# BEFORE THE WASHINGTON UTILITIES & TRANSPORTATION COMMISSION

Washington Utilities and Transportation Commission, Complainant,

v.

PUGET SOUND ENERGY, INC. Respondent.

DOCKET NOs. UE-072300 and UG-072301

#### CROSS-REBUTTAL TESTIMONY OF

STEPHEN G. HILL (SGH-18T)

#### ON BEHALF OF

#### PUBLIC COUNSEL

JULY 3, 2008

#### CROSS-REBUTTAL TESTIMONY OF STEPHEN G. HILL (SGH-18T) DOCKET NOS. UE-072300 AND UG-072301

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	Staff DCF Results	Staff DCF Results

## EXHIBIT LISTS

Exhibit No. \_\_\_\_ (SGH-19)

1		I. INTRODUCTION / SUMMARY
2	Q:	Please state your name and business address.
3	A:	My name is Stephen G. Hill, and my business address is P.O. Box 587, Hurricane,
4		West Virginia, 25526 (e-mail: <u>hillassociates@gmail.com</u> ).
5	Q:	By whom are you employed and in what capacity?
6	A:	I am self-employed as a financial consultant and am principal of Hill Associates, a
7		consulting firm specializing in financial and economic issues in regulated
8		industries.
9	Q:	Are you the same Stephen Hill who testified previously in this proceeding on
10		behalf of the Public Counsel Section of the Washington Attorney General's
11		Office?
12	A:	Yes.
13	Q:	What is the purpose of your cross-rebuttal testimony at this time?
14	A:	I will address my concerns with the Direct Testimony of Staff witness David
15		Parcell.
16	Q:	Please briefly describe those concerns.
17	A:	Although I disagree with Mr. Parcell's use of a Comparable Earnings analysis as a
18		method of estimating the cost of equity, my overriding concern with the Staff
19		witness' testimony is not the details of his analytical methodology. Mr. Parcell's
20		analytical methods produce results that are very similar to my own equity cost
21		estimate in this proceeding—9.25 percent. Rather, my concern is with his

1		interpretation of the results of his analyses, which is not symmetrical in an	
2		analytical sense and, in my view, is biased upward.	
3	Q:	How is your testimony organized?	
4	A:	I will first discuss Mr. Parcell's Discounted Cash Flow (DCF) results and then	
5		turn to his Comparable Earnings analysis.	
6		II. STAFF'S DCF RESULTS	
7	Q:	What are the results of the Staff's DCF analysis in this proceeding?	
8	A:	Staff's DCF results are discussed at pages 32 and 33 of Mr. Parcell's Direct	
9		Testimony and shown on page 4 of his Exhibit No (DCP-2), Schedule 8. M	∕Ir.
10		Parcell uses three sample groups: one of his own choosing and the two sample	
11		groups selected by Company witness Morin. <sup>1</sup>	
12		The results of Mr. Parcell's DCF analyses are shown below.	
13			
14		Lable I. Staff DCE Desults	
15		Stall DCF Results	
10		Mean Median	
18		Parcell's Proxy Group 9.1% 8.9%	
10		S&P Integrated Group 9.0% 8.9%	
20		Moody's Electric Group 9.5% 8.9%	
21			
22		The central nature of those results is quite clear. The DCF averages range from	
23		9.0 percent to 9.5 percent, and Dr. Morin's sample group of firms that have	

<sup>&</sup>lt;sup>1</sup> I have discussed the shortcomings of Dr. Morin's second sample group (the "Moody's Electric Group") which indicate those companies do not provide a reliable estimate of the cost of equity for Puget in my Direct Testimony at pages 58 and 59, and will not repeat those concerns here.

1	greater risk than Puget produces the higher result, 9.5 percent. Absent that, the
2	DCF average ranges from 9.0 percent to 9.1 percent.
3	The median results, as Mr. Parcell points out in his testimony at page 33,
4	eliminate the influence of too high or too low "outliers" that can skew average
5	results. The median DCF results for all three sample groups are identical—8.9
6	percent.
7	The centrality of the Staff's DCF results therefore is quite clear—it shows
8	the cost of equity capital of similar-risk electric utilities to be 9.0 percent (Parcell
9	Proxy Group: Median 8.9 percent – Mean 9.1 percent). However, in reporting
10	the results of his DCF analysis in his testimony, Mr. Parcell elects to construct a
11	range using 1) the average and median of all the results in combination with 2) the
12	highest DCF results. The result of that process is to create a range entirely above
13	the indicated cost of equity capital. Mr. Parcell provides neither an economic nor
14	a statistical rationale for his DCF reporting process.
15	Through the use of the highest DCF average (9.5%) and the median of the
16	highest DCF results (10.6%), Staff witness Parcel has constructed a "DCF range"
17	of 9.5 percent to 10.5 percent. The mid-point of that range, 10.0 percent, is fully
18	100 basis points higher than the cost of equity capital indicated by the Staff's
19	DCF analyses.
20	

1		III. STAFF'S COMPARABLE EARNINGS ANALYSIS
2	Q:	How has Staff witness Parcell conducted his Comparable Earnings analysis?
3	A:	Mr. Parcell reviewed earned returns of his three sample group companies over a
4		sixteen-year historical period and also compared market-to-book ratios in 2007
5		with projected equity returns.
6	Q:	Mr. Parcell indicates on page 38 of his Direct Testimony that because he has
7		utilized market-to-book ratios in his Comparable Earnings analysis, it is
8		"essentially a market test." Do you agree?
9	A:	No, Mr. Parcell and I disagree on this point. A Comparable Earnings (CE)
10		analysis is grounded on earned returns, which are not equal to the investors'
11		required return—the cost of equity capital. A Comparable Earnings analysis is
12		not a market-based analysis, and historical or projected book equity returns for
13		utilities are not indicative of the return investors require in the future.
14		To his credit, Mr. Parcel does recognize that "a market price of a utility's
15		common stock that is 150 percent or more above the stock's book value is
16		indicative of earnings that exceed the utility's reasonable cost of capital."
17		Moreover, because of that view, the Staff witness has narrowed the indicated
18		earned returns to a range of 10 percent to 10.5 percent, with a mid-point of 10.25
19		percent.
20		However, the data on which Mr. Parcell relied in his Comparable Earnings
21		analysis shows that his Comparable Earnings equity cost estimate, 10.25 percent,

1		would produce a market-to-book ratio of approximately 150 percent. This,
2		according to his own testimony, would be the result of earning a return above the
3		"reasonable cost of capital." Therefore, Staff's own data show that the 10.25
4		percent Comparable Earnings mid-point is above a reasonable cost of capital.
5	Q:	Please explain how Mr. Parcell's data show that his Comparable Earnings
6		result overstates the cost of equity.
7	A:	Exhibit No (SGH-19) attached to this testimony shows a scatter diagram of
8		all of the earned returns and market-to-book ratios of all of the utility companies
9		in Mr. Parcell's three sample groups over the past sixteen years. Those data were
10		drawn from Mr. Parcell's Exhibit No (DCP-2), Schedule 11.
11		A least-squares regression line shows the relationship between the earned
12		return and the market-to-book ratio for those companies during the time period
13		studied by Mr. Parcell. His data indicate that the earned return at which the
14		market price of a utility approximates its book value, the cost of equity capital, is
15		about 8.0 percent. Mr. Parcell's Comparable Earnings data also indicate that an
16		earned return of 10.25 percent (his CE recommendation) would produce a market-
17		to-book ratio of about 150 percent. Therefore, his own data show that an equity
18		cost of 10.25 percent would represent earnings that, in Mr. Parcell's words,
19		"exceed the utility's reasonable cost of capital." Because this overstated CE
20		analysis is included in Mr. Parcell's average recommended equity return, that
21		recommendation is skewed upward.

1		IV. CONCLUSION
2	Q:	Can you please summarize your testimony regarding Staff's cost of capital
3		analysis in this proceeding?
4	A:	As I noted earlier, the central nature of Staff's DCF analyses in this proceeding is
5		9.0 percent. Staff indicates that the DCF is its primary method of analysis. Staff's
6		Capital Asset Pricing Model indicates a cost of equity range of 9.1 percent to 9.5
7		percent. The Staff's market-based methodologies, which are the most reliable
8		equity cost estimation methods, support the reasonableness of the 9.25 percent
9		equity cost estimate offered by Public Counsel in this proceeding. Finally, the
10		data on which Staff relied to adjust its Comparable Earnings analysis shows that
11		the mid-point result of that analysis exceeds Puget's cost of equity capital.
12	Q:	Does this conclude your Cross-rebuttal Testimony, Mr. Hill?
13	A:	Yes, it does.