on Dr. Morin's Exhibit No. ___

3 (RAM-3). As shown on that Exhibit, several of the companies have betas of 0.90 or

4 higher. Those companies include Avista Corp., PG&E Corp., TECO Energy, PPL Corp.,

5 Pepco Holdings, PNM Resources, and Public Service Enterprise. These companies had

6 significant nonregulated risk over the last five years. This is significant because Value

7 Line calculates its beta estimates for utility companies based on five years of data. For

8 example, Avista Corp.'s beta is not only based on its regulated operations, but also its

9 trading operations, which have impacted this company's risk profile. Further, PG&E

10 Corp. was under bankruptcy protection due to the regulatory mechanisms in California

11 that limited its ability to fully recover its power costs. PNM Resources is involved in

12 mergers and acquisition activities. Finally, TECO Energy has recently experienced

13 financial distress due to unregulated merchant investment activities. As such, a simple

14 average of this group does not provide a reasonable estimate of Puget Energy's beta

15 estimate. As discussed previously in my testimony, these companies have significantly

16 higher business risk than does PSE.

17 Reviewing the standard, it is clear that, with exception of the companies just

18 described, predominately all of the companies' beta estimates fall in the broad range from

19 approximately 0.70 to 0.85. This range would suggest the beta estimate in the range of

20 0.75 to 0.80. Puget Energy Inc.'s beta is 0.80. Hence, I would recommend the CAPM

21 estimate be based on a beta of 0.80.

1 **Q. HAS DR. MORIN EVER REJECTED THE BETA ESTIMATES FROM**
2 **ELECTRIC PROXY GROUPS AND INSTEAD USED MORE NORMALIZED**
3 **BETA ESTIMATES IN A CAPM ANALYSIS?**

4 **A.**   Yes. As discussed above, Dr. Morin has rejected his utility industry approved beta

5   estimate as not being reflective of the underlying risk of the utility. He has provided no

6   support for using a beta significantly different from that of the observable beta for Puget

7   Energy in this case. Hence, the beta used in PSE's authorized return on equity should be

8   no higher than 0.80.

9 **Q. IS THERE REASON TO BELIEVE THAT THE BETA ESTIMATES OF**
10 **UTILITY COMPANIES TODAY DO NOT REASONABLY REFLECT**
11 **ELECTRIC INDUSTRY INVESTMENT RISK?**

12 **A.**   Yes. Electric utility betas have increased from around 0.5 two to three years ago, up to

13   0.8 to 0.9 currently. This increase in beta estimates is inconsistent with the observable

14   market data. For example, as noted above, utility bond yield spreads for Treasury bond

15   yields have contracted and are now at or below 25-year average spreads. This indication

16   of the market's explicit valuation assessment confirms utility risk as below historical

17   levels. A normal utility beta estimate is approximately 0.70 based on a long-term

18   assessment of utility beta estimates.

19   One likely factor that has caused utility betas to increase has nothing to do with an

20   increase in utility beta risk, but rather lackluster overall market performance. Utility

21   betas are estimated based on the covariance of utility stock returns in relationship to the

22   overall market. With robust utility stock returns and moderate market returns over the

23   last few years, utility betas have given the false perception of increasing risk.

24   This is illustrated on my Exhibit No. ____(MPG-17). On that exhibit, I have

25   provided a graph that shows the annual stock appreciation for the S&P 500, the S&P

1   Utilities, and the S&P Electric Utilities. As clearly shown on this graph, S&P Electric

2   Utilities' stock price appreciation has significantly outpaced that of the overall S&P 500.

3   This is abnormal, because the S&P 500's returns are normally expected to be stronger

4   than that of the S&P Electric Utilities and the overall utility industry.

5   Because of the lackluster performance of the market, and the relatively strong

6   performance of the utility stocks over this same time period, utility stocks have

7   outperformed the market. Because utility stocks outperformed the market, utility betas

8   have increased toward the overall market beta of 1.

9   However, and importantly, this is an abnormal event, which represents

10   abnormally strong utility stock investment returns, and not increasing utility risk.

11   **Q.   HOW WOULD DR. MORIN'S CAPM RESULT CHANGE IF REASONABLE**
12   **MARKET RISK PREMIUMS ARE USED?**

13   **A.**   Using a market risk premium of 6.6%, a beta estimate of 0.80, and a risk-free rate in the

14   range of 4.7% to 5.3%, produce a CAPM return in the range of 9.98% to 10.58% with a

15   midpoint of 10.3%. I reject Dr. Morin's proposed 30 basis point flotation cost adjustment

16   as a result of this CAPM estimate for the reasons discussed below.

17   **Q.   PLEASE DESCRIBE DR. MORIN'S ECAPM ANALYSIS.**

18   **A.**   The empirical CAPM ("ECAPM") analysis adds two weighted risk premiums to a risk

19   free rate: A 75% weighted risk premium based on a 0.83 utility beta, and a 25%

20   weighted risk premium based on a beta equal to the overall market beta of 1. The theory

21   of the ECAPM is that a beta of less than 1 will increase toward the market beta of 1 over

22   time, which is necessary because the risk of securities will be increasing over time.

| 1 | **Q.** | **WHAT ISSUES DO YOU TAKE WITH DR. MORIN'S ECAPM ANALYSIS?** |

2 **A.** The ECAPM analysis should be rejected. The practical result of Dr. Morin's ECAPM is

3 that the CAPM return is based on a beta estimate of 0.87 to 0.91,[17] instead of the actual

4 Value Line utility beta of 0.83.

5 Dr. Morin's increase to the beta estimate to reflect a more gradual increase in

6 security risk across the risk spectrum is redundant with the use of Value Line's adjusted

7 betas and is therefore unreasonable. The Value Line beta Dr. Morin relied on to estimate

8 a utility beta is already adjusted for the tendencies of betas lower than 1 to increase

9 toward the market beta of 1 over time. The practical effect of Value Line's beta

10 adjustment is that it flattens the security risk line. Consequently, Value Line's beta

11 adjustment formula accomplishes the same thing as the ECAPM analysis. Value Line's

12 adjustment increases a beta lower than 1, and decreases betas greater than 1. Value

13 Line's published adjusted beta is based on a weighted average of a simple regression beta

14 estimate and the market beta. Value Line adjusts its beta by weighting the regression

15 beta estimate by approximately two-thirds, and gives approximately a one-third weight to

16 the market beta of 1. Dr. Morin's proposed ECAPM analysis double-counts the impact

17 on a CAPM return estimate created by using Value Line's adjusted beta.

18 **Q.** **IN DR. MORIN'S EXHIBIT NO. __ (RAM-4), HE PROVIDES AN ANALYSIS**
19 **THAT RELIES ON ADJUSTED VALUE LINE BETAS TO SUPPORT HIS USE**
20 **OF THE ECAPM ANALYSIS. IS DR. MORIN'S ECAPM ANALYSIS SUPPORT**
21 **FOR ADJUSTED BETAS REASONABLE?**

A. No. Dr. Morin's claimed support for the ECAPM analysis, and the way he constructs it,

is significantly flawed and does not support his overstated ECAPM return estimate. I

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[17] Weighted at 75% utility proxy beta, plus the market beta of 1 weighted at 25%.

reached this conclusion based on several inconsistencies in Dr. Morin's testimony. First,

his ECAPM analysis is based on his effort to try to benchmark the CAPM results based

on his DCF return estimates for various companies in the Value Line stock universe.[18]

However, this objective is inconsistent with Dr. Morin's own testimony, Exhibit No. ___

(RAM-1T) at 13, where he states the following:

1	"No one individual method provides the necessary level of
2	precision for determining a fair return, but each method
3	provides useful evidence to facilitate the exercise of an
4	informed judgment. Reliance on any single method or
5	preset formula is inappropriate when dealing with investor
6	expectations because of possible measurement errors and
7	vagaries in individual companies' market data."

8   Hence, Dr. Morin's effort to adjust the CAPM return estimates are an exercise to

9   smooth the results of the DCF and CAPM returns for the Value Line stock universe.

10   However, as noted above, this is inconsistent with the need to independently review the

11   results of a DCF and CAPM return estimate to accurately capture investors' expectations.

12   Second, capturing investors' expectations is the primary objective, not

13   manipulating data to increase the return estimate. This is the significant deficiency in Dr.

14   Morin's ECAPM study. Specifically, Value Line publishes beta estimates that are widely

15   followed by the investment market. These beta estimates reflect the stock's return

16   estimates and are used by investors to make stock purchase and sale decisions. In

17   significant contrast, Dr. Morin's manipulation of the beta estimate in a CAPM analysis is

18   not reflective of market information used by investors to value stock.

19   Finally, the modification to the traditional CAPM return estimate by use of the

20   ECAPM return estimate does not fix the factor that Dr. Morin claims to be flawed in the

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[18]   Exh. No. ___ (RAM-4) at 14.

1   first instance. For example, Dr. Morin maintains the ECAPM analysis is needed because

2   the intercept of the graph of the CAPM return estimate is not equal to, or within a

3   reasonable range of, the claimed risk free rate. Importantly, however, the ECAPM

4   return's adjustment to the alpha coefficient is essentially the exact same adjustment that

5   is made to the alpha coefficient through Value Line's adjustment to the raw beta estimate

6   to create its published adjusted beta.

7   As noted above, Dr. Morin's proposed ECAPM analysis is flawed because he

8   uses Value Line's adjusted beta estimates, rather than raw beta estimates. Had Dr. Morin

9   used unadjusted beta estimates, his ECAPM analysis results may have been reasonable.

10   However, since Dr. Morin relied on adjusted Value Line beta estimates, the modification

11   to the alpha coefficient regression analysis through the beta adjustment process proposed

12   by Value Line is redundant with his ECAPM analysis adjustment to the alpha coefficient,

13   and therefore significantly skews the CAPM result. For these reasons, Dr. Morin's

14   proposed ECAPM analysis should be rejected.

15 **Q.   HOW WOULD THE RESULTS OF DR. MORIN'S ECAPM ANALYSIS**
16 **CHANGE IF HIS INAPPROPRIATE BETA ADJUSTMENT WAS REMOVED?**

17 **A.**   If Dr. Morin's ECAPM inappropriate beta adjustment was removed and his ECAPM data

18   was updated for current inflation, the results of an ECAPM would be similar to the results

19   of my CAPM analysis. Dr. Morin's CAPM study, excluding his unreasonable market

20   risk premium and beta estimate, supports a return of 10.3%.

HISTORICAL RISK PREMIUM

1

2 **Q.** **PLEASE DESCRIBE DR. MORIN'S HISTORICAL RISK PREMIUM ON**
3 **ELECTRIC AND NATURAL GAS COMPANIES.**

4 **A.** Dr. Morin estimates the actual achieved return on electric utility stocks relative to that of

5 long-term Treasury bond securities over the period 1931 through end of year 2001. This

6 produced an achieved return on electric utility stocks above the achieved return on

7 Treasury bonds of 5.55%.[19] Similarly, Dr. Morin estimates the achieved return on gas

8 distribution utility stocks relative to Treasury bond yields for 1954 through 2001 and

9 estimates an equity risk premium of 5.66%.[20]

10 Dr. Morin then adds the estimated electric equity risk premium of 5.6% to the

11 current yield on long-term Treasury bonds of 4.7%, and a projected yield of 5.3%, to

12 arrive at a risk premium estimated return of 10.3% and 10.9%, respectively. Finally, he

13 increased these results by 0.3% to include a flotation cost adder to produce a risk

14 premium return of 10.6% and 11.2%.[21]

15 Next, Dr. Morin adds the estimated gas equity risk premium of 5.7% to the

16 current and projected yields of 4.7% and 5.3%, respectively, to arrive at a risk premium

17 of 10.4% and 11.0%. Finally, he increases these results by 30 basis points for flotation

18 costs to produce a risk premium return of 10.7% and 11.3%.[22]

19 **Q.** **WHAT ISSUE DO YOU TAKE WITH DR. MORIN'S RISK PREMIUM ON**
20 **ELECTRIC AND NATURAL GAS COMPANIES?**

21 **A.** Dr. Morin's achieved return on utility stocks, compared to Treasury securities, should be

22 given little weight in this proceeding for several reasons. First, Mr. Morin's analysis has

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[19]   Exh. No. ___ (RAM-5).
[20]   Exh. No. ___ (RAM-6).
[21]   Exh. No. ___ (RAM 1T) at 37.
[22]   Id. at 38.

1   not been updated for the last five years of data, and it therefore skews the results of this

2   historical achieved return study. Dr. Morin's study was concluded in 2001. However,

3   excluding data from 2002, 2003, 2004, and 2005 likely had a significant impact on his

4   study. Failing to update this study diminishes the unbiased nature of the analysis and

5   provides Dr. Morin a means of misrepresenting this historical achieved return estimate.

6   Excluding a few years from the analysis can make a difference, as illustrated in Dr.

7   Morin's own study. Specifically, if calendar years 2000 and 2001 were removed from his

8   database, the average historical equity risk premium would decrease from 5.55% to about

9   5.0%. Hence, eliminating relevant recent information can skew the results in a

10   meaningful way, as Dr. Morin has done.

11   Second, the achieved return on Treasury securities versus utility securities has

12   been impacted significantly by the dramatic decrease in interest rates over the last 20

13   years. Hence, the achieved return on these securities is not as much an assessment of

14   consistent or varying risk differentials and required return, as it is an assessment of the

15   impact that declining interest rates and reduced inflation expectations have on stock

16   versus bond investments.

17   Third, the achieved return on electric utility stocks and utility bond yields over the

18   last several years has been driven by high expectations of large profits produced by

19   competitive operations related to wholesale market trading and merchant plant

20   development. As noted above, utility security credit ratings and energy company

21   publicly traded stocks have been highly influenced by the high risk volatile earnings and

22   cash flows produced through competitive investments. The equity premium estimated

23   from the electric utility industry over the last few years is highly influenced by these

1   business activities that are significantly higher in risk than those of regulated electric

2   utilities. Therefore, the indicated equity risk premium is biased upward.

3   Finally, the estimated risk premium from this methodology is sensitive to the

4   annual time period selected. Dr. Morin has used December to December as an annual

5   time period. Had he used different months, for example July through July, his results

6   may have been very different. More thorough analyses, such as that performed by

7   Ibbotson & Associates, consider annual holding periods that can take place throughout

8   the year. That is, they consider each holding period for each month in the year. Dr.

9   Morin's estimated equity risk premium may be higher than average for 12-month holding

10   periods simply by using end of year data. Hence, his analysis of an annual holding

11   period's achieved return is incomplete because it does not reflect the total breadth of

12   possible 12-month holding periods for investments in utility and Treasury securities.

13   **Q.   HOW WOULD DR. MORIN'S RISK PREMIUM ANALYSES CHANGE USING**
14   **MORE RECENT INFORMATION?**

15   **A.** Excluding calendar years 2000 and 2001, which were largely driven by normal market

16   industry conditions related to overstated expectations of the wholesale market profits, and

17   the beginning of a liquidity crisis and loss of investor confidence in 2001 attributable to

18   the Enron bankruptcy and other industry events, would indicate an equity risk premium

19   that may be more in line with current market conditions. Excluding these two years from

20   Dr. Morin's analysis, as indicated above, would signify a market risk premium of 5.0%,

21   and not 5.55%. Using this 5.0% market risk premium for both the electric and LDC

22   comparable groups, along with Dr. Morin's estimated Treasury bond yields of 4.7% to

1   5.3%, produces a market return estimate of 9.7% to 10.3%, with a midpoint estimate of

2   10.0%.

3   **ALLOWED RISK PREMIUM**

4   **Q.   PLEASE DESCRIBE DR. MORIN'S ALLOWED RISK PREMIUM ON**
5   **ELECTRIC UTILITIES.**

6   **A.**   Dr. Morin estimates an equity risk premium by subtracting from regulatory commission-

7   authorized returns on equity for U.S. electric utilities from the contemporary Treasury

8   bond yield. He estimates the average ROE spread of authorized returns on equities over

9   Treasury yields to be 5.5% during the period 1996 through 2005. Using a regression

10   equation, he then adjusts the average equity risk premium spread by the difference

11   between the average nominal Treasury bond yield over the 1996-2005 time period and

12   the current Treasury bond yield.

13   This adjustment is based on the simplistic assumption that as nominal interest

14   rates decline, equity risk premiums increase. Making an adjustment for the current

15   Treasury bond yield of 4.7% and projected Treasury yield of 5.3% produces an equity

16   risk premium of 6.0% and 5.7%, respectively.

17   Using a current Treasury bond yield of 4.7%, and a risk premium of 6.0%, implies

18   a return on equity of 10.7%. Using a risk premium of 5.7%, with a projected Treasury

19   bond yield of 5.3%, produces a return on equity of 11.0%. Dr. Morin did not adjust this

20   model result for flotation costs.

21   **Q.   PLEASE DESCRIBE THE ISSUES YOU TAKE WITH DR. MORIN'S**
22   **ALLOWED RISK PREMIUM ON ELECTRIC COMPANIES.**

23   **A.**   Dr. Morin's regression analysis increases his observed equity risk premium based on

24   changes to current and projected interest rates. At a current interest rate of 4.7%, Dr.

1   Morin proposes to increase the 5.5% equity risk premium up to 6.0%. At a projected

2   Treasury interest rate of 5.3%, he proposes to adjust the equity risk premium up to 5.7%.

3   These adjustments are based on a regression analysis that was based on the premise that

4   as nominal interest rates decrease, equity risk premiums increase.

5   Dr. Morin's analysis simply does not comport with observable market data or

6   commission-authorized returns. Equity risk premiums do not move directly with simple

7   changes to nominal interest rates. Rather, equity risk premiums should increase as

8   perceptions of equity risk change in relationship to bond risks.

9   As I describe above, utility industry investment risk is not increasing, as clearly

10   illustrated by the spread between utility bonds and Treasury instruments. If anything,

11   utility investments are still regarded as high quality investments.

12   In any event, the relationship between authorized returns on equity and bond

13   yields simply illustrates that commission-authorized returns have not decreased to the

14   same degree as utility interest rates have over the last ten years. As such, the implied

15   equity risk premium has been increasing over the last few years only because authorized

16   returns on equity have decreased at a much slower rate than that of utility bond interest

17   rates and Treasury instruments. There are no fundamental reasons why equity risk

18   premiums should continue to increase, unless the equity risk is increasing, which it is not.

19   Therefore, based on an assessment of Dr. Morin's own analysis, an equity risk

20   premium over Treasury bonds is approximately 5%, and an equity risk premium over

21   utility equity securities of 3.6% is fully justified. Risk premiums are justified because

22   they reflect historical average equity risk premiums, and that in conjunction with the

1   reality that utility investment risk is not greater than it has been historically supports the

2   reasonableness of those findings.

3   Using a 5.0% equity risk premium, which is reflective of both current and

4   projected interest rates, and Dr. Morin's projected Treasury yield of 5.3%, would indicate

5   a return on common equity in the range of 10.3%.

6   Dr. Morin's regression analysis is too simplistic to provide meaningful

7   information on changes to equity risk premiums. Specifically, Dr. Morin has failed to

8   recognize that commission-authorized returns typically are conservative in nature in

9   estimating changes to investor return requirements. In Dr. Morin's analysis, as interest

10   rates dropped, authorized returns on equity were reduced more slowly. This gave rise to

11   the false premise, as applied by Dr. Morin, that equity risk premiums are increasing

12   dramatically as interest rates drop. Rather, commissions are just slow to react to reduced

13   interest rates, especially drops in interest rates that resulted in the lowest cost capital

14   market experienced in quite some time. In any event, Dr. Morin's regression-adjusted

15   equity risk premiums far exceed actual commission-authorized equity risk premiums at

16   interest rates used in Dr. Morin's analysis.

17   **DCF ANALYSES**

18   **Q.   PLEASE DESCRIBE DR. MORIN'S DCF ANALYSES.**

19   **A.**   Dr. Morin performed a DCF analysis on: 1) Puget Energy (PSE's parent company); 2) a

20   group of combination electric and gas utilities; and 3) a group of natural gas distribution

21   companies. Dr. Morin constructed two DCF analyses for each of the utility groups and

22   Puget Energy using an analyst consensus growth rate projection from Zack's for one

23   DCF analysis, and a second DCF analysis using Value Line's projected growth rate.

1   As shown on Exhibit No. ___ (RAM-8) and Exhibit No. ___ (RAM-10), he relied

2   on group average growth rates for 19 of the companies in his electric distribution utility

3   sample of approximately 5.7% from both Value Line and Zack's to produce a DCF cost

4   of equity of 9.9%. He then added a 0.2% flotation cost to arrive at adjusted returns of

5   10.1%.

6   For Puget Energy, he used a utility yield of 5.1% and a Zack's growth rate of

7   5.3% to produce a DCF return of 10.4%. Using the Value Line growth projections for

8   Puget Energy of 5.5%, he produced a DCF return of 10.6%. Dr. Morin added 30 basis

9   points to the DCF results to produce an adjusted DCF return for Puget Energy in the

10   range of 10.7% to 10.9%.

11   As shown on his Exhibit No. ___ (RAM-12) and Exh. No. ___ (RAM-13), he

12   relied on Zack's growth rates of 5.1%, a dividend yield of 4.3%, and Value Line's growth

13   projections of 6.6% and a dividend yield of 4.4% to produce DCF returns on his natural

14   gas distribution utility groups of 9.4% and 11.0%, respectively. Again, he added 20 basis

15   points to these DCF return estimates to arrive at his DCF return recommendations of

16   9.6% and 11.2%, respectively.

17 **Q.   PLEASE DESCRIBE THE ISSUES YOU TAKE WITH DR. MORIN'S DCF**
18 **ANALYSES.**

19 **A.** Dr. Morin's use of both Zack's and Value Line growth rate projections produces a wide

20   divergence of projected DCF returns. Zack's growth rates, in contrast to Value Line's,

21   contain many analysts' growth rate projections and therefore better reflect the market's

22   growth expectations of the underlying stock. Hence, Dr. Morin's DCF studies, based on

1   his Zack's growth rate projections, are superior to those produced from his Value Line

2   growth rate projections.

3   Therefore, I recommend that the Commission give primary weight to Dr. Morin's

4   DCF return estimates based on his Zack's growth rate models, which indicate a DCF

5   return in the range of 9.4% to 10.4% for Puget Energy, for his natural gas companies and

6   electric distribution companies, excluding his flotation cost adjustment.

7   The DCF returns for the comparable group should be given more weight than the

8   single estimate for Puget Energy because they contain a greater cross section of the

9   market valuations for energy companies, and are likely less skewed than a single

10   company estimate.   Hence, using Dr. Morin's electric and natural gas group would

11   indicate a DCF return in the range of 9.4% to 9.9%.

12   **Q.   DID DR. MORIN'S DCF RESULTS SUPPORT HIS RECOMMENDED 11.25%**
13   **RETURN ON EQUITY FOR PSE IN THIS CASE?**

14   **A.**   No. Dr. Morin's DCF results range from 9.4% to 9.9%. This implies a midpoint return

15   estimate, excluding flotation costs, of less than 9.7%. Thus, Dr. Morin's DCF results

16   clearly indicate that his 11.25% return on equity for PSE is significantly overstated. I

17   would note, as described above, DCF return estimates today are quite robust, and do

18   reflect today's very low-cost capital market environment. The growth rate expectations

19   used by Dr. Morin are very high in relation to historical dividend growth, approaching

20   that of the expected overall growth to the U.S. economy. Hence, these growth rates are

21   very high by historical standards. Further, the dividend yields used in his analysis reflect

22   today's very low-interest rate environment. Consequently, the DCF results clearly reflect

1   optimistic growth expectations for these companies and today's low cost capital market

2   environment.

3   **FLOTATION COST ADJUSTMENT**

4   **Q.   IS DR. MORIN'S PROPOSED FLOTATION COST ADJUSTMENT REASON-**
5   **ABLE?**

6   **A.**   No. Flotation cost adjustments are a legitimate cost of issuing stock to the public. Actual

7   book costs, however, should be used for this adjustment so the Commission Staff, and

8   other interested intervenors, can audit the Company's actual common stock flotation

9   expenses for reasonableness and amount. Any adjustment to PSE's cost of service for

10   flotation cost expenses should be based only on known and measurable common stock

11   flotation expenses.

12   In significant contrast, Dr. Morin's proposed flotation cost adjustment is not

13   based on PSE's known, measurable, prudent, and reasonable common stock flotation

14   costs. Rather, it is based on a general study of market flotation costs that may or may not

15   have any relationship to PSE's actual cost of issuing stock to the public. Indeed, Dr.

16   Morin acknowledges that PSE is not a publicly traded company, and therefore it is

17   unclear what, if any, PSE's common stock flotation cost expenses might be. Further,

18   while PSE receives its incremental equity capital from its parent company, it is not clear

19   whether that equity capital is being funded by public common stock issuances, debt

20   issuances, or internally generated funds. Hence, it simply is not known and measurable

21   what, if any, common stock flotation costs should be properly allocated to PSE and

22   should be reflected in its cost of service in this proceeding. For these reasons, Dr.

1   Morin's proposed flotation cost adjustment is not based on known and measurable

2   expenses and should be rejected.

3 **Q.**   **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

4 **A.**   Yes.