

Exhibit No. ___T (SGH-21T)
Docket Nos. UE-060266/UG-060267
Witness: Stephen G. Hill

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION
COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

PUGET SOUND ENERGY, INC.

Respondent.

DOCKET NO. UE-060266

DOCKET NO. UG-060267

CROSS-ANSWERING TESTIMONY OF

STEPHEN G. HILL

**ON BEHALF OF STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION**

August 23, 2006

1 **I. INTRODUCTION / SUMMARY**

2

3 **Q. Please state your name, occupation and address.**

4 A. My name is Stephen G. Hill. I am self-employed as a financial consultant, and
5 principal of Hill Associates, a consulting firm specializing in financial and economic
6 issues in regulated industries. My business address is P.O. Box 587, Hurricane, West
7 Virginia, 25526 (e-mail: sghill@compuserve.com).

8

9 **Q. Are you the same Stephen G. Hill who previously submitted direct testimony for**
10 **Commission Staff on rate of return?**

11 A. Yes. My direct testimony is contained in Exhibit Nos. ___ (SGH-1T) through ___
12 (SGH-20). There, I recommend an overall rate of return of 7.85% based on a return
13 on equity of 9.375% and an equity capitalization of 43%. I also rebut the cost of
14 capital testimony of Company witness Dr. Roger A. Morin.

15

16 **Q. What is the purpose of your testimony at this time?**

17 A. I will comment on the cost of capital recommendation of Mr. Michael P. Gorman,
18 who testifies for the Industrial Customers of Northwest Utilities (ICNU). While Mr.
19 Gorman's equity cost estimate for Puget, 9.9%, is far more accurate than that of Dr.
20 Morin's, it is overstated for some of the same reasons I discussed in my direct
21 testimony.

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II. DISCUSSION

Q. How has Mr. Gorman estimated the cost of equity in this proceeding?

A. Mr. Gorman has analyzed the cost of equity capital for Puget using a DCF analysis, a risk premium analysis and a CAPM analysis. In each analysis, the results of Mr. Gorman's equity cost analyses are somewhat overstated.

Q. What are your comments regarding Mr. Gorman's DCF analysis?

A. At the outset, it is important to note that Mr. Gorman and I are in agreement with regard to the ability of the DCF to accurately estimate the cost of equity capital. At pages 12 through 14 of his response testimony, Mr. Gorman sets out his rationale as to why the DCF accurately estimates the current cost of equity capital for utility operations, and I concur with his opinions on that topic.

I do disagree, however, with two aspects of Mr. Gorman's application of the DCF, which, I believe, cause his DCF results to be overstated to some degree. First, in calculating his DCF dividend yield Mr. Gorman applied a generic dividend adjustment to each of the companies in his sample group, increasing the dividend by one plus the projected average earnings growth rate. The adjustment was applied to every company regardless of whether or not the dividend was likely to be increased in the next period.

For example, the issue of Value Line from which Mr. Gorman drew his information about Puget Energy indicates that that company will not raise its dividend until the 2009-2011 period (i.e., not in 2006 or 2007). Therefore, investors who rely on Value Line would expect Puget's "next period" dividend to be its current

1 dividend, which is \$0.25 per quarter or \$1.00 annually. In Mr. Gorman's DCF
2 analysis, however, he increases the current dividend by one plus the projected
3 average earnings growth and used an adjusted dividend of \$1.053 for Puget [$\$1.00 \times$
4 $(1 + 5.27\% \text{ growth})$]. Mr. Gorman's DCF dividend for Puget, 5.02%, would
5 therefore overstate the dividend actually expected by investors, 4.77%, which is
6 calculated by dividing the Company's current dividend (\$1.00) by Mr. Gorman's
7 stock price for Puget, \$20.95. In that particular instance, Mr. Gorman's particular
8 DCF dividend methodology would overstate investor dividend yield expectations by
9 25 basis points.

10 It has been my experience that when analysts elect to use a generic dividend
11 yield adjustment, in lieu of examining the details of each company, the most often-
12 used methodology is what FERC elected to use in its Generic Rate of Return
13 rulemaking proceedings in the 1980s and early 1990s. Namely, that adjustment was
14 to increase the current dividend by one plus one-half of the expected long term
15 dividend growth, or $d_0(1 + 0.5g)$. That adjustment assumes that some of the
16 companies might raise dividends next quarter and some might raise the dividend four
17 quarters from now, but, on average in a large sample, a dividend increase is
18 reasonably expected to be one-half year in the future. Hence, FERC elected to use
19 one-half of the expected long-term growth in a generic DCF analysis. As shown in
20 Table I, below, Mr. Gorman's DCF results would have been about 10 basis points
21 lower had he used the more common dividend yield adjustment.

Table I

Mr. Gorman's DCF Dividend Yield

	Stock Price	Annual Dividend	Yield + 1/2 Growth	Gorman Yield
American El. Power	\$33.69	\$1.48	4.47%	4.54%
Ameren Corp.	\$49.87	\$2.54	5.24%	5.38%
Cleco Corp.	\$22.32	\$0.90	4.19%	4.35%
DTE Energy	\$40.33	\$2.06	5.23%	5.35%
Empire Dist. Elec.	\$21.78	\$1.28	5.96%	6.05%
Energy East Corp.	\$23.68	\$1.16	5.01%	5.11%
FirstEnergy Corp.	\$51.96	\$1.80	3.54%	3.62%
IDACORP, Inc.	\$33.66	\$1.20	3.65%	3.73%
NiSource Inc.	\$21.34	\$0.92	4.38%	4.46%
OGE Energy	\$31.35	\$1.33	4.31%	4.37%
Pepco Holdings	\$22.92	\$1.04	4.65%	4.77%
Pinnacle West Capital	\$39.73	\$2.00	5.21%	5.40%
Puget Energy Inc.	\$20.95	\$1.00	4.90%	5.02%
Xcel Energy Inc.	<u>\$18.72</u>	<u>\$0.86</u>	<u>4.70%</u>	<u>4.81%</u>
Averages	\$30.88	\$1.40	4.67%	4.78%

Dividend Yield Difference 0.11%

Q. What is your second area of disagreement with Mr. Gorman's DCF analysis?

A. The other area of my concern with Mr. Gorman's DCF analysis relates to his estimate for long-term sustainable dividend growth called for in the DCF model.

Q. What are your concerns with Mr. Gorman's DCF growth rate analysis?

A. Mr. Gorman's DCF growth rate analysis suffers from the same flaw as that of Dr. Morin—exclusive reliance on projected earnings growth rates. At pages 102 through 104 of my direct testimony, I discuss that issue in regard to Dr. Morin's testimony and will not repeat that discussion here. Earnings growth estimates are widely published and should, therefore, be considered in any well-balanced analysis of long-term expected growth. However, those estimates should not be given exclusive

1 consideration, absent all other information available to investors, which is what both
2 Mr. Gorman and Dr. Morin have done in this proceeding.

3 Mr. Gorman relies on Value Line in determining his equity cost estimates, as
4 do all the cost of equity witnesses in this proceeding. Value Line publishes projected
5 earnings, dividend, book value and sustainable (“b times r”) growth rates for each of
6 the utility companies on which it reports. That information is published; it is widely
7 available to investors; and therefore, it must be assumed to be included in stock
8 prices. DCF theory indicates that, over the long term, dividends, earnings, book value
9 and sustainable growth are all equal. Therefore, a rational investor would consider all
10 the information available to him or her and not just part of it. A reliable DCF
11 analysis, which is intended to gauge investor opinion, should do the same.

12 Table II below shows that the average projected growth rate information for
13 Mr. Gorman’s sample companies contained in the Value Line editions he used in his
14 DCF analysis (May 12, June 2 and June 30, 2006) indicates that his reliance on
15 earnings growth, alone, may cause his DCF result to be overstated by as much as 95
16 basis points. Mr. Gorman’s earnings-only projected growth rate for his sample group
17 is 4.77%, while the average projected earnings, dividend, book value and sustainable
18 growth published by Value Line for those same companies is 3.82%—95 basis points
19 less.

20 Even if Mr. Gorman gave his earnings growth rates 1/2 weight and Value
21 Line’s projected growth 1/2 weight, his DCF growth rate would have been 4.3%,
22 which, when combined with a dividend yield of 4.7% (10 basis points less than the
23 dividend he used), would indicate a DCF result of 9.0%.

Table II

Mr. Gorman's DCF Growth Rate

	Value Line Projected				Gorman Earns. Growth
	Earnings	Dividends	Book Value	"b x r"	
American El. Power	4.00%	4.00%	5.50%	4.50%	3.28%
Ameren Corp.	1.50%	0.00%	3.00%	2.00%	5.60%
Cleco Corp.	4.50%	2.00%	8.00%	3.50%	8.00%
DTE Energy	4.50%	0.50%	2.00%	4.50%	4.72%
Empire Dist. Elec.	6.50%	0.00%	2.00%	2.00%	2.92%
Energy East Corp.	4.00%	4.50%	2.50%	3.00%	4.39%
FirstEnergy Corp.	11.50%	5.00%	6.50%	5.50%	4.63%
IDACORP, Inc.	4.50%	-2.00%	3.00%	3.00%	4.70%
NiSource Inc.	3.50%	5.00%	3.50%	3.50%	3.36%
OGE Energy	4.00%	2.00%	5.00%	4.50%	3.00%
Pepco Holdings	7.50%	3.00%	3.00%	4.50%	5.09%
Pinnacle West Capital	6.00%	5.00%	3.50%	3.00%	7.18%
Puget Energy Inc.	5.00%	1.50%	4.00%	3.50%	5.27%
Xcel Energy Inc.	<u>6.00%</u>	<u>5.50%</u>	<u>3.00%</u>	<u>3.50%</u>	<u>4.67%</u>
	5.21%	2.57%	3.89%	3.61%	

Averages

3.82%

4.77%

Q. What are your comments regarding Mr. Gorman's Risk Premium analysis in this proceeding.

A. Mr. Gorman has relied on an "allowed return" risk premium analysis which compares the allowed returns for electric utilities to bond yields in the same year, over the past twenty years. This analysis is similar to one of Dr. Morin's risk premium analyses and suffers from the same flaws. Fortunately, Mr. Gorman doesn't subscribe to the "negative correlation" rationale used by Dr. Morin to increase the current risk premium over historical averages (See Gorman Direct Testimony, pages 43-45).

1 Nevertheless, Mr. Gorman's risk premium analysis probably overstates the
2 current cost of capital for Puget. That is because he has selected a period of study in
3 which market prices of utility stocks have been well above book value. Fundamental
4 DCF theory indicates that when investors are paying stock prices that are above book
5 value, the utilities are earning (being allowed) returns that exceed the cost of equity
6 capital (the investors' required return). It is reasonable to believe, therefore, that the
7 allowed returns, which have declined at a slower rate than the bond yields have
8 exceeded utilities' cost of capital, and the risk premium gleaned from those data will
9 overstate investors' return expectations.

10 There are other problems with Mr. Gorman's risk premium analysis that were
11 discussed in my response to a similar analysis by Dr. Morin. Those comments are at
12 pages 97 and 98 of my direct testimony.

13
14 **Q. What are your comments regarding Mr. Gorman's CAPM analysis?**

15 A. First, Mr. Gorman has used projected bond yields. As I note on page 87 of my direct
16 testimony, the current bond yield (just as the current stock price) is most
17 representative of investors' current expectations for the future. If investors, en masse,
18 thought that the current "Blue Chip" forecast was correct, then they would bid down
19 the price of bonds and bid up the yield to match the forecast, but they haven't done
20 that. The most recent Federal Reserve Release H.15 indicates that the current yield
21 on 30-year T-Bonds is 5.0%, down from 5.13% in July, and well below the 5.3%
22 Blue Chip forecast for the current period (Gorman Exhibit No. __ (MPG-4), page
23 16).

1 Second, Mr. Gorman relies on two estimates of total market return for the
2 future. Both estimates are based on Ibbotson's historical data series from 1926
3 through 2005. As I have discussed at pages 6 through 17 of my direct testimony, the
4 Ibbotson historical data produces market return expectations that are at the very top
5 end of the range of expected market returns. Nearly all of the most recent research on
6 the topic of the market risk premium indicates that the return premium investors
7 expect going forward is substantially below the level indicated by the Ibbotson data.

8 Moreover, those lower risk premium estimates are corroborated by Puget's
9 own market return expectations, evidenced in its pension fund portfolio return
10 projections. The equity market return expectations included in Mr. Gorman's CAPM
11 analysis are several hundred basis points higher than the market return expectations
12 included in Puget's own investment portfolio. Therefore, it is reasonable to believe
13 that CAPM results based on the Ibbotson historical data series overstate the current
14 cost of equity capital for combination electric and gas utility operations like Puget
15 Sound Energy.

16
17 **Q. Does this conclude your comments on Mr. Gorman's response testimony?**

18 **A. Yes, it does.**

19
20 **Q. Does this conclude your cross-answering testimony, Mr. Hill?**

21 **A. Yes, it does.**