

CenterPoint Energy Resources Corp.
Cost of Capital Study
June 2, 2008
Prepared by
J. Randall Woolridge, Ph.D.

I. OVERVIEW AND SUMMARY

The purpose of this report is to estimate the cost of capital for CenterPoint Energy Resources Corporation (“CenterPoint” or “Company”). This report has been prepared on behalf of the Gulf Coast Coalition of Cities (“GCCC”). A summary of my educational background and business experience is attached as Appendix A.

The cost of capital was estimated using a proxy group of natural gas companies. I have used a hypothetical capital structure and a debt cost rate which are based on the average capitalization and debt cost rate of the companies in the proxy group. I have estimated an equity cost rate of 9.0% for CenterPoint using capital market data for the proxy group companies. This equity cost rate recommendation presumes that CenterPoint’s Cost of Service Adjustment (“COSA”) mechanism is not adopted. My overall cost of capital recommendation for CenterPoint is 7.59%. This recommendation is provided in Exhibit JRW-1 and is summarized in Table 1.

Table 1
CenterPoint Energy Resources Corporation
Cost of Capital

	Capitalization Ratios	Cost Rate	Weighted Cost Rate
Debt	48.51%	6.10%	2.96%
Common Equity	51.49%	9.00%	4.63%
Total	100.00%		7.59%

II. PROXY GROUP

To estimate the cost of capital for CenterPoint, I used a proxy group of natural gas distribution companies. This proxy group (or the “Industry Gas Group”) consists of ten natural gas distribution companies covered by the Standard Edition of the *Value Line Investment Survey*. These companies are listed in Exhibit JRW-2. This proxy group includes the seven companies used by CenterPoint’s witness, Mr. Robert A. Hevert, plus three additional companies.

Also listed in Exhibit JRW-2 are the summary financial statistics for the proxy group. The average operating revenues, net plant and market capitalization for the Industry Gas Group are \$2,536.7M, \$2,160.1M and \$1.5B, respectively. On average, the group receives 68% of revenues from regulated gas operations and has an ‘A’ S&P bond rating, a common equity ratio of 47% and an earned return on common equity of 11.7%.

III. CAPITAL STRUCTURE

CenterPoint has proposed a hypothetical capital structure consisting of 44.6% long-term debt and 55.4% common equity (as shown in Panel A of page 1 of Exhibit JRW-3). This capital structure represents the average quarterly long-term debt and common equity ratios for a proxy group of seven gas distribution companies used by Mr. Hevert. Panel B on page 1 of Exhibit JRW-3 shows the average monthly capitalization ratios for CenterPoint over the past year. These figures indicate that CenterPoint's common equity ratio is 15.2%. Mr. Hevert has employed a hypothetical capital structure due to CenterPoint's low common equity relative to other gas companies.

Panels C and D on page 1 of Exhibit JRW-3 provide the average capital structure ratios for the ten gas companies in my proxy group over the past four quarters. In my analysis, I included short-term debt since natural gas companies consistently use short-term debt as a source of capital. The average common equity ratio for this group, including short-term debt, is 51.49%. For my recommended capital structure, I have grouped together short-term and long-term debt and included in common equity the very small amount of preferred stock. My recommended capital structure is provided in Table 2.

Table 2
CenterPoint Capital Structure

	Proxy Group
Debt	48.51%
Common Equity	51.49%

IV. DEBT COST RATE

Mr. Hevert has employed a debt cost rate of 7.422%. This reflects CenterPoint's embedded cost of long-term debt. The error in this approach is that Mr. Hevert has not synchronized the capital structure and debt cost rate. Instead, he has employed his proxy group for the capital structure but used the debt cost rate for CenterPoint. Given the significant difference in the financial risk (as indicated by the relative common equity ratios) of CenterPoint and the proxy group, one would expect the debt cost rate for CenterPoint to be higher than the average of the proxy group. Hence, if Mr. Hevert is employing the debt cost rate for CenterPoint, he should be using CenterPoint's capital structure as well.

To synchronize the capital structure and debt cost rate, I used both the average capital structure and debt cost rate for the ten companies in my proxy group. Details of the calculation of my 6.10% debt cost rate are provided in Exhibit JRW-4.

V. THE COMMON EQUITY COST RATE FOR CENTERPOINT

To estimate a common equity cost rate for CenterPoint, I am employing the DCF and CAPM methodologies to my proxy group of ten gas distribution companies.

A. DCF Approach

According to the constant-growth DCF model, a firm's cost of common equity is equal to the dividend yield plus the expected dividend growth rate. This is summarized below:

$$k = \frac{D_1}{P} + g$$

In this expression, k is the cost of equity capital, D_1 is the expected dividend over the coming year, P is the current stock price, and g is the expected growth rate of dividends. My DCF analysis is provided in Schedule JRW-5. The DCF summary is provided on page 1 of this Exhibit; and the supporting data and analysis for the dividend yield and expected growth rate are provided on the following pages.

1. Dividend Yield

The dividend yields on the common stock for the companies in the proxy group are provided on page 2 of Exhibit JRW-5 for the six-month period ending May 2008. These yields are shown in Table 3. For the groups' DCF dividend yields, I am using the average of the six month and May 2008 dividend yields, which is 3.9%.

Table 3
Dividend Yields

	6-Month Average Dividend Yield	May 2008 Dividend Yield	DCF Dividend Yield
Proxy Group	3.9%	3.9%	3.9%

According to the traditional DCF model, the term dividend yield relates to the dividend yield over the coming period. As indicated by Professor Myron Gordon, who is commonly associated with the development of the DCF model for popular use, this is obtained by: (1) multiplying the expected dividend over the coming quarter by 4, and (2)

dividing this dividend by the current stock price to determine the appropriate dividend yield for a firm, which pays dividends on a quarterly basis.¹

In applying the DCF model, some analysts adjust the current dividend for growth over the coming year as opposed to the coming quarter. This can be complicated because firms tend to announce changes in dividends at different times during the year. As such, the dividend yield computed based on presumed growth over the coming quarter as opposed to the coming year can be quite different. Consequently, it is common for analysts to adjust the dividend yield by some fraction of the long-term expected growth rate.

Given this discussion, I will adjust the dividend yield by one-half (1/2) the expected growth so as to reflect growth over the coming year.

2. DCF Growth Rate

There is much debate as to the proper methodology to employ in estimating the growth component of the DCF model. By definition, this component is investors' expectation of the long-term dividend growth rate. Presumably, investors use some combination of historical and/or projected growth rates for earnings and dividends per share and for internal or book value growth to assess long-term potential.

I have analyzed a number of measures of growth for the gas companies. I considered historic growth rates in earnings per share ("EPS"), dividends per share ("DPS"), and book value per share ("BVPS"). I have reviewed *Value Line's* historic and projected growth rate estimates for EPS, DPS and BVPS. In addition, I have utilized the average EPS growth rate forecasts of Wall Street analysts as provided by First Call (Yahoo!), Reuters, and Zacks. These services compile and publish five-year earnings growth rate projections of securities analysts. Finally, I have also assessed prospective growth as measured by prospective earnings retention rates and earned returns on common equity.

Historical growth rates for EPS, DPS and BVPS are readily available to virtually all investors and presumably an important ingredient in forming expectations concerning future growth. However, one must use historical growth numbers as measures of investors' expectations with caution. In some cases, past growth may not reflect future growth potential. Also, employing a single growth rate number (for example, five or ten years) is unlikely to accurately measure investors' expectations due to the sensitivity of a single growth rate figure to fluctuations in individual firm performance as well as overall economic fluctuations (i.e., business cycles). However, one must appraise the context in which the growth rate is being employed. According to the conventional DCF model, the expected return on a security is equal to the sum of the dividend yield and the expected long-term growth in dividends. Therefore, to best estimate the cost of common equity

¹ *Petition for Modification of Prescribed Rate of Return*, Federal Communications Commission, Docket No. 79-05, Direct Testimony of Myron J. Gordon and Lawrence I. Gould at 62 (April 1980).

capital using the conventional DCF model, one must look to long-term growth rate expectations.

Internally generated growth is a function of the percentage of earnings retained within the firm (the earnings retention rate) and the rate of return earned on those earnings (the return on equity). The internal growth rate is computed as the retention rate times the return on equity. Internal growth is significant in determining long-run earnings and, therefore, dividends. Investors recognize the importance of internally generated growth and pay premiums for stocks of companies that retain earnings and earn high returns on internal investments.

There is one other issue regarding expected DCF growth rates. It is common for some analysts to simply use Wall Street analysts' and/or *Value Line*'s EPS growth rate forecasts as the DCF growth rate. However, in my opinion, this approach is seriously flawed. It is highly unlikely that investors today would rely excessively on the forecasts of securities analysts and *Value Line* and ignore prospective internal and historical growth in arriving at expected growth. It is well known the EPS forecasts of Wall Street securities analysts are overly optimistic and biased upwards.

Value Line Historic Growth Rates

Page 3 of Exhibit JRW-5 provides a summary of the five- and ten-year historic growth rates in EPS, DPS and BVPS for the companies in the proxy group as provided in the *Value Line Investment Survey*. Due to the presence of outliers, I have used both the mean and median as measures of central tendency. The historic growth in EPS, DPS and BVPS for the proxy group ranges from 2.3% to 6.8%, with the average of means and medians equaling 4.4%.

Value Line Projected Growth Rates

Page 4 of Exhibit JRW-5 provides a summary of the projected five-year growth rates in EPS, DPS and BVPS for the companies in the proxy group as provided by the *Value Line Investment Survey*. Also provided in this table is the average prospective internal growth as determined by *Value Line*'s average projected retention rate and return on common equity. Due to the presence of outliers, I have once again used both the mean and median as measures of central tendency. The mean and median projected growth rates in EPS, DPS and BVPS are in the range of 3.7% to 4.9% for the proxy group, with an average of 4.2%. The average internal growth rate for the proxy group is 5.0%.

Analysts' Projected EPS Growth Rates

Page 5 of Exhibit JRW-5 shows the summary of analysts' projected five-year EPS growth rates from First Call (Yahoo!), Reuters and Zacks. The average projected EPS growth rate for the companies in the proxy group is 5.5%.

DCF Growth Rate Summary

Table 4 provides a summary of the historic and projected DCF growth rate indicators for the proxy group. For the proxy group, the average of *Value Line*'s historic mean and median growth rate measures in EPS, DPS and BVPS is 4.4%. The average projected growth rate in EPS, DPS and BVPS from *Value Line* is 4.2%, and the average prospective internal growth for the group is 5.0%. The mean EPS growth rate of analysts' five-year forecasts is 5.5%. Giving primary weight to the projected growth rates and prospective internal growth, I will use a DCF growth rate of 5.0% for the proxy group.

Table 4
Summary DCF Growth Rate Measures

	Proxy Group
Historic <i>Value Line</i> Growth in EPS, DPS and BVPS	4.4%
Projected <i>Value Line</i> Growth in EPS, DPS and BVPS	4.2%
Internal Growth ROE * Retention rate	5.0%
Average Analyst Projected EPS Growth Rate	5.5%

3. DCF Equity Cost Rate

My DCF-derived equity cost rate for the proxy group is provided in Table 5.

Table 5
DCF Equity Cost Rate Summary

DCF Equity Cost Rate (k) =	Dividend Yield	½ Growth Adjustment	DCF Growth Rate	Equity Cost Rate
Proxy Group	3.9%	1.025	5.0%	9.0%

B. CAPM Approach

The CAPM is a risk premium approach to gauging a firm's cost of equity capital. According to the risk premium approach, the cost of equity is the sum of the interest rate on a risk-free bond (R_f) and a risk premium (RP), as in the following:

$$k = R_f + RP$$

The yield on long-term Treasury securities is normally used as R_f . Risk premiums are measured in different ways. The CAPM is a theory of the risk and

expected returns of common stocks. In the CAPM, two types of risk are associated with a stock: firm-specific risk or unsystematic risk; and market or systematic risk, which is measured by a firm's beta. The only risk that investors receive a return for bearing is systematic risk.

According to the CAPM, the expected return on a company's stock, which is also the equity cost rate (K), is equal to:

$$K = (R_f) + \beta_i * [E(R_m) - (R_f)]$$

Where:

K represents the estimated rate of return on the stock;

E(R_m) represents the expected return on the overall stock market. Frequently, the 'market' refers to the S&P 500;

(R_f) represents the risk-free rate of interest;

[E(R_m) - (R_f)] represents the expected equity or market risk premium—the excess return that an investor expects to receive above the risk-free rate for investing in risky stocks; and

Beta—(β_i) is a measure of the systematic risk of an asset.

To estimate the required return or cost of equity using the CAPM requires three inputs: the risk-free rate of interest (R_f), the beta (β), and the expected equity or market risk premium [E(R_m) - (R_f)].

R_f is the easiest of the inputs to measure – it is the yield on risk-free obligations of the U.S. Treasury. The key issue involves whether to use the yields on short-term Treasury bills or long-term Treasury bonds.

Beta (β) is a measure of the systematic risk of a stock. The market has a beta of 1.0. The beta of a stock with the same price movement as the market also has a beta of 1.0. A stock whose price movement is greater than that of the market, such as a technology stock, is riskier than the market and has a beta greater than 1.0. A stock with below average price movement, such as that of a regulated public utility, is less risky than the market and has a beta less than 1.0. Estimating a stock's beta involves running a linear regression of a stock's return on the market return. The slope of the regression line is the stock's β. A steeper line indicates the stock is more sensitive to the return on the overall market. This means that the stock has a higher β and greater than average market risk. A less steep line indicates a lower β and less market risk.

There are several published sources of betas. The primary differences in estimating betas include (1) the time frame over which a beta is estimated and (2) what adjustments, if any, should be made to historical betas due to their tendency to regress to 1.0 over time.

Finally, an even more difficult input to measure is the expected equity or market risk premium $[E(R_m) - (R_f)]$. The equity or market risk premium— $[E(R_m) - R_f]$ is equal to the expected return on the stock market (e.g., the expected return on the S&P 500 $E(R_m)$) minus the risk-free rate of interest (R_f) . The equity premium is the difference in the expected total return between investing in equities and investing in “safe” fixed-income assets, such as long-term government bonds. However, while the equity risk premium is easy to define conceptually, it is difficult to measure because it requires an estimate of the expected return on the market.

Table 6 highlights the primary approaches to, and issues in, estimating the expected equity risk premium. The traditional way to measure the equity risk premium was to use the difference between historical average stock and bond returns. In this case, historical stock and bond returns, also called ex post returns, were used as the measures of the market’s expected return (known as the ex ante or forward-looking expected return). This type of historical evaluation of stock and bond returns is often called the “Ibbotson approach” after Professor Roger Ibbotson who popularized this method of using historical financial market returns as measures of expected returns. Most historical assessments of the equity risk premium suggest an equity risk premium of 5-7 % above the rate on long-term Treasury bonds. However, this can be a problem because (1) ex post returns are not the same as ex ante expectations, (2) market risk premiums can change over time, increasing when investors become more risk-averse, and decreasing when investors become less risk-averse, and (3) market conditions can change such that ex post historical returns are poor estimates of ex ante expectations.

Table 6
Equity Risk Premium Approaches

	Historical Ex Post Excess Returns	Surveys	Ex Ante Models and Market Data
Means of Assessing the Equity-Bond Risk Premium	Historical average is a popular proxy for the ex ante premium – but likely to be misleading	Investor and expert surveys can provide direct estimates of prevailing expected returns/premiums	Current financial market prices (simple valuation ratios or DCF-based measures) can give most objective estimates of feasible ex ante equity-bond risk premium
Problems/Debated Issues	Time variation in required returns and systematic selection and other biases have boosted valuations over time, and have exaggerated realized excess equity returns compared with ex ante expected premiums	Limited survey histories and questions of survey representativeness. Surveys may tell more about hoped-for expected returns than about objective required premiums due to irrational biases such as extrapolation.	Assumptions needed for DCF inputs, notably the trend earnings growth rate, make even these models’ outputs subjective. The range of views on the growth rate, as well as the debate on the relevant stock and bond yields, leads to a range of premium estimates.

Source: Antti Ilmanen, “Expected Returns on Stocks and Bonds,” *Journal of Portfolio Management*, (Winter 2003).

The use of historical returns to measure market expectations has been criticized in numerous academic studies. The general theme of these studies is that the large equity

risk premium discovered in historical stock and bond returns cannot be justified by the fundamental data. The “Ex Ante Models and Market Data” approach involves the computation of expected market returns using market data to arrive at an expected equity risk premium. These studies have also been called “Puzzle Research” after the famous study by Mehra and Prescott in which the authors first questioned the magnitude of historical equity risk premiums relative to fundamentals.²

The final approach to estimating an equity risk premium is to use surveys of market professionals. There are several such surveys available. The Federal Reserve Bank of Philadelphia conducts an annual Survey of Financial Forecasters. In this survey, which has been in existence since 1964, professional forecasters provide their 10-year forecasts for a number of financial variables, including stock and bond returns. *CFO Magazine*, in conjunction with Duke University, conducts a quarterly survey of Chief Financial Officers (“CFOs”). In this survey, which typically has about 500 respondents, CFOs are asked for their expected 10-year return on the S&P 500 given the level of interest rates. Finally, Professor Ivo Welch of Yale University periodically surveys academics on their assessment of the appropriate equity risk premium.

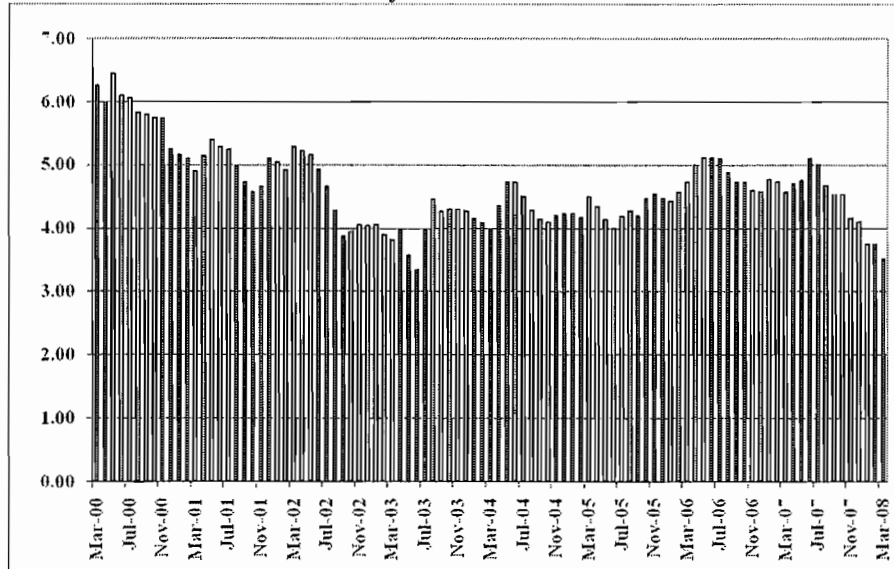
My CAPM analysis is provided in Schedule JRW-6. The CAPM summary is on page 1 of Exhibit JRW-6 and the supporting data and analysis for the dividend yield and expected growth rate are provided on the following pages.

1. Risk-Free Interest Rate

The yield on long-term Treasury bonds has usually been viewed as the risk-free rate of interest in the CAPM. The yield on long-term Treasury bonds, in turn, has been considered to be the yield on Treasury bonds with 30-year maturities. However, the Treasury’s issuance of 30-year bonds was interrupted for a period of time in recent years. Since that time, the yield on 10-year Treasury bonds has been widely-used as a measure of long-term Treasury bond yields. The 10-year U.S. Treasury yields over the past five years are shown in Figure 1. These rates hit a 60-year low in the summer of 2003 at 3.33%. They increased with the rebounding economy and fluctuated in the 4.0%-4.5% range before advancing to 5.0% in early 2006 in response to increases in energy, commodity and consumer prices. In late 2006, long-term interest rates retreated to 4.5% as commodity and energy prices declined and inflationary pressures subsided. These rates rebounded to the 5.0% level in the first half of 2007. However, the effects of the housing and sub-prime mortgage issues that surfaced in the summer of 2007 led to a slowdown in the economy, causing 10-year Treasury yields to once again fall below 4.0%.

² Rahnish Mehra and Edward Prescott, “The Equity Premium: A Puzzle,” *Journal of Monetary Economics* (1985).

Figure 1
Ten-Year U.S. Treasury Yields
 January 2000-March 2008



<http://research.stlouisfed.org/fred2/series/GS10?cid=115>

In the past month, interest rates have increased due, in part, to inflation pressures associated with higher commodity prices. As of May 27, 2008, as shown in the Table 7, the rates on 10- and 30-year U.S. Treasury Bonds were 3.91% and 4.64%, respectively. Given this recent range, I will use 4.50% as the risk-free rate, or R_f , in my CAPM.

Table 7
U.S. Treasury Yields

NOTES/BONDS	COUPON	MATURITY DATE	CURRENT PRICE/YIELD
2-YEAR	2.125	04/30/2010	99-10+ / 2.48
5-YEAR	3.125	04/30/2013	99-20¾ / 3.20
10-YEAR	3.875	05/15/2018	99-22¾ / 3.91
30-YEAR	4.375	02/15/2038	95-24+ / 4.64

2. Beta

Numerous online investment information services, such as *Yahoo!* and *Reuters*, provide estimates of stock betas. Usually these services report different betas for the same stock. The differences are usually due to (1) the time period over which the β is measured and (2) any adjustments that are made to reflect the fact that betas tend to regress to 1.0 over time. In estimating an equity cost rate for the proxy group of gas companies, I am using the betas for the proxy group companies as provided in the *Value*

Line Investment Survey. As shown on page 2 of Exhibit JRW-6, the average beta for the companies in the proxy group is 0.87.

3. Equity Risk Premium

The equity risk premium is the return that investors require on stocks relative to risk-free bonds. As discussed above, there are three approaches to estimating the expected or required equity risk premium: (1) historical estimates as indicated by the historical relationship between stock and bond returns, (2) surveys of market professionals, and (3) the analysis of ex ante expected return models and market data.

The equity risk premium for my CAPM is developed on page 3 of Exhibit JRW-4. I have used the three approaches discussed above and the results of thirty studies and surveys. I have used several different studies of the historical equity risk premium, including the Ibbotson results. It is important to note that historical results are sensitive to the time period studies, whether you use short-term or long-term government securities, the measure of central tendency (the arithmetic versus the geometric mean), and the index used to measure the market return. In addition, as discussed above, there are a number of empirical biases which cause historical risk premiums to be poor measures of expected risk premiums. For surveys, I have used the results of surveys of academics, CFOs and financial forecasters. For ex ante models and market data, I have employed the results of studies by leading academics which employ data over long periods of time and have been published over the past decade. Finally, I have also used the results of the so-called Building Block approach which is a combination of historical and ex ante models. The equity risk premium estimates are 5.67% using historic data, 4.15% from ex ante models, 3.92% from the surveys, and 4.57% using the Building Block approach. I will use the average of these approaches, 4.58%, as the equity risk premium in my CAPM.

4. CAPM Equity Cost Rate

The results of my CAPM study for the proxy group are provided in Table 8.

Table 8
CAPM Equity Cost Rate
 $K = (Rf) + \beta * [E(Rm) - (Rf)]$

	Risk-Free Rate	Beta	Equity Risk Premium	Equity Cost Rate
Proxy Group	4.50%	0.87	4.58%	8.5%

C. Equity Cost Rate Summary

Table 9 provides a summary of the DCF and CAPM equity cost rate results for the proxy group. These results suggest a range of 8.5% to 9.0%. The midpoint of these figures is 8.75%. However, since (1) I give greater weight to the DCF model results, and (2) GCCC is not proposing the adoption of the Company's proposed COSA, I will use the upper end of this range, 9.0%, as the equity cost rate for CenterPoint.

Table 9
Equity Cost Rate Summary

	DCF	CAPM
Proxy Group	9.0%	8.7%

APPENDIX A

EDUCATIONAL BACKGROUND, RESEARCH, AND RELATED BUSINESS EXPERIENCE

J. RANDALL WOOLRIDGE

J. Randall Woolridge is a Professor of Finance and the Goldman, Sachs & Co. and Frank P. Smeal Endowed Faculty Fellow in Business Administration in the College of Business Administration of the Pennsylvania State University in University Park, PA. In addition, Professor Woolridge is Director of the Smeal College Trading Room and President and CEO of the Nittany Lion Fund, LLC.

Professor Woolridge received a Bachelor of Arts degree in Economics from the University of North Carolina, a Master of Business Administration degree from the Pennsylvania State University, and a Doctor of Philosophy degree in Business Administration (major area-finance, minor area-statistics) from the University of Iowa. At Iowa he received a Graduate Fellowship and was awarded membership in Beta Gamma Sigma, a national business honorary society. He has taught Finance courses at the University of Iowa, Cornell College, and the University of Pittsburgh, as well as the Pennsylvania State University. These courses include corporation finance, commercial and investment banking, and investments at the undergraduate, graduate, and executive MBA levels.

Professor Woolridge's research has centered on the theoretical and empirical foundations of corporation finance and financial markets and institutions. He has published over 35 articles in the best academic and professional journals in the field, including the *Journal of Finance*, the *Journal of Financial Economics*, and the *Harvard Business Review*. His research has been cited extensively in the business press. His work has been featured in the *New York Times*, *Forbes*, *Fortune*, *The Economist*, *Financial World*, *Barron's*, *Wall Street Journal*, *Business Week*, *Washington Post*, *Investors' Business Daily*, *Worth Magazine*, *USA Today*, and other publications. In addition, Dr. Woolridge has appeared as a guest to discuss the implications of his research on CNN's *Money Line*, CNBC's *Morning Call* and *Business Today*, and Bloomberg Television's *Morning Call*.

Professor Woolridge's popular stock valuation book, *The StreetSmart Guide to Valuing a Stock* (McGraw-Hill, 2003), was released in its second edition. He has also co-authored *Spinoffs and Equity Carve-Outs: Achieving Faster Growth and Better Performance* (Financial Executives Research Foundation, 1999) as well as a new textbook entitled *Applied Principles of Finance* (Kendall Hunt, 2006). Dr. Woolridge is a founder and a managing director of www.valuepro.net - a stock valuation website.

Professor Woolridge has also consulted with and prepared research reports for major corporations, financial institutions, and investment banking firms, and government agencies. In addition, he has directed and participated in over 500 university- and company- sponsored professional development programs for executives in 25 countries in North and South America, Europe, Asia, and Africa.

Dr. Woolridge has prepared testimony and/or provided consultation services in the following cases:

Pennsylvania: Dr. Woolridge has prepared testimony on behalf of the Pennsylvania Office of Consumer Advocate in the following cases before the Pennsylvania Public Utility Commission; Bell Telephone Company (R-811819), Peoples Natural Gas Company (R-832315), Pennsylvania Power Company (R-832409), Western Pennsylvania Water Company (R-832381), Pennsylvania Power Company (R-842740), Pennsylvania Gas and Water Company (R-850178), Metropolitan Edison Company (R-860384), Pennsylvania Electric Company (R-860413), North Penn Gas Company (R-860535), Philadelphia Electric Company (R-870629), Western Pennsylvania Water Company (R-870825), York Water Company (R-870749), Pennsylvania-American Water Company (R-880916), Equitable Gas Company (R-880971), the Bloomsburg Water Co. (R-891494), Columbia Gas of Pennsylvania, Inc. (R-891468), Pennsylvania-American Water Company (R-90562), Breezewood Telephone Company (R-901666), York Water Company (R-901813), Columbia Gas of Pennsylvania, Inc. (R-901873), National Fuel Gas Corporation (R-

911912), Pennsylvania-American Water Company (R-911909), Borough of Media Water Fund (R-912150), UGI Utilities, Inc. - Electric Utility Division (R-922195), Dauphin Consolidated Water Supply Company - General Waterworks of Pennsylvania, Inc, (R-932604), National Fuel Gas Corporation (R-932548), Commonwealth Telephone Company (I-920020), Conestoga Telephone and Telegraph Company (I-920015), Peoples Natural Gas Company (R-932866), Blue Mountain Consolidated Water Company (R-932873), National Fuel Gas Corporation (R-942991), UGI - Gas Division (R-953297), UGI - Electric Division (R-953534), Pennsylvania-American Water Company (R-973944), Pennsylvania-American Water Company (R-994638), Philadelphia Suburban Water Company (R-994868;R-994877;R-994878; R-9948790), Philadelphia Suburban Water Company (R-994868), Wellsboro Electric Company (R-00016356), Philadelphia Suburban Water Company (R-00016750), National Fuel Gas Corporation (R-00038168), Pennsylvania-American Water Company (R-00038304), York Water Company (R-00049165), Valley Energy Company (R-00049345), Wellsboro Electric Company (R-00049313), National Fuel Gas Corporation (R-00049656), T.W. Phillips Gas and Oil Co. (R-00051178), PG Energy (R-00061365), City of Dubois Water Company (Docket No. R-00050671), R-00049165), York Water Company (R-00061322), Emporium Water Company (R-00061297), Pennsylvania-American Water Company (R-00072229),

New Jersey: Dr. Woolridge prepared testimony for the New Jersey Department of the Public Advocate, Division of Rate Counsel: New Jersey-American Water Company (R-91081399J), New Jersey-American Water Company (R-92090908J), and Environmental Disposal Corp. (R-94070319).

Alaska: Dr. Woolridge prepared testimony for Attorney General's Office of Alaska: Golden Heart Utilities, Inc. and College Utilities Corp. (Water Public Utility Service TA-29-118 and Sewer Public Utility Service TA-82-97), Anchorage Water and Wastewater Utility (TA-106-122).

Arizona: Dr. Woolridge prepared testimony for Utility Division staff of the Arizona Corporation Commission, Arizona Public Service Company (Docket No. E-01345A-06-0009).

Hawaii: Dr. Woolridge prepared testimony for the Hawaii Office of the Consumer Advocate: East Honolulu Community Services, Inc. (Docket No. 7718).

Delaware: Dr. Woolridge prepared testimony for the Delaware Division of Public Advocate: Artesian Water Company (R-00-649). Dr. Woolridge prepared testimony for the staff of the Public Service Commission: Artesian Water Company (R-06-158).

Ohio: Dr. Woolridge prepared testimony for the Ohio Office of Consumers' Council: SBC Ohio (Case No. 02-1280-TP-UNC R-00-649), and Cincinnati Gas & Electric Company (Case No. 05-0059-EL-AIR).

Texas: Dr. Woolridge prepared testimony for the Atmos Cities Steering Committee: Mid-Texas Division of Atmos Energy Corp. (Docket No. 9670).

New York: Dr. Woolridge prepared testimony for the County of Nassau in New York State: Long Island Lighting Company (PSC Case No. 942354).

Florida: Dr. Woolridge prepared testimony for the Office of Public Counsel in Florida: Florida Power & Light Co. (Docket No. 050045-EL).

Indiana: Dr. Woolridge prepared testimony for the Indiana Office of Utility Consumer Counsel (OUCC) in the following cases: Southern Indiana Gas and Electric Company (IURC Cause No. 43111 and IURC Cause No. 43112).

Oklahoma: Dr. Woolridge prepared testimony for the Oklahoma Industrial Energy Companies (OIEC) in the following cases: Public Service Company of Oklahoma (Cause No. PUD 200600285), Oklahoma Gas & Electric Company (Cause No. PUD 200700012)

Connecticut: Dr. Woolridge prepared testimony for the Office of Consumer Counsel in Connecticut: United Illuminating (Docket No. 96-03-29), Yankee Gas Company (Docket No. 04-06-01), Southern Connecticut Gas

Company (Docket No. 03-03-17), the United Illuminating Company (Docket No. 05-06-04), Connecticut Light and Power Company (Docket No. 05-07-18), Birmingham Utilities, Inc. (Docket No. 06-05-10), Connecticut Water Company (Docket No. 06-07-08), Connecticut Natural Gas Corp. (Docket No. 06-03-04), Aquarion Water Company (Docket No. 07-05-09), Yankee Gas Company (Docket No. 06-12-02), and Connecticut Light and Power Company (Docket No. 07-07-01).

California: Dr. Woolridge prepared testimony for the Office of Ratepayer Advocate in California: San Gabriel Valley Water Company (Docket No. 05-08-021), Pacific Gas & Electric (Docket No. 07-05-008), San Diego Gas & Electric (Docket No. 07-05-007), and Southern California Edison (Docket No. 07-05-003).

South Carolina: Dr. Woolridge prepared testimony for the Office of Regulatory Staff in South Carolina: South Carolina Electric and Gas Company (Docket No. 2005-113-G), Carolina Water Service Co. (Docket No. 2006-87-WS), Tega Cay Water Company (Docket No. 2006-97-WS), United Utilities Companies, Inc. (Docket No. 2006-107-WS).\

Missouri: Dr. Woolridge prepared testimony for the Department of Energy in Missouri: Kansas City Power & Light Company (CASE NO. ER-2006-0314). Dr. Woolridge prepared testimony for the Office of Attorney General of Missouri: Union Electric Company (CASE NO. ER-2007-0002).

Kentucky: Dr. Woolridge prepared testimony for the Office of Attorney General in Kentucky: Kentucky-American Water Company (Case No. 2004-00103), Union Heat, Light, and Power Company (Case No. 2004-00042), Kentucky Power Company (Case No. 2005-00341), Union Heat, Light, and Power Company (Case No. 2006-00172), Atmos Energy Corp. (Case No. 2006-00464), Columbia Gas Company (Case No. 2007-00008), Delta Natural Gas Company (Case No. 2007-00089), Kentucky-American Water Company (Case No. 2007-00143).

Washington, D.C.: Dr. Woolridge prepared testimony for the Office of the People's Counsel in the District of Columbia: Potomac Electric Power Company (Formal Case No. 939).

Washington: Dr. Woolridge consulted with trial staff of the Washington Utilities and Transportation Commission on the following cases: Puget Energy Corp. (Docket Nos. UE-011570 and UG-011571); and Avista Corporation (Docket No. UE-011514).

Kansas: Dr. Woolridge prepared testimony on behalf of the Kansas Citizens' Utility Ratepayer Board in the following cases: Western Resources Inc. (Docket No. 01-WSRE-949-GIE), UtiliCorp (Docket No. 02-UTCG701-CIG), and Westar Energy, Inc. (Docket No. 05-WSEE-981-RTS).

FERC: Dr. Woolridge has prepared testimony on behalf of the Pennsylvania Office of Consumer Advocate in the following cases before the Federal Energy Regulatory Commission: National Fuel Gas Supply Corporation (RP-92-73-000) and Columbia Gulf Transmission Company (RP97-52-000).

Vermont: Dr. Woolridge prepared testimony for the Department of Public Service in the Central Vermont Public Service (Docket No. 6988) and Vermont Gas Systems, Inc. (Docket No. 7160).

Exhibit JRW-1**CenterPoint Energy Resources Corp.****Cost of Capital**

Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Debt	48.51%	6.10%	2.96%
Common Equity	51.49%	9.00%	4.63%
Total	100.00%		7.59%

Exhibit JRW-2
CenterPoint Energy Resources Corp.
Summary Financial Statistics

Panel A
Industry Gas Group

Company	Symbol	S&P Bond Rating	Market Cap (\$B)	Operating Revenue (\$mil)	Percent Gas Revenue	Net Plant (\$mil)	Pre-Tax Interest Coverage	Primary Service Area	Common Equity Ratio*	Return on Equity	Price/Earnings Ratio	Market to Book Ratio
AGL Resources	ATG	A-	2.7	2,494.0	67%	3,566.0	3.7	GA,VA	42	12.9%	13.0	1.65
Atmos Energy	ATO	BBB	2.4	5,953.3	56%	3,888.1	2.8	LA,KY,TX, CO,KS	47	8.1%	15.2	1.21
Laclede Group, Inc.	LG	A	0.8	2,023.4	55%	800.0	3.0	MO	40	12.0%	15.5	1.81
New Jersey Resources	NJR	A+	1.3	3,091.4	34%	978.7	6.0	NJ,Canada	49	10.2%	20.6	2.07
Nicor, Inc.	GAS	AA	1.5	3,176.3	83%	2,757.3	4.6	IL	52	15.3%	11.5	1.70
Northwest Natural Gas Company	NWN	AA-	1.1	1,033.2	98%	1,495.9	3.5	OR,WA	47	12.5%	16.7	2.08
Piedmont Natural Gas, Inc.	PNY	A	1.8	1,822.5	82%	2,158.9	4.0	NC,SC,TN	45	12.6%	17.4	2.18
South Jersey Industries	SJI	A	1.0	956.4	65%	948.9	4.8	NJ	50	13.6%	17.5	2.29
Southwest Gas	SWX	BBB-	1.1	2,152.1	84%	2,845.3	2.4	AZ,NV,CA	43	8.8%	15.2	1.28
WGL Holdings, Inc.	WGL	AA-	1.6	2,664.7	57%	2,161.6	5.7	DC,MD,VA	51	11.1%	15.2	1.66
Mean		A	1.5	2,536.7	68%	2,160.1	4.1		47	11.7%	15.8	1.79

Data Source: AUS Utility Reports, May, 2008; Value Line Investment Survey, 2008.

Exhibit JRW-3
CenterPoint Energy Resources Corp.
Capital Structure Ratios

Panel A - CenterPoint Recommended Capitalization Ratios

Capital	Capitalization Ratios
Long-Term Debt	44.6%
Common Equity	55.4%
Total Capital	100.0%

Testimony of Robert B. Hevert

Panel B - CenterPoint Actual Capitalization Ratios - 2007 Monthly Average

Capital	Capitalization Ratios
Short Term Debt	2.5%
Long-Term Debt	82.3%
Common Equity	15.2%
Total Capital	100.0%

See Page 2 of Exhibit JRW-3

Panel C - Industry Gas Group - Capitalization Ratios

Capital	Capitalization Ratios			
	12/31/07	9/30/07	6/30/07	3/31/07
Short Term Debt	7.98%	7.07%	5.21%	4.77%
Long-Term Debt	41.34%	42.33%	42.66%	42.68%
Preferred Stock	0.18%	0.18%	0.01%	0.01%
Common Equity	50.51%	50.42%	52.11%	52.54%
Total	100.00%	100.00%	100.00%	100.00%

See Page 3 of Exhibit JRW-3

Panel D - Industry Gas Group
Four-Quarter Average Capitalization Ratios

Capital	Capitalization Ratios
Debt	48.51%
Common Equity	51.49%
Total	100.00%

Exhibit JRW-3
CenterPoint Energy Resources Corp.
Monthly Capital Structure Ratios
 Per RFI Request TCUC05-01

	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Average
% of Total Capitalization													
Short-term borrowings	3.24%	2.71%	3.08%	2.58%	2.19%	2.00%	1.75%	6.07%	1.31%	1.38%	1.62%	1.98%	2.5%
Long-term debt	81.92%	82.57%	81.88%	82.63%	82.82%	82.98%	83.59%	78.95%	83.50%	83.58%	83.13%	82.58%	82.5%
Equity	14.84%	14.72%	15.05%	14.79%	14.99%	15.02%	14.67%	14.98%	15.19%	15.05%	15.25%	15.44%	15.0%
Total Capitalization	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.0%

	Jan-08	Feb-08	Mar-08
% of Total Capitalization			
Short-term borrowings	2.98%	2.95%	1.73%
Long-term debt	81.48%	81.11%	81.97%
Equity	15.54%	15.95%	16.30%
Total Capitalization	100.00%	100.00%	100.00%

Exhibit JRW-3
CenterPoint Energy Resources Corp.
Capital Structure Ratios
Industry Gas Group

		12/31/07	9/30/07	6/30/07	3/31/07	ATG		12/31/07	9/30/07	6/30/07	3/31/07
ATG	Short Term Debt	598,000	576,000	339,000	111,000	ATG	Short Term Debt	15.20%	15.37%	9.54%	3.25%
	Long-Term Debt	1,674,000	1,548,000	1,544,000	1,623,000		Long-Term Debt	42.56%	41.31%	43.43%	47.57%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	1,661,000	1,623,000	1,672,000	1,678,000		Common Equity	42.23%	43.31%	47.03%	49.18%
	Total	3,933,000	3,747,000	3,555,000	3,412,000		Total	100.00%	100.00%	100.00%	100.00%
ATO						ATO					
	Short Term Debt	205,862	154,430	303,992	303,232		Short Term Debt	4.72%	3.64%	6.88%	7.21%
	Long-Term Debt	2,124,915	2,126,315	2,126,526	1,878,331		Long-Term Debt	48.70%	50.07%	48.13%	44.68%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	2,032,483	1,965,754	1,988,142	2,021,953		Common Equity	46.58%	46.29%	44.99%	48.10%
	Total	4,363,260	4,246,499	4,418,660	4,203,516		Total	100.00%	100.00%	100.00%	100.00%
LG						ATO					
	Short Term Debt	160	40,160	40,160	40,160		Short Term Debt	0.02%	4.87%	4.83%	4.86%
	Long-Term Debt	355,538	355,522	355,501	355,482		Long-Term Debt	44.63%	43.11%	42.77%	43.01%
	Preferred Stock	627	627	627	627		Preferred Stock	0.08%	0.08%	0.08%	0.08%
	Common Equity	440,397	428,325	434,876	430,191		Common Equity	55.28%	51.94%	52.32%	52.05%
	Total	796,722	824,634	831,164	826,460		Total	100.00%	100.00%	100.00%	100.00%
NJR						NJR					
	Short Term Debt	387,968	340,060	336,904	238,081		Short Term Debt	26.64%	24.18%	24.32%	18.72%
	Long-Term Debt	399,639	421,269	377,023	381,022		Long-Term Debt	27.44%	29.96%	27.21%	29.96%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	668,969	644,797	671,550	652,805		Common Equity	45.93%	45.86%	48.47%	51.32%
	Total	1,456,576	1,406,126	1,385,477	1,271,908		Total	100.00%	100.00%	100.00%	100.00%
GAS						GAS					
	Short Term Debt	444,000	237,000		107,000		Short Term Debt	24.50%	15.10%	0.00%	7.05%
	Long-Term Debt	422,800	423,300	497,600	497,500		Long-Term Debt	23.33%	26.98%	35.18%	32.77%
	Preferred Stock	600		600	600		Preferred Stock	0.03%	0.00%	0.04%	0.04%
	Common Equity	945,200	908,800	916,300	913,100		Common Equity	52.15%	57.92%	64.78%	60.14%
	Total	1,812,600	1,569,100	1,414,500	1,518,200		Total	100.00%	100.00%	100.00%	100.00%
NWN						NWN					
	Short Term Debt	22,732	33,773	18,115	18,947		Short Term Debt	2.01%	2.96%	1.57%	1.62%
	Long-Term Debt	516,082	522,919	523,585	520,108		Long-Term Debt	45.53%	45.80%	45.45%	44.48%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	594,751	584,956	610,277	630,367		Common Equity	52.47%	51.24%	52.98%	53.90%
	Total	1,133,565	1,141,648	1,151,977	1,169,422		Total	100.00%	100.00%	100.00%	100.00%
PNY						PNY					
	Short Term Debt						Short Term Debt	0.00%	0.00%	0.00%	0.00%
	Long-Term Debt	824,773	824,887	825,000	825,000		Long-Term Debt	47.24%	48.43%	47.81%	47.16%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	921,125	878,374	900,437	924,364		Common Equity	52.76%	51.57%	52.19%	52.84%
	Total	1,745,898	1,703,261	1,725,437	1,749,364		Total	100.00%	100.00%	100.00%	100.00%
SJI						SJI					
	Short Term Debt	17,953	14,530	15,422	16,092		Short Term Debt	2.08%	1.71%	1.81%	1.91%
	Long-Term Debt	364,570	361,768	364,191	362,849		Long-Term Debt	42.21%	42.63%	42.83%	43.08%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	481,080	472,379	470,784	463,289		Common Equity	55.71%	55.66%	55.36%	55.01%
	Total	863,603	848,677	850,397	842,230		Total	100.00%	100.00%	100.00%	100.00%
SWX						SWX					
	Short Term Debt	47,079	36,937	29,821	27,501		Short Term Debt	1.96%	1.60%	1.30%	1.20%
	Long-Term Debt	1,366,067	1,327,606	1,303,901	1,315,182		Long-Term Debt	57.00%	57.57%	56.99%	57.31%
	Preferred Stock						Preferred Stock	0.00%	0.00%	0.00%	0.00%
	Common Equity	983,673	941,604	954,114	952,000		Common Equity	41.04%	40.83%	41.70%	41.49%
	Total	2,396,819	2,306,147	2,287,836	2,294,683		Total	100.00%	100.00%	100.00%	100.00%
WGL						WGL					
	Short Term Debt	46,094	21,094	31,075	31,075		Short Term Debt	2.70%	1.28%	1.89%	1.89%
	Long-Term Debt	593,513	616,419	605,364	605,099		Long-Term Debt	34.72%	37.44%	36.79%	36.80%
	Preferred Stock	28,173	28,173				Preferred Stock	1.65%	1.71%	0.00%	0.00%
	Common Equity	1,041,428	980,767	1,008,872	1,008,105		Common Equity	60.93%	59.57%	61.32%	61.31%
	Total	1,709,208	1,646,453	1,645,311	1,644,279		Total	100.00%	100.00%	100.00%	100.00%
						Summary					
							Short Term Debt	7.98%	7.07%	5.21%	4.77%
							Long-Term Debt	41.34%	42.33%	42.66%	42.68%
							Preferred Stock	0.18%	0.18%	0.01%	0.01%
							Common Equity	50.51%	50.42%	52.11%	52.54%
							Total	100.00%	100.00%	100.00%	100.00%

Exhibit JRW-4
CenterPoint Energy Resources Corp.
Debt Cost Rates

Industry Gas Group

Company	2007 Long-Term Interest	2007 Long-Term Debt	2006 Long-Term Debt	Average Debt Outstanding	Average Debt Cost Rate
AGL Resources	95.0	1674.0	1622.0	1648.0	5.76%
Atmos Energy	125.0	2124.9	2182.2	2153.6	5.80%
Laclede Group, Inc.	20.0	355.5	395.5	375.5	5.33%
New Jersey Resources	17.0	359.2	332.0	345.6	4.92%
Nicor, Inc.	32.0	423.3	497.3	460.3	6.95%
Northwest Natural Gas Company	31.0	512.0	516.9	514.5	6.03%
Piedmont Natural Gas, Inc.	55.7	824.9	824.9	824.9	6.75%
South Jersey Industries	21.0	357.9	358.1	358.0	5.87%
Southwest Gas	93.0	1366.0	1386.3	1376.2	6.76%
WGL Holdings, Inc.	40.1	593.5	576.7	585.1	6.85%
Mean					6.10%

Data Source: *Value Line Investment Survey*, 2008.

Exhibit JRW-5

**CenterPoint Energy Resources Corp.
Discounted Cash Flow Analysis**

Industry Gas Group

Dividend Yield*	3.9%
Adjustment Factor	<u>1.025</u>
Adjusted Dividend Yield	4.0%
Growth Rate**	<u>5.0%</u>
Equity Cost Rate	9.0%

* Page 2 of Exhibit JRW-5

** Based on data provided on pages 3, 4, and
5 of Exhibit JRW-5

Exhibit JRW-5

CenterPoint Energy Resources Corp.
Monthly Dividend Yields
December 2007 - May 2008

Industry Gas Group

Company	Dec	Jan	Feb	Mar	Apr	May	Mean
AGL Resources	4.5%	4.6%	4.4%	4.6%	4.9%	4.7%	4.6%
Atmos Energy	4.8%	4.9%	4.8%	4.8%	5.1%	4.8%	4.9%
Laclede Group, Inc.	4.2%	4.5%	4.4%	4.5%	4.2%	4.1%	4.3%
New Jersey Resources	3.1%	3.3%	3.3%	3.4%	3.6%	3.4%	3.4%
Nicor Inc.	4.4%	4.4%	4.6%	4.9%	5.7%	5.2%	4.9%
Northwest Natural Gas Company	2.9%	3.2%	3.0%	3.3%	3.6%	3.3%	3.2%
Piedmont Natural Gas, Inc.	3.9%	3.9%	3.9%	4.0%	4.0%	3.8%	3.9%
South Jersey Industries	2.8%	3.1%	2.9%	3.0%	3.1%	2.9%	3.0%
Southwest Gas	3.0%	3.0%	3.0%	3.1%	3.3%	3.0%	3.1%
WGL Holdings, Inc.	4.1%	4.3%	4.1%	4.2%	4.4%	4.2%	4.2%
Mean	3.8%	3.9%	3.8%	4.0%	4.2%	3.9%	3.9%

Data Source: AUS *Utility Reports*, monthly issues.

Exhibit JRW-5

CenterPoint Energy Resources Corp.
DCF Equity Cost Growth Rate Measures
Value Line Historic Growth Rates

Industry Gas Group

		<i>Value Line</i> Historic Growth					
Company	Sym	Past 10 Years			Past 5 Years		
		Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
AGL Resources	ATG	7.0%	2.5%	6.5%	15.0%	4.0%	10.5%
Atmos Energy	ATO	3.5%	2.5%	7.0%	7.5%	1.5%	9.0%
Laclede Group, Inc.	LG	3.0%	1.0%	3.0%	9.5%	1.0%	4.5%
New Jersey Resources	NJR	6.5%	3.5%	7.5%	6.0%	4.0%	10.0%
Nicor Inc.	GAS	1.5%	4.0%	3.0%	-3.0%	2.5%	2.5%
Northwest Natural Gas Comp	NWN	2.0%	1.0%	4.0%	3.5%	1.5%	3.5%
Piedmont Natural Gas, Inc.	PNY	5.0%	5.0%	6.0%	6.0%	4.5%	6.5%
South Jersey Industries	SJI	9.5%	2.0%	6.0%	12.0%	3.5%	13.5%
Southwest Gas	SWX	12.0%	0.0%	3.0%	6.0%	0.0%	3.5%
WGL Holdings, Inc.	WGL	2.0%	1.5%	4.0%	5.0%	1.5%	3.5%
Mean		5.2%	2.3%	5.0%	6.8%	2.4%	6.7%
Median		4.3%	2.3%	5.0%	6.0%	2.0%	5.5%
Average of Mean and Median Figures =					4.4%		

Data Source: *Value Line Investment Survey, 2008.*

Exhibit JRW-5

CenterPoint Energy Resources Corp.
DCF Equity Cost Growth Rate Measures
Value Line Projected Growth Rates

		<i>Value Line</i>			<i>Value Line</i>		
Company	Sym	Projected Growth			Internal Growth		
		Est'd. '05-'07 to '11-'13			Return on Equity	Retention Rate	Internal Growth
		Earnings	Dividends	Book Value			
AGL Resources	ATG	3.5%	4.0%	1.5%	14.5%	43.0%	6.2%
Atmos Energy	ATO	4.5%	2.0%	3.5%	9.5%	42.0%	4.0%
Laclede Group, Inc.	LG	3.5%	2.5%	5.0%	11.0%	40.0%	4.4%
New Jersey Resources	NJR	6.0%	6.0%	9.0%	10.5%	45.0%	4.7%
Nicor Inc.	GAS	4.0%	0.5%	4.0%	13.5%	42.0%	5.7%
Northwest Natural Gas Company	NWN	7.0%	5.5%	3.5%	11.0%	44.0%	4.8%
Piedmont Natural Gas, Inc.	PNY	5.0%	4.0%	3.5%	12.5%	32.0%	4.0%
South Jersey Industries	SJI	NMF	5.5%	5.0%	14.5%	57.0%	8.3%
Southwest Gas	SWX	7.5%	4.0%	3.5%	10.0%	69.0%	6.9%
WGL Holdings, Inc.	WGL	3.5%	2.5%	5.0%	10.5%	38.0%	4.0%
Mean		4.9%	3.7%	4.4%	11.8%	45.2%	5.3%
Median		4.5%	4.0%	3.8%	11.0%	42.5%	4.8%
Average of Mean and Median Figures =		4.2%				Average =	5.0%

Data Source: *Value Line Investment Survey, 2008.*

Exhibit JRW-5

CenterPoint Energy Resources Corp.
DCF Equity Cost Growth Rate Measures
Analysts Projected EPS Growth Rate Estimates

Industry Gas Group					
Yahoo					
Company	Sym	First Call	Reuters	Zack's	Average
AGL Resources	ATG	5.25%	5.18%	4.80%	5.1%
Atmos Energy	ATO	5.22%	4.73%	5.80%	5.3%
Laclede Group, Inc.	LG	3.50%	3.50%	10.00%	5.7%
New Jersey Resources	NJR	5.50%	5.30%	7.30%	6.0%
Nicor Inc.	GAS	4.00%	4.33%	5.70%	4.7%
Northwest Natural Gas Compan	NWN	4.90%	4.90%	6.20%	5.3%
Piedmont Natural Gas, Inc.	PNY	5.18%	5.13%	6.20%	5.5%
South Jersey Industries	SJI	6.60%	6.25%	7.90%	6.9%
Southwest Gas	SWX	5.67%	4.80%	8.00%	6.2%
WGL Holdings, Inc.	WGL	4.00%	4.00%	6.30%	4.8%
Mean		5.0%	4.8%	6.8%	5.5%

Data Sources: www.zacks.com, www.investor.reuters.com, http://quote.yahoo.com, April, 2008

Exhibit JRW-6

**CenterPoint Energy Resources Corp.
Capital Asset Pricing Model**

Industry Gas Group

Risk-Free Interest Rate	4.50%
Beta*	0.87
<u>Ex Ante Equity Risk Premium**</u>	<u>4.58%</u>
CAPM Cost of Equity	8.5%

* See page 2 of Exhibit JRW-6

** See page 3 of Exhibit JRW-6

Exhibit JRW-6**CenterPoint Energy Resources Corp.
Beta****Panel A
Industry Gas Group**

Company		Beta
AGL Resources	ATG	0.85
Atmos Energy	ATO	0.85
Laclede Group, Inc.	LG	0.90
New Jersey Resources	NJR	0.85
Nicor Inc.	GAS	1.00
Northwest Natural Gas Company	NWN	0.80
Piedmont Natural Gas, Inc.	PNY	0.85
South Jersey Industries	SJI	0.80
Southwest Gas	SWX	0.90
WGL Holdings, Inc.	WGL	0.85
Mean		0.87

Data Source: *Value Line Investment Survey, 2008.*

Exhibit JW-6

CenterPoint Energy Resources Corp.
 Capital Asset Pricing Model
 Equity Risk Premium

Category	Study Authors	Publication Date	Time Period Of Study	Methodology	Return Measure	Range Low High	Midpoint of Range	Mean	Average
Historical Risk Premium	Ibbotson	2008	1926-2007	Historical Stock Returns - Bond Returns	Arithmetic			6.50%	
					Geometric			4.90%	
	Shiller	2006	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic			7.00%	
					Geometric			5.50%	
	Damodoran	2006	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic			6.70%	
					Geometric			5.10%	
	Siegel	2005	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic			6.10%	
					Geometric			4.60%	
	Dimson, Marsh, and Staunton	2006	1900-2005	Historical Stock Returns - Bond Returns	Arithmetic			5.50%	
	Goyal & Welch	2006	1872-2004	Historical Stock Returns - Bond Returns				4.77%	
AVERAGE									5.67%
Ex Ante Models (Puzzle Research)	Claus Thomas	2001	1985-1998	Abnormal Earnings Model				3.00%	
	Arnott and Bernstein	2002	1810-2001	Fundamentals - Div Yld + Growth				2.40%	
	Constantinides	2002	1872-2000	Historical Returns & Fundamentals - P/D & P/E				6.90%	
	Cornell	1999	1926-1997	Historical Returns & Fundamental GDP/Earnings		3.50%	5.50%	4.50%	
	Easton, Taylor, et al	2002	1981-1998	Residual Income Model				5.30%	
	Fama French	2002	1951-2000	Fundamental DCF with EPS and DPS Growth		2.55%	4.32%	3.44%	
	Harris & Marston	2001	1982-1998	Fundamental DCF with Analysts' EPS Growth				7.14%	
	McKinsey	2002	1962-2002	Fundamental (P/E, D/P, & Earnings Growth)		3.50%	4.00%	3.75%	
	Siegel	2005	1802-2001	Historical Earnings Yield	Geometric			2.50%	
	Grabowski	2006	1926-2005	Historical and Projected		3.50%	6.00%	4.75%	
	Maheu & McCurdy	2006	1885-2003	Historical Excess Returns, Structural Breaks, Bond Yields, Credit Risk, and Income Volatility		4.02%	5.10%	4.56%	
	Bostock	2004	1960-2002	Fundamentals - Interest Rates		3.90%	1.30%	2.60%	
	Bakshi & Chen	2005	1982-1998	Fundamentals - Interest Rates				7.31%	
	Donaldson, Kamstra, & Kramer	2006	1952-2004	Fundamental, Dividend yld., Returns, & Volatility		3.00%	4.00%	3.50%	
	Campbell	2008	1982-2007	Historical & Projections (D/P & Earnings Growth)		4.10%	5.40%	4.75%	
	Fernandez	2007	Projection	Required Equity Risk Premium				4.00%	
	Social Security Office of Chief Actuary								
	John Campbell	2001	1900-1995	Historical & Projections (D/P & Earnings Growth)	Arithmetic	3.00%	4.00%	3.50%	
				Projected for 75 Years	Geometric	1.50%	2.50%	2.00%	
				Projected for 75 Years		3.00%	4.80%	3.90%	
			Projected for 75 Years		3.00%	3.50%	3.25%		
AVERAGE									4.15%
Surveys	Survey of Financial Forecasters	2008	10-Year Projection	About 50 Financial Forecasters				1.96%	
	Duke - CFO Magazine Survey	2008	10-Year Projection	Approximately 500 CFOs				4.43%	
	Welch - Academics	2008	30-Year Projection	Random Academics		5.00%	5.74%	5.37%	
	AVERAGE								
Building Block	Ibbotson and Chen	2008	1926-2007	Historical Supply Model (D/P & Earnings Growth)	Arithmetic		6.23%	5.24%	
	Wooldridge		2008	Current Supply Model (D/P & Earnings Growth)	Geometric		4.24%	3.90%	
OVERALL AVERAGE									4.57%
									4.58%