

Docket Nos. UE-090704 and UG-090705
Direct Testimony of Stephen G. Hill
Exhibit No. SGH-1T
REDACTED

BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,
Complainant,

v.

PUGET SOUND ENERGY, INC.,
Respondent.

DOCKET NOS. UE-090704 AND UG-090705

STEPHEN G. HILL (SGH-1T)

ON BEHALF OF
PUBLIC COUNSEL

NOVEMBER 17, 2009

REDACTED

1 **Interest Rates:** In late 2008, with the economy seemingly
2 in freefall, the Federal Reserve voted to lower the federal
3 funds rate target to near zero. It has kept it there ever
4 since, as the central bank has sought to turn the nation's
5 economic fortunes around. Recent data suggest that it has
6 met with success in this endeavor Clearly, the next
7 move will be for the Fed to raise rates. We do not think
8 that will occur before 2010, though, especially if the
9 economy shows just limited life during the second half of
10 this year. (The Value Line Investment Survey, *Selection &*
11 *Opinion*, August 28, 2009, pp. 3345-6.)
12

13 In that most recent Quarterly Economic Review, cited above, Value Line
14 projects long-term Treasury bond rates will average 4.2 percent during the third
15 quarter of 2009 and 5.0 percent by the end of 2010. The recent 20-year T-bond
16 yield for the week ending September 25, 2009, according to the Federal Reserve
17 is 4.19 percent (Federal Reserve Statistical Release H.15, September 28, 2009).
18 Therefore, the indicated expectation with regard to long-term interest rates is that
19 they could move somewhat higher in the near-term future, provided the economic
20 recovery continues to advance.

21 **IV. METHODS OF EQUITY COST EVALUATION**

22 **A. Discounted Cash Flow Model**

23 **Q: Please describe the discounted cash flow (DCF) model you used to arrive at**
24 **an estimate of the cost rate of common equity capital for PSE in this**
25 **proceeding.**

26 **A:** The DCF model relies on the equivalence of the market price of the stock (P) with
27 the present value of the cash flows investors expect from the stock, and assumes
28 that the discount rate equals the cost of capital. The total return to the investor,
29 which equals the required return and the cost of equity capital according to this

1 theory, is the sum of the dividend yield and the expected growth rate in the
2 dividend.

3 The theory is represented by the equation,

4
$$k = D/P + g, \quad (1)$$

5 where “k” is the equity capitalization rate (cost of equity, required return), “D/P”
6 is the dividend yield (dividend divided by the stock price) and “g” is the expected
7 sustainable growth rate.
8

9 **Q: What growth rate (g) did you adopt in developing your DCF cost of common**
10 **equity for the Company in this proceeding?**

11 A: The growth rate variable in the traditional DCF model is quantified theoretically
12 as the dividend growth rate investors expect to continue into the indefinite future.
13 The DCF model is actually derived by 1) considering the dividend a growing
14 perpetuity, that is, a payment to the stockholder which grows at a constant rate
15 indefinitely, and 2) calculating the present value (the current stock price) of that
16 perpetuity. The model also assumes that the company whose equity cost is to be
17 measured exists in a steady state environment, i.e., the payout ratio and the
18 expected return are constant and the earnings, dividends, book value and stock
19 price all grow at the same rate, forever. As with all mathematical models of real-
20 world phenomena, the DCF theory does not exactly “track” reality. Payout ratios
21 and expected equity returns do change over time. Therefore, in order to properly
22 apply the DCF model to any real-world situation and, in this case, to find the

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1 long-term sustainable growth rate called for in the DCF theory, it is essential to
2 understand the determinants of long-run expected dividend growth.

3 **Q: Can you provide an example to illustrate the determinants of long-run**
4 **expected dividend growth?**

5 A: Yes, in Exhibit No. SGH-3, I provide an example of the determinants of a
6 sustainable growth rate on which to base a reliable DCF estimate. Additionally,
7 in Exhibit No. SGH-3, I show how reliance on earnings growth rates alone, absent
8 an examination of the underlying determinants of long-run dividend growth, can
9 produce inaccurate DCF results.

10 **Q: Did you use a sustainable growth rate approach to develop an estimate of the**
11 **expected growth rate for the DCF model?**

12 A: I have calculated both the historical and projected sustainable growth rate for a
13 sample of utility firms with similar-risk operations, but I have not relied solely on
14 that type of growth rate analysis. To estimate an appropriate DCF growth rate, I
15 have also utilized published data regarding both historical and projected growth
16 rates in earnings, dividends, and book value for the sample group of utility
17 companies. Through an examination of all of those data, which are available to
18 and used by investors, I estimate investors' long-term internal growth rate
19 expectations. To that long-term growth rate estimate, I add any additional growth
20 that is attributable to investors' expectations regarding the on-going sale of stock
21 for each of the companies under review.

22 ///

23 ///

1 **Q: Why have you used the technique of analyzing the market data of several**
2 **companies?**

3 A: I have used the “similar sample group” approach to cost of capital analysis
4 because it yields a more accurate determination of the cost of equity capital than
5 does the analysis of the data of one individual company. Any form of analysis, in
6 which the result is an estimate, such as growth in the DCF model, is subject to
7 measurement error, i.e., error induced by the measurement of a particular
8 parameter or by variations in the estimate of the technique chosen. When the
9 technique is applied to only one observation (e.g., estimating the DCF growth rate
10 for a single company) the estimate is referred to, statistically, as having “zero
11 degrees of freedom.” This means, simply, that there is no way of knowing if any
12 observed change in the growth rate estimate is due to measurement error or to an
13 actual change in the cost of capital. The degrees of freedom can be increased and
14 exposure to measurement error reduced by applying any given estimation
15 technique to a sample of companies rather than one single company. Therefore,
16 by analyzing a group of firms with similar characteristics, the estimated value (the
17 growth rate and the resultant cost of capital) is more likely to equal the “true”
18 value for that type of operation.

19 **Q: How were the firms selected for your analysis?**

20 A: In selecting a sample of electric utility firms to analyze, I screened all the electric
21 utilities followed by Value Line, because that investor service, in addition to
22 providing a wealth of historical data, provides projected information, which is
23 important in gauging investor expectations. I selected electric companies that had

1 at least 70 percent of revenues from electric operations, had generation assets, did
2 not have a pending merger, did not have a recent dividend cut, had stable book
3 values and a senior bond rating between “A-” and “BBB-”. The screening
4 process for electric utilities is summarized on Exhibit No. SGH-6, attached to my
5 testimony. All of the electric utilities followed by Value Line are shown, as well
6 as the screening parameters and the parameter values for each company. The
7 Companies selected for analysis as most similar in risk to PSE are: Central
8 Vermont Public Service (CV), FirstEnergy Corp. (FE), Northeast Utilities (NU),
9 American Electric Power (AEP), Cleco Corp. (CNL), Empire District Electric
10 (DPL), Entergy Corp. (ETR), Westar Energy (WR), Hawaiian Electric (HE),
11 Idacorp (IDA), and Pinnacle West Capital Corp. (PNW).¹⁰

12 **Q: How have you calculated the DCF growth rates for the sample of comparable**
13 **companies?**

14 A: Exhibit No. SGH-7 pages 1 through 4, shows the retention ratios, equity returns,
15 sustainable growth rates, book values per share and number of shares outstanding
16 for the comparable electric companies for the past five years. Also included in
17 the information presented in Exhibit No. SGH-7, are Value Line’s projected 2009,
18 2010 and 2012-2014 values for equity return, retention ratio, book value growth
19 rates and number of shares outstanding.

20 In evaluating these data, I first calculate the five-year average sustainable
21 growth rate, which is the product of the earned return on equity (r) and the ratio of
22 earnings retained within the firm (b). For example, Exhibit No. SGH-7, page 2,

¹⁰ In the Schedules accompanying this testimony, the sample group companies are referred to by their stock

1 shows that the five-year average sustainable growth rate for one of the sample
2 companies (American Electric Power—AEP) is 5.36 percent. The simple five-
3 year average sustainable growth value is used as a benchmark against which I
4 measure the company’s most recent growth rate trends. Recent growth rate trends
5 are more investor influencing than are simple historical averages. Continuing to
6 focus on AEP, we see that sustainable growth has been quite consistent
7 throughout the historical period indicating stable growth. By the 2012-2014
8 period, Value Line projects AEP’s sustainable growth will moderate a bit from
9 the recent five-year average, to 5.03 percent. These forward-looking data indicate
10 that investors expect AEP to grow at a rate slightly lower than the growth rate that
11 has existed, on average, over the past five years.

12 At this point I should note that, while the five-year projections are given
13 consideration in estimating a proper growth rate because they are available to and
14 are used by investors, they are not given sole consideration. Without reviewing
15 all the data available to investors, both projected and historic, sole reliance on
16 projected information may be misleading. Value Line readily acknowledges to its
17 subscribers the subjectivity necessarily present in estimates of the future:

18 “We have greater confidence in our year-ahead ranking
19 system, which is based on proven price and earnings
20 momentum, than in 3- to 5-year projections.” (*Value Line*
21 *Investment Survey, Selection and Opinion*, June 7, 1991, p.
22 854).
23

24 Another factor to consider is that AEP’s book value growth is expected to
25 increase at a 5.0 percent level over the next five years. This information tends to

ticker symbols, shown here in parentheses.

1 confirm the sustainable growth projections. Also, as shown on Exhibit No. SGH-
2 7 page 2, AEP's dividend growth rate, which was negative 6 percent historically,
3 is expected increase to a 3 percent rate of growth. While this also shows higher
4 growth, the projected level is well below sustainable growth projections.

5 Earnings growth rate data available from Value Line indicate that
6 investors can expect a relatively lower growth rate in the future (3%), compared
7 to the sustainable growth rate projections. IBES and Zack's (investor advisory
8 services that poll institutional analysts for growth earnings rate projections) also
9 project moderate earnings growth rate for AEP—3.75 percent and 3.3 percent,
10 respectively—over the next five years.

11 AEP's projected sustainable growth is expected to approach 5 percent,
12 dividends are expected to increase at a 3 percent annual rate. Per share earnings
13 growth is expected to range from 3 percent to 3.75 percent. A long-term growth
14 rate of 4.25 percent is a reasonable expectation for AEP.

15 **Q: Is the internal (b x r) growth rate the final growth rate you use in your DCF**
16 **analysis?**

17 A: No. An investor's sustainable growth rate analysis does not end upon the
18 determination of an internal growth rate from earnings retention. Investor
19 expectations regarding growth from external sources (sales of stock) must also be
20 considered and examined. For AEP, page 2 of Exhibit No. SGH-7 shows that the
21 number of outstanding shares increased at a 0.64 percent rate over the most recent
22 five-year period. However, Value Line expects the number of shares outstanding
23 to increase at a faster rate through the 2012-2014 period, bringing the share

1 growth rate to a 3.83 percent rate by that time, due to a large issuance expected
2 this year. An expectation of share growth of 2 percent is reasonable for this
3 company.

4 Because AEP is currently trading at a market price that is greater than
5 book value, issuing additional shares will increase investors' growth rate
6 expectations. Multiplying the expected growth rate in shares outstanding by (1-
7 (Book Value/Market Value))¹¹ increases the investor-expected growth rate for
8 AEP by 0.24 percent. Therefore, the combined internal and external growth rate
9 for AEP is 4.49 percent (4.25% internal growth and 0.24% external growth).

10 I have included the details of my growth rate analyses for AEP as an
11 example of the methodology I use in determining the DCF growth rate for each
12 company in the electric industry sample. A description of the growth rate analyses
13 of each of the companies included in my sample groups is set out in Exhibit No.
14 SGH-4 and Exhibit No. SGH-8, page 1 of 2, attached to this testimony shows the
15 internal, external and resultant overall growth rates for each of the electric utility
16 companies analyzed.

17 **Q: Have you checked the reasonableness of your growth rate estimates against**
18 **other, publicly available, growth rate data?**

19 A: Yes. Page 2 of Exhibit No. SGH-8 shows the results of my DCF growth rate
20 analysis as well as 5-year historic and projected earnings, dividends and book
21 value growth rates from Value Line, earnings growth rate projections from

¹¹ This is Gordon's formula for "v" the accretion rate related to new stock issues. B=book value, M=market value. (Gordon, M.J., *The Cost of Capital to a Public Utility*, MSU Public Utilities Studies, East Lansing, Michigan, 1974, pp., 30-33).

1 Reuters, the average of Value Line and IBES growth rates and the 5-year
2 historical compound growth rates for earnings, dividends and book value for each
3 company under study.

4 My average DCF growth rate estimate for all the electric utility companies
5 included in my analysis is 4.67 percent. This figure exceeds Value Line's
6 projected average growth rate in earnings, dividends and book value for those
7 same companies (4.41%) and is well above the five-year historical average
8 earnings, dividend and book value growth rate reported by Value Line for those
9 companies (3.18%). My growth rate estimate for the electric companies under
10 review is below the analysts' earnings growth rate projections—6.11 percent and
11 5.9 percent (IBES and Zack's, respectively). Also, my growth rate estimate is
12 above the projected dividend growth rate of the sample companies, 3.55 percent.

13 **Q: Some cost of capital witnesses rely exclusively on analysts' earnings**
14 **projections as the growth rate in the DCF; you have not done so. Can you**
15 **explain why?**

16 A: In my view, earnings growth rate projections are widely available, are used by
17 investors, and therefore deserve consideration in an informed, accurate
18 assessment of the investor expected growth rate to be included in a DCF model. I
19 do not believe, however, that projected earnings growth rates should be used as
20 the only source of a DCF growth estimate as Company witness Morin has done in
21 this case. In other words, projected earnings growth rates are influential in, but
22 not solely determinative of, investor expectations.

1 First, it is important to realize that, as I discuss in Exhibit No. SGH-3,
2 projected earnings growth rates may over or understate the growth that can be
3 sustained over time by the companies under review. This is important because
4 long-term sustainable growth is required in an accurate DCF assessment of the
5 cost of equity capital. The efficacy of projected earnings growth rates in any
6 specific DCF analysis can only be determined through a study of the underlying
7 fundamentals of growth—something that those who rely exclusively on analysts’
8 earnings growth rate projections fail to do.

9 Second, the studies that support the use of analysts’ earnings projections
10 measure the ability of analyst’s estimates to predict stock prices versus simple
11 historical averages of other parameters. In that sort of simplistic comparison,
12 analysts’ projections perform better. However, I am aware of no cost of capital
13 analyst that relies exclusively on historical average growth rates, nor is it
14 reasonable to believe that any astute investor would do so. Therefore, while
15 studies do indicate that analysts’ earnings growth estimates are better indicators of
16 stock prices than are simple historical averages of other growth rate parameters,
17 those studies do not provide any basis for exclusive reliance on earnings growth
18 projections in a DCF analysis.

19 Third, the sell-side institutional analysts that are polled by IBES and other
20 investor services offer relatively “rosy” expectations for the stock they follow—
21 even when the analyst’s actual expectations for the stock may not be so sanguine.
22 That is, some analysts overstate growth expectations to make the stocks they want
23 to sell appear more attractive. Although claims are often made that the opinions

1 of sell-side analysts are not affected by the profits made by the other parts of the
2 business that actually trade the securities, the “Cinderella effect” (analysts’
3 overstating stock growth expectations) is not a new phenomenon, and is
4 recognized in academia. As the authors of a widely-used finance textbook note
5 regarding the use of projected earnings growth rates in a DCF analysis:

6 Estimates of this kind are only as good as the long-term
7 forecasts on which they are based. For example, several
8 studies have observed that security analysts are subject to
9 behavioral biases and their forecasts tend to be over-
10 optimistic [footnote omitted]. If so, such DCF estimates of
11 the cost of equity should be regarded as upper estimates of
12 the true figure. [footnote omitted]. *See, for example,*
13 A. Dugar and S. Nathan, “The Effect of Investment
14 Banking Relationships on Financial Analysts’ Earnings
15 Investment Recommendations.” (*Contemporary*
16 *Accounting Research* 12 (1995), pp. 131-160. Brealey,
17 Meyers, Allen, *Principles of Corporate Finance, 8th Ed.*,
18 McGraw-Hill Irwin, Boston, MA, (2006), p. 67.)

19 This concern regarding investors’ use of analysts’ growth estimates is also
20 underscored by an investor’s service sponsored by the *Wall Street Journal*:

21
22 “You should be careful when looking at analyst
23 recommendations for several reasons. First of all, many
24 analysts suffer from a conflict of interest between the firm
25 that employs them and the company whose stock they
26 track. Often times, an analyst will be responsible for
27 issuing reports on a company that is a current or potential
28 client of their employer (usually an investment bank). Since
29 they know that their employer would like to keep the
30 client’s business, the analyst may be tempted to issue a
31 rosier outlook for the stock than what it really deserves.”
32 (Investorguide.com, “University,” Analysts and Earnings
33 Estimates, www.investorguide.com/igustockanalyst.html)
34

35 **Q: Does this conclude the growth rate portion of your DCF analysis?**

36 **A:** Yes, it does.

37 ///

FUNDAMENTAL OF UTILITY LONG-TERM GROWTH

Q. PLEASE PROVIDE AN EXAMPLE WHICH DESCRIBES THE DETERMINANTS OF LONG-TERM SUSTAINABLE GROWTH.

A. Assume that a hypothetical regulated firm had a first period common equity or book value per share of \$10, the investor-expected return on that equity was 10% and the stated company policy was to pay out 60% of earnings in dividends. The first period earnings per share are expected to be \$1.00 (\$10/share book equity x 10% equity return) and the expected dividend is \$0.60. The amount of earnings not paid out to shareholders (\$0.40), the retained earnings, raises the book value of the equity to \$10.40 in the second period. The table below continues the hypothetical for a five year period and illustrates the underlying determinants of growth.

TABLE A.

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>GROWTH</u>
BOOK VALUE	\$10.00	\$10.40	\$10.82	\$11.25	\$11.70	4.00%
EQUITY RETURN	10%	10%	10%	10%	10%	-
EARNINGS/SH.	\$1.00	\$1.040	\$1.082	\$1.125	\$1.170	4.00%
PAYOUT RATIO	0.60	0.60	0.60	0.60	0.60	-
DIVIDENDS/SH.	\$0.60	\$0.624	\$0.649	\$0.675	\$0.702	4.00%

We see that under steady-state conditions, the earnings, dividends and book value all grow at the same rate. Moreover, the key to this growth is the amount of earnings retained or reinvested in the firm and the return on that new portion of equity. If we let “b” equal the retention ratio of the firm (1 – the payout ratio) and let “r” equal the firm’s expected return on equity, the DCF growth rate “g” (also referred to as the internal or sustainable growth rate) is equal to their product, or

$$g = br. \qquad (i)$$

Professor Myron Gordon, who developed the Discounted Cash Flow technique and first

introduced it into the regulatory arena, has determined that Equation (i) embodies the underlying fundamentals of growth and, therefore, is a primary measure of growth to be used in the DCF model. Professor Gordon's research also indicates that analysts' growth rate projections are useful in estimating investors' expected sustainable growth.

I should note here that the above hypothetical does not allow for the existence of external sources of equity financing, i.e., sales of common stock. Stock financing will cause investors to expect additional growth if the company is expected to issue new shares at a market price that exceeds book value. The excess of market over book would inure to current shareholders, increasing their per share equity value. Therefore, if the company is expected to continue to issue stock at a price that exceeds book value, the shareholders would continue to expect their book value to increase and would add that growth expectation to that stemming from earnings retention or internal growth. Conversely, if a company were expected to issue new equity at a price below book value, that would have a negative effect on shareholder's current growth rate expectations. In such a situation, shareholders would perceive an overall growth rate less than that produced by internal sources (retained earnings). Finally, with little or no expected equity financing or a market-to-book ratio near unity, investors would expect the sustainable growth rate for the company to equal that derived from Equation (i), "g = br." Dr. Gordon¹ identifies the growth rate which includes both expected internal and external financing as:

$$g = br + sv, \tag{ii}$$

where,

g = DCF expected growth rate,
r = return on equity,
b = retention ratio,
v = fraction of new common stock
sold that accrues to the current

¹Gordon, M.J., The Cost of Capital to a Public Utility, MSU Public Utilities Studies, East Lansing, Michigan, 1974, pp., 30-33.

shareholder,
s = funds raised from the sale of stock
as a fraction of existing equity.

Additionally,

$$v = 1 - BV/MP, \quad (iii)$$

where,

MP = market price,
BV = book value.

I have used Equation (iii) as the basis for my examination of the investor expected long-term growth rate (g) in this proceeding.

Q. IN YOUR PREVIOUS EXAMPLE, EARNINGS AND DIVIDENDS GREW AT THE SAME RATE (br) AS DID BOOK VALUE. WOULD THE GROWTH RATE IN EARNINGS OR DIVIDENDS, THEREFORE, BE SUITABLE FOR DETERMINING THE DCF GROWTH RATE ?

A. No, not necessarily. Rates of growth derived from earnings or dividends alone can be unreliable due to extraneous influences on those parameters such as changes in the expected rate of return on common equity or changes in the payout ratio. That is why it is necessary to examine the underlying determinants of growth through the use of a sustainable growth rate analysis.

If we take the hypothetical example previously stated and assume that, in year three, the expected return on equity rises to 15%, the resultant growth rate for earnings and dividends far exceeds that which the company could sustain indefinitely. The potential error in using those growth rates to estimate "g" is illustrated in the following table.

TABLE B.

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>GROWTH</u>
BOOK VALUE	\$10.00	\$10.40	\$10.82	\$11.47	\$12.157	5.00%
EQUITY RETURN	10%	10%	15%	15%	15%	10.67%
EARNINGS/SH.	\$1.00	\$1.040	\$1.623	\$1.720	\$1.824	16.20%
PAYOUT RATIO	0.60	0.60	0.60	0.60	0.60	-
DIVIDENDS/SH.	\$0.60	\$0.624	\$0.974	\$1.032	\$1.094	16.20%

What has happened is a shift in steady-state growth paths. For years one and two, the sustainable rate of growth ($g=br$) is 4.00%, just as in the previous hypothetical. Then, in the last three years, the sustainable growth rate increases to 6.00% ($g=br = 0.4 \times 15\%$). If the regulated firm were expected to continue to earn a 15% return on equity and retain 40% of its earnings, then a growth rate of 6.0% would be a reasonable estimate of the long-term sustainable growth rate. However, the compound annual growth rate for dividends and earnings exceeds 16% which is the result only of an increased equity return rather than the intrinsic ability of the firm to grow continuously at a 16% annual rate. Clearly, this type of estimate of future growth cannot be used with any reliability at all. In the case of the hypothetical, to utilize a 16% growth rate in a DCF model would be to expect the company's return on common equity to increase by 50% every five years into the indefinite future. This would be a ridiculous forecast for any regulated firm and underscores the importance of utilizing the underlying fundamentals of growth in the DCF model.

It can also be demonstrated that a change in our hypothetical regulated firm's payout ratio makes the past rate of growth in dividends an unreliable basis for predicting "g". If we assume our regulated firm consistently earns its expected equity return (10%) but in the third year, changes its payout ratio from 60% to 80% of earnings, the results are shown in the table below.

TABLE C.

	<u>YEAR 1</u>	<u>YEAR 2</u>	<u>YEAR 3</u>	<u>YEAR 4</u>	<u>YEAR 5</u>	<u>GROWTH</u>
BOOK VALUE	\$10.00	\$10.40	\$10.82	\$11.036	\$11.26	3.01%
EQUITY RETURN	10%	10%	10%	10%	10%	-
EARNINGS/SH.	\$1.00	\$1.040	\$1.082	\$1.104	\$1.126	3.01%
PAYOUT RATIO	0.60	0.60	0.80	0.80	0.80	7.46%
DIVIDENDS/SH.	\$0.60	\$0.624	\$0.866	\$0.833	\$0.900	10.67%

What we see here is that, although the company has registered a high dividend growth rate (10.67%), it is, again, not at all representative of the growth that could be sustained indefinitely, as called for in the DCF model. In actuality, the sustainable growth rate has declined from 4.0% the first two years to only 2.0% ($g=br = 0.2 \times 10\%$) during the last three years due to the increased payout ratio. To utilize a 10% growth rate in a DCF analysis of this hypothetical regulated firm would 1) assume the payout ratio of the firm would continue to increase 33% every five years into the indefinite future, 2) lead to the highly implausible result that the firm intends to consistently pay out more in dividends than it earns and 3) grossly overstate the cost of equity capital.

SAMPLE COMPANY GROWTH RATE ANALYSES

ELECTRIC UTILITIES

CV – Central Vermont Public Service - CV's sustainable growth rate has averaged 1.39% over the most recent five year period (2004-2008), including a set-back with low growth in 2005. In the most recent three years, the company's sustainable growth averaged approximately 3%. Value Line (VL) expects CV's sustainable growth to rise above that historical growth rate level and reach approximately 3.3% by the 2012-2014 period. CV's book value growth rate is expected to be 6.5% over the next five years, higher than the historical growth of 1.5%, confirming higher growth expectations for the future. CV's earnings per share are projected to increase at a 3.0% (VL) rate (IBES and Zack's do not publish growth rate expectations for this company). Over the past five years, CV's earnings growth was 3.5% but its dividends increased at a 1% rate, according to Value Line. Investors can reasonably expect long-term sustainable growth rate in the future to be higher than the past; a growth rate of **3.75%** is reasonable for CV.

Regarding share growth, CV's shares outstanding decreased at a 1.3% rate over the past five years. The growth the number of shares is projected by VL to increase at about a 1% rate through the 2012-14 period. An expectation of share growth of **0%** for this company is reasonable.

FE – FirstEnergy Corp. - FE's sustainable growth rate averaged 6.02% over the five-year historical period, with much higher results in the most recent year, indicating an upward trend. VL projects that the internal growth will increase through 2012-14; bringing sustainable growth near 7%. FE's book value, which increased at a 3% rate during the most recent five years, however, is expected to increase to a 4.5% rate in the future. While confirming that future expectations are for higher growth, that projected book value growth rate is much lower than indicated by the sustainable growth measure. FE's earnings per share are projected to increase at 4% (VL) to 5% (IBES), and 7% (Zack's) rates. FE's dividends are expected to grow at a 4.5% rate, down from 6.5% historically and moderating long-term growth expectations to some extent. Historically FE's earnings grew at a 12.5% rate, according to Value Line. The projected sustainable growth indicate that investors can expect the growth from FE in the future to be higher than that which has existed in the past, while projected dividned and earnings growth indicate more moderate growth. Investors can reasonably expect a sustainable growth rate of **5.75%** for FE—similar to historical averages.

Regarding share growth, FE's shares outstanding showed about a 2% decline over the past five years. However, FE's growth rate in shares outstanding is expected to stabilize and show a 0% rate of increase through 2012-14. An expectation of share growth of **-0.25%** for this company is reasonable.

NU – Northeast Utilities – NU's sustainable growth rate has averaged 2.64% over the most recent five-year period, with 5.3% growth in the most recent year.

VL expects NU's sustainable growth to reach approximately 4% through the 2012-14 period. NU's book value growth rate is expected to be 5% over the next five years, up from the 2.0% rate of growth experienced over the past five years. Projected book value growth is, in this case, similar to sustainable growth projections. Also, NU's earnings per share are projected to increase at 8% according to Value Line (8.5% IBES and Zacks). Part of that increase is due to an expectation of a recovery from very low earned returns in the 2004-2006 period, which is unlikely to continue into the indefinite future. Value Line also projects a 6.5% growth in dividends, lower than the 8.5% rate of dividend growth for the previous five years (which was inflated due to the initiation of dividend payments). Also Value Line shows historical earnings growth of 3%. Investors can reasonably expect a higher sustainable growth rate in the future, but not as high as the current earnings growth rate estimates— **5.75%** for NU is reasonable.

Regarding share growth, NU's shares outstanding increased at approximately a 5% rate over the past five years, due to an equity issuance in 2006. However, between 1992 and 2005 NU's shares outstanding showed essentially zero growth. The number of shares is expected to grow at a 6% rate through 2012-14. An expectation of share growth of **4%** for this company is reasonable.

AEP- American Electric Power- AEP's sustainable growth rate has averaged 5.36% over the most recent five-year period. VL expects AEP's sustainable growth to decrease to a growth rate level of 5.03% by the 2012-2014 period. Also, AEP's book value growth rate is expected to increase at a 5% rate over the next five years. AEP's earnings per share are projected to increase at 3.0% (VL), to 3.75% (IBES), to 3.3% (Zack's) rate—all below the indicated projected internal growth rate. Also, AEP's dividends are expected to grow at 3%. Investors can reasonably expect a sustainable growth rate in the future of **4.25%** for AEP.

Regarding share growth, AEP's shares outstanding increased at a 0.64% rate over the past five years. The number of shares outstanding in 2012-2014 is expected to show about a 3.8% increase from 2007 levels. An expectation of share growth of **2.0%** for this company is reasonable.

CNL – Cleco Corp. - CNL's sustainable growth rate averaged 3.50% for the five-year period, with the results in the most recent year above that average. VL expects sustainable growth to continue to increase to about a 4% level through the 2012-14 period. CNL's book value growth is expected to increase at a 4.5% rate, below the historical level of 9.5%, established during the building of a new power plant. CNL's earnings and dividends per share are projected to show 9.5% and 10% growth, respectively, over the next five years, according to Value Line (IBES projects 12.5% earnings growth & Zacks projects 10.5% earnings growth). Historically CNL's earnings and dividends increased at a 0.5% rate, according to Value Line. Those high earnings growth projections are built on the expectation of a 34% increase in earned return from the 2006-2008 period to the 2012-14

period. Therefore, those earnings growth rates are not sustainable, and the high growth represents a recovery from prior low growth situations not a blueprint for the long term. The sustainable growth data indicate that future growth will be only modestly above prior growth rate averages and moderate future growth expectations somewhat. However the earnings growth projections would increase expectations to some extent. Investors can reasonably expect sustainable growth from CNL to be above past averages, a sustainable internal growth rate of 6% is reasonable for this company.

Regarding share growth, CNL's shares outstanding grew at approximately a 4.8% rate over the past five years, due to an equity issuance in 2006; prior to that CNL's shares have grown at about a 1% rate. The growth in the number of shares is expected by VL to be 1.6% through 2012-14. An expectation of share growth of 1.5% for this company is reasonable.

EDE – Empire District Electric - EDE's sustainable internal growth rate averaged -1.25% over the five-year historical period, with several negative growth years, due to paying out more in dividends than earnings. VL projects EDE's sustainable growth will rise to a level of 2.4% through 2012-14—a substantial improvement over historical results. EDE's book value growth rate is expected to continue in the future at 2.0%, above the historical level of 1.5%. However, EDE's earnings per share are projected to increase at 6% according to VL (based on a large increase in ROE, which is unsustainable). The analysts' surveyed by IBES project earnings growth at 6%, while Zacks publishes a 0% earnings growth rate expectations (i.e., earnings per share will be constant over the next five years). EDE's dividends are expected to grow at a 1.5% rate over the next five years moderating long-term growth expectations. Sustainable growth has been relatively inconsistent for this company, historically and is expected to trend upward in the future. Dividend growth has been non-existent historically, but the company has continued to pay its dividend. Investors can reasonably expect a sustainable growth rate of 3.0% from EDE.

Regarding share growth, EDE's shares outstanding rose at about a 7.2% rate over the past five years. The level of share growth is expected by VL to be 3.83% from 2007 through 2012-14. However, from 2009 through 2012-2014 the growth is expected to be only 1.9%. An expectation of share growth of 3.5% for this company is reasonable.

ETR – Entergy Corp. - ETR's internal sustainable growth rate has averaged 7.13% over the most recent five year period (2004-2008). Sustainable growth is expected to increase to about 7.7% by the 2012-2014 period. Also, ETR's book value growth rate is expected to be 6.5% over the next five years—an increase from the 3% rate of growth experienced over the past five years—pointing to higher growth expectations for the future. ETR's earnings per share are projected to increase at a rate of from about 6% (VL) to 8.5% (Zack's) to 6% (IBES). ETR's dividends are expected to grow at a 5.5% rate, down from an historical rate

of 13%--moderating growth expectations. Over the past five years, ETR's earnings grew at a 10.5% rate according to Value Line. These data indicate that investors can reasonably expect a sustainable growth rate in the future similar to or below past averages. Therefore, **6.75%** is a reasonable long-term growth expectation for ETR.

Regarding share growth, ETR's shares outstanding grew at a -3.3% rate over the past five years. The number of shares outstanding is projected by VL to decrease at a 0.14% rate through 2012-14. An expectation of share growth of -**0.75%** for this company is reasonable.

WR – Westar, Inc.- WR's sustainable growth rate has averaged 3.15% over the most recent five-year period. Value Line expects WR's sustainable growth to decline to approximately 2.9% by the 2012-2014 period. However, WR's book value growth rate is expected to be 6% over the next five years, up substantially from the 1% rate of growth experienced over the past five years, and well above sustainable growth projections. Also, WR's earnings per share are projected to increase at a rate of from 4.5% (Value Line), to 3.3% (IBES), to 4.5% (Zack's). Over the past five years, WR's earnings growth was 21.5% according to Value Line, including negative earnings in the base years. Compound 5-year historical earnings growth for WR was 7.7%. Historically, dividends grew at a -0.5% rate, and Value Line expects that rate to increase to +4.5% over the next five years. Investors can reasonably expect a higher sustainable growth over the long term — **3.75%** for WR is reasonable.

Regarding share growth, WR's shares outstanding increased at about a 6% rate over the past five years. The number of shares is expected to increase at a 1% rate through 2012-14. An expectation of share growth of **2.0%** for this company is reasonable.

HE – Hawaiian Electric - HE's sustainable growth rate has averaged 0.21% over the most recent five year period (2004-2008), with negative growth in the two most recent years. However, VL expects HE's sustainable growth to increase from that historical growth rate level to reach approximately 3% by the 2012-2014 period. HE's book value growth rate is expected to be 2.0% over the next five years, up from the 1% rate of growth experienced over the past five years. HE's earnings per share are projected to increase at a 7% (Value Line) to 6% (Zack's) to 3% (IBES) rate. The company's dividends are expected to show 0% growth over the next five years, moderating long-term growth expectations. Over the past five years, HE's earnings grew at a -6% rate while its dividends showed no increase, though the company maintained its dividend payment to investors. Investors can reasonably expect a sustainable growth rate in the future of **3.25%** for HE.

Regarding share growth, HE's shares outstanding grew at a 2.92% rate over the past five years. The number of shares is projected by VL to show a 0.65% rate of increase through the 2012-14 period. An expectation of share growth of **1.5%** for this company is reasonable.

IDA – IDACORP - IDA's internal sustainable growth rate has averaged 2.96% over the most recent five year period (2004-2008). Sustainable growth is expected to increase to about 3.7% by the 2012-2014 period. Also, IDA's book value growth rate is expected to be 5% over the next five years—above to the 3% rate of growth experienced over the past five years—pointing to increasing growth expectations for the future. IDA's earnings per share are projected to increase at a rate of from 4.5% (Value Line) to 5% (Zack's and IBES). IDA's dividends are expected to show 2.5% growth. Over the past five years, IDA's earnings grew at a 1.5% rate according to Value Line while its dividends showed -8% growth. These data indicate that investors can reasonably expect a sustainable growth rate in the future above past averages. Therefore, **4.25%** is a reasonable long-term growth expectation for IDA.

Regarding share growth, IDA's shares outstanding grew at a 2.67% rate over the past five years. The number of shares outstanding is projected by Value Line to continue to increase at approximately a 2% rate through 2011-13. An expectation of share growth of **2.25%** for this company is reasonable.

Pinnacle West – PNW - PNW's sustainable growth rate has averaged 1.81% over the most recent five-year period with no discernable trend. However, VL expects PNW's sustainable growth to rise above that historical average growth rate level to almost 3% by the 2012-2014 period. PNW's book value growth rate is expected to be 1% over the next five years, below the 3% rate of growth experienced over the past five years, indicating relatively lower growth expectations for this firm. PNW's earnings per share is projected to increase at a 3% (VL) to 5.5% (IBES) to 8% (Zack's) rate—a very wide range, with all but VL projections above the indicated internal growth rate. PNW's dividends are expected to grow at a 1% rate, supporting moderate long-term growth rate expectations. Over the past five years, PNW's earnings growth was -1% while its dividends increased at a 5% rate. Investors can reasonably expect a sustainable growth rate in the future of **3.5%** for PNW.

Regarding share growth, PNW's shares outstanding increased at a 2.4% rate over the past five years due to a share issuance in 2005. The number of shares outstanding in 2012-2014 is expected to show a 2.11% increase from 2007 levels. An expectation of share growth of **2.25%** for this company is reasonable.

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**PUGET SOUND ENERGY
DCF GROWTH RATE PARAMETERS
ELECTRIC UTILITIES**

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
CV						
2004	0.2640	06.8%	1.80%	18.49	12.19	
2005	-10.5000	00.5%	-5.25%	17.70	12.28	
2006	0.4356	10.1%	4.40%	17.70	10.13	
2007	0.3826	08.2%	3.14%	18.43	10.24	
2008	0.3947	07.3%	<u>2.88%</u>	<u>18.96</u>	<u>11.57</u>	
AVERAGE GROWTH			1.39%	1.50%		-1.30%
2009	0.4250	07.5%	3.19%		11.70	1.12%
2010	0.4424	07.5%	3.32%		11.80	0.99%
2012-2014	0.5027	06.5%	3.27%	6.50%	12.10	0.90%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
FE						
2004	0.3105	10.6%	3.29%	26.04	329.84	
2005	0.3979	10.2%	4.06%	27.86	329.84	
2006	0.5157	13.9%	7.17%	28.30	319.21	
2007	0.5142	14.6%	7.51%	29.45	304.84	
2008	0.4977	16.2%	<u>8.06%</u>	<u>27.17</u>	<u>304.85</u>	
AVERAGE GROWTH			6.02%	3.00%		-1.95%
2009	0.3973	13.0%	5.16%		304.84	0.00%
2010	0.3714	11.5%	4.27%		304.84	0.00%
2012-2014	0.4952	14.5%	7.18%	4.50%	304.84	0.00%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
NU						
2004	0.3077	05.1%	1.57%	17.80	129.03	
2005	0.3061	05.1%	1.56%	18.46	131.59	
2006	0.1098	04.3%	0.47%	18.14	154.23	
2007	0.5094	08.4%	4.28%	18.65	156.22	
2008	0.5538	09.6%	<u>5.32%</u>	<u>19.38</u>	<u>155.83</u>	
AVERAGE GROWTH			2.64%	2.00%		4.83%
2009	0.4865	09.0%	4.38%		176.00	12.94%
2010	0.4872	09.5%	4.63%		176.00	6.27%
2012-2014	0.4889	08.5%	4.16%	5.00%	210.00	6.15%

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COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
<u>AEP</u>	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
2004	0.4636	12.2%	5.66%	21.32	395.86	
2005	0.4621	11.3%	5.22%	23.08	393.72	
2006	0.4755	12.0%	5.71%	23.73	396.67	
2007	0.4476	11.4%	5.10%	25.17	400.43	
2008	0.4515	11.3%	<u>5.10%</u>	<u>26.33</u>	<u>406.07</u>	
AVERAGE GROWTH			5.36%	2.50%		0.64%
2009	0.4345	10.0%	4.34%		477.00	17.47%
2010	0.4467	10.5%	4.69%		477.00	8.38%
2012-2014	0.4571	11.0%	5.03%	5.00%	490.00	3.83%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
<u>CNL</u>	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
2004	0.3182	11.9%	3.79%	10.83	49.62	
2005	0.3662	10.7%	3.92%	13.69	49.99	
2006	0.3382	08.3%	2.81%	15.22	57.57	
2007	0.3182	07.8%	2.48%	16.85	59.94	
2008	0.4706	09.6%	<u>4.52%</u>	<u>17.65</u>	<u>60.04</u>	
AVERAGE GROWTH			3.50%	9.00%		4.88%
2009	0.4706	09.5%	4.47%		61.00	1.60%
2010	0.5000	10.5%	5.25%		62.00	1.62%
2012-2014	0.3600	11.5%	4.14%	4.50%	65.00	1.60%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
<u>EDE</u>	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
2004	-0.4884	05.8%	-2.83%	14.76	25.70	
2005	-0.3913	06.0%	-2.35%	15.08	26.08	
2006	0.0922	08.5%	0.78%	15.49	30.25	
2007	-0.1743	06.2%	-1.08%	16.04	33.61	
2008	-0.0940	07.5%	<u>-0.71%</u>	<u>15.56</u>	<u>33.98</u>	
AVERAGE GROWTH			-1.24%	1.50%		7.23%
2009	0.1467	08.5%	1.25%		38.00	11.83%
2010	0.1742	09.5%	1.65%		40.25	8.84%
2012-2014	0.2286	10.5%	2.40%	2.00%	41.00	3.83%

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**PUGET SOUND ENERGY
DCF GROWTH RATE PARAMETERS
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COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
<u>ETR</u>	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
2004	0.5191	11.0%	5.71%	38.26	216.83	
2005	0.5091	11.9%	6.06%	35.71	207.50	
2006	0.5970	13.8%	8.24%	40.45	202.67	
2007	0.5393	14.4%	7.77%	40.71	193.12	
2008	0.5161	15.3%	<u>7.90%</u>	<u>42.07</u>	<u>189.36</u>	
AVERAGE GROWTH			7.13%	3.00%		
2009	0.5082	15.0%	7.62%		188.00	-3.33%
2010	0.5714	15.5%	8.86%		188.00	-0.72%
2012-2014	0.5500	14.0%	7.70%	6.50%	188.00	-0.36%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
<u>WR</u>	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
2004	0.3162	07.1%	2.25%	16.13	86.03	
2005	0.4065	09.5%	3.86%	16.31	86.84	
2006	0.4787	10.7%	5.12%	17.62	87.39	
2007	0.4130	09.2%	3.80%	19.14	95.46	
2008	0.1145	06.2%	<u>0.71%</u>	<u>20.18</u>	<u>108.31</u>	
AVERAGE GROWTH			3.15%	1.00%		
2009	0.3000	08.0%	2.40%		109.00	5.93%
2010	0.3297	08.5%	2.80%		110.00	0.64%
2012-2014	0.3636	08.0%	2.91%	6.00%	114.00	0.78%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
<u>HE</u>	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
2004	0.0882	08.9%	0.79%	15.01	80.69	
2005	0.1507	09.7%	1.46%	15.02	80.98	
2006	0.0677	09.9%	0.67%	13.44	81.46	
2007	-0.1171	07.2%	-0.84%	15.29	83.43	
2008	-0.1589	06.5%	<u>-1.03%</u>	<u>15.35</u>	<u>90.52</u>	
AVERAGE GROWTH			0.21%	1.00%		
2009	-0.0783	07.5%	-0.59%		91.75	2.92%
2010	0.1733	09.5%	1.65%		92.00	1.36%
2012-2014	0.2914	10.0%	2.91%	2.00%	93.50	0.81%

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**PUGET SOUND ENERGY
DCF GROWTH RATE PARAMETERS
ELECTRIC UTILITIES**

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
IDA						
2004	0.3684	07.2%	2.65%	23.88	42.22	
2005	0.3143	06.2%	1.95%	24.04	42.66	
2006	0.4894	08.9%	4.36%	25.77	43.63	
2007	0.3548	06.8%	2.41%	26.79	45.06	
2008	0.4495	07.6%	3.42%	27.76	46.92	
AVERAGE GROWTH			2.96%	3.00%		2.67%
2009	0.5000	08.0%	4.00%		48.00	2.30%
2010	0.5200	07.5%	3.90%		49.00	2.19%
2012-2014	0.4909	07.5%	3.68%	5.00%	52.00	2.08%

COMPANY	INTERNAL GROWTH				EXTERNAL GROWTH	
	RETENTION RATIO	EQUITY RETURN	"g"	BOOK VALUE (\$/SHARE)	SHARES OUTS (MILLIONS)	SHARE GROWTH
PNW						
2004	0.2907	08.0%	2.33%	32.14	91.79	
2005	0.1384	06.5%	0.90%	34.57	99.08	
2006	0.3596	09.2%	3.31%	34.47	99.96	
2007	0.2905	08.5%	2.47%	35.15	100.49	
2008	0.0094	06.2%	0.06%	34.16	100.89	
AVERAGE GROWTH			1.81%	3.00%		2.39%
2009	0.0870	07.0%	0.61%		101.50	0.60%
2010	0.2500	08.0%	2.00%		106.00	2.50%
2012-2014	0.3231	09.0%	2.91%	1.00%	112.00	2.11%

Data from Value Line Ratings and Reports, August 7, 29 and September 25, 2009.

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**DCF GROWTH RATES
ELECTRIC UTILITIES**

<u>COMPANY</u>	<u>br</u>	+	<u>sv=g*(1-(1/(M/B)))</u>	=	<u>g</u>
CV	3.75%	+	0.00% (1 - (1/ 0.92)))	=	3.75%
FE	5.75%	+	-0.25% (1 - (1/ 1.61)))	=	5.66%
NU	5.75%	+	4.00% (1 - (1/ 1.18)))	=	6.36%
AEP	4.25%	+	2.00% (1 - (1/ 1.14)))	=	4.49%
CNL	6.00%	+	1.50% (1 - (1/ 1.35)))	=	6.39%
EDE	3.00%	+	3.50% (1 - (1/ 1.15)))	=	3.46%
ETR	6.75%	+	-0.75% (1 - (1/ 1.87)))	=	6.40%
WR	3.75%	+	2.00% (1 - (1/ 0.96)))	=	3.67%
HE	3.25%	+	1.50% (1 - (1/ 1.16)))	=	3.46%
IDA	4.25%	+	2.25% (1 - (1/ 0.98)))	=	4.21%
PNW	3.50%	+	2.25% (1 - (1/ 0.99)))	=	3.49%

Average Market-to-Book Ratio = 1.21

CV	=	Central Vermont P. S.
FE	=	FirstEnergy Corp.
NU	=	Northeast Utilities
AEP	=	American Electric Power
CNL	=	Cleco Corporation
EDE	=	Empire District Electric
ETR	=	Entergy Corp.
WR	=	Westar
HE	=	Hawaiian Electric
IDA	=	Idacorp
PNW	=	Pinnacle West Capital

g*= expected growth in number of shares outstanding

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**GROWTH RATE COMPARISON
ELECTRIC UTILITIES**

COMPANY	DCF	Value Line Projected			IBES	Value Line Historic			IBES & VL	5-yr Compound Hist.		
	Growth	EPS	DPS	BVPS	EPS	EPS	DPS	BVPS	AVGS.	EPS	DPS	BVPS
CV	3.75%	3.00%	0.00%	6.50%	n/a	3.50%	1.00%	1.50%	2.58%	5.06%	0.00%	2.58%
FE	5.66%	4.00%	4.50%	4.50%	5.00%	12.50%	6.50%	3.00%	5.71%	5.67%	2.87%	1.89%
NU	6.36%	8.00%	6.50%	5.00%	8.50%	3.00%	8.50%	2.00%	5.93%	15.25%	8.56%	2.61%
AEP	4.49%	3.00%	3.00%	5.00%	3.75%	n/a	-6.00%	2.50%	1.88%	2.13%	3.22%	5.15%
CNL	6.39%	9.50%	10.00%	4.50%	12.50%	0.50%	0.50%	9.00%	6.64%	5.19%	0.00%	11.12%
EDE	3.46%	6.00%	1.50%	2.00%	6.00%	3.50%	0.00%	1.50%	2.93%	11.77%	0.00%	1.37%
ETR	6.40%	6.00%	5.50%	6.50%	8.53%	10.50%	13.00%	3.00%	7.58%	9.19%	9.68%	2.12%
WR	3.67%	4.50%	4.50%	6.00%	3.30%	21.50%	-0.50%	1.00%	5.76%	7.76%	8.27%	5.52%
HE	3.46%	7.00%	0.00%	2.00%	3.00%	-6.00%	0.00%	1.00%	1.00%	-3.30%	0.00%	0.32%
IDA	4.21%	4.50%	2.50%	5.00%	5.00%	1.50%	-8.00%	3.00%	1.93%	4.78%	0.00%	4.10%
PNW	3.49%	3.00%	1.00%	1.00%	5.50%	-1.00%	5.00%	3.00%	2.50%	-2.27%	2.79%	0.50%
		5.32%	3.55%	4.36%		4.95%	1.82%	2.77%		5.57%	3.22%	3.39%
AVERAGES	4.67%		4.41%		6.11%		3.18%		4.04%		4.06%	

Zack's growth rates: CV-n/a, FE-7.0%, NU-8.5%, AEP-3.3%, CNL-10.5%, EDE-0%, ETR-6.0%, WR-4.5%, HE-6.0%, IDA-5.0%, PNW-8.0%. Zack's average earnings growth = 5.9%.

Exhibit SGH-9

PUGET SOUND ENERGY
STOCK PRICE, DIVIDENDS, YIELDS
 ELECTRIC UTILITIES

<u>COMPANY</u>	<u>AVG. STOCK PRICE</u> 8/25/09-10/6/09 (PER SHARE)		<u>ANNUALIZED</u> <u>DIVIDEND</u> (PER SHARE)	<u>DIVIDEND</u> <u>YIELD</u>
CV	\$19.29		\$0.92	4.77%
FE	\$46.00		\$2.20	4.78%
NU	\$23.89		\$0.95	3.98%
AEP	\$31.18	*	\$1.71	5.50%
CNL	\$24.74	*	\$0.96	3.87%
EDE	\$18.19		\$1.28	7.04%
ETR	\$79.46		\$3.00	3.78%
WR	\$20.24		\$1.20	5.93%
HE	\$17.73		\$1.24	6.99%
IDA	\$28.66		\$1.20	4.19%
PNW	\$32.75		\$2.10	<u>6.41%</u>
			AVERAGE	5.20%

* Dividend increased by (1+g), derived on Schedule 5.

Exhibit SGH-10

PUGET SOUND ENERGY

**DCF COST OF EQUITY CAPITAL
 ELECTRIC UTILITIES**

<u>COMPANY</u>	<u>DIVIDEND YIELD</u> <u>Schedule 6</u>	<u>GROWTH RATE</u> <u>Schedule 5</u>	<u>DCF COST OF</u> <u>EQUITY CAPITAL</u>
CV	4.77%	3.75%	8.52%
FE	4.78%	5.66%	10.44%
NU	3.98%	6.36%	10.34%
AEP	5.50%	4.49%	9.99%
CNL	3.87%	6.39%	10.26%
EDE	7.04%	3.46%	10.50%
ETR	3.78%	6.40%	10.18%
WR	5.93%	3.67%	9.59%
HE	6.99%	3.46%	10.45%
IDA	4.19%	4.21%	8.39%
PNW	6.41%	3.49%	<u>9.90%</u>
		AVERAGE	9.87%
		STANDARD DEVIATION	0.75%