

WYOMING DEPARTMENT OF REVENUE  
MINERAL TAX DIVISION

# CAPITALIZATION RATE STUDY

---

MODIFIED NETBACK RATE OF RETURN

Production Year 2011

---

---

**TABLE OF CONTENTS**

---

---

<b>INTRODUCTION .....</b>	<b>1</b>
<b>SOURCES OF INFORMATION AND DATA .....</b>	<b>1</b>
<b>CAPITAL STRUCTURE.....</b>	<b>2</b>
<b>COST OF EQUITY .....</b>	<b>2</b>
<b>CONCLUSION REGARDING EQUITY RATE .....</b>	<b>4</b>
<b>FLOTATION COST ADJUSTMENTS .....</b>	<b>5</b>
<b>OVERALL WEIGHTED AVERAGE COST OF CAPITAL.....</b>	<b>5</b>
<b>DIRECT CAPITALIZATION .....</b>	<b>6</b>
<b>EXHIBIT A.....</b>	<b>WEIGHTED AVERAGE COST OF CAPITAL</b>
<b>EXHIBIT B.....</b>	<b>DEBT &amp; EQUITY INFORMATION</b>
<b>EXHIBIT C.....</b>	<b>RISK FREE RATES</b>
<b>EXHIBIT D.....</b>	<b>MORNINGSTAR INC. DATA</b>
<b>EXHIBIT E.....</b>	<b>LIBRARY OF RATINGS</b>
<b>EXHIBIT F.....</b>	<b>FLOTATION COST DATA</b>
<b>EXHIBIT G.....</b>	<b>BOND RATINGS</b>

# CAPITALIZATION RATE STUDY

---

## MODIFIED NETBACK RATE OF RETURN

---

### INTRODUCTION

---

The capitalization rate applied to income is a means of estimating market value for properties. This capitalization rate reflects the relationship between one year's income or an annual average of several years' income and the corresponding capital value. This market value estimated by capitalizing an income is one indicator of what a willing buyer and a willing seller may consider a fair return on their investment in the open market.

The primary components of the capitalization rate are Debt, Preferred (if applicable), and Common Equity. The following data have been assembled to determine a rate of return for the Modified Netback valuation method.

The Mineral Tax Division develops its capitalization rates in accordance with WY Title 39-14-203(b)(6)(E) and WY Title 39-14-201. As such, the capitalization rate used for all producers utilizing the Modified Netback method of valuation is derived from a calculation consisting of the highest ten producers of natural gas in the State of Wyoming.

### SOURCES OF INFORMATION AND DATA

---

Source data used to compute the capitalization rates for the largest ten natural gas producers (top ten producers) was acquired from various sources:

- 1) Mergent Bond Record (December 2011 issue) and Standard & Poor's Record (January 2012) provided bond ratings for the companies. In addition, the 2011 annual Debt Rates and Preferred Rates by industry grouping came from the same source.
- 2) Value Line provided statistical information. The data from Value Line included Betas, 2011 projected Annual Rates of Change in Earnings, Dividends, Book Value and Annual Total Return. Value Line also provided data for the calculation of the risk free (RF) rates; the specific weekly rates are detailed in Exhibit C of this report.
- 3) The required return on market (RM) came from the MorningStar, Inc. 2012 Year Book, "Basic Series: Summary of Statistics of Annual Returns--1926 to 2011", and is based on the Arithmetic Mean return realized on common stocks. This information source also supplied data used to develop the risk premium (RP) and firm size and adjustments.
- 4) The Wall Street Journal for January 3, 2012, was the source for stock prices for individual companies, as required in the Discounted Cash Flow Model and the Direct Capitalization Rates.
- 5) The Public Utility Financing Tracker provided the data for computing flotation costs.

---

---

## CAPITAL STRUCTURE

---

---

For appraisal purposes, capital structure has three components: long-term debt, preferred stock and net worth (or common equity or, simply, equity). It differs from financial structure, which includes other, primarily, short-term sources of capital, such as payables and operating loans. There are two primary methods of computing capital structure for appraisals - book structure and market structure. Book structure uses the relationships of the book values (i.e., accounting values) of debt, preferred and equity. Market structure uses the market values of these components. The appropriate capital structure to use in a capitalization rate study for the modified netback rate of return is the market structure of the publicly traded companies (often the parent holding companies) because it reflects the structure which a typical purchaser would probably use to acquire the operating assets of a subject company. To compute market capital structure, we used the book value of debt and preferred securities (since there usually are no material differences between book and market value for these securities), as reported in Value Line. We computed the market value of common equity by multiplying the shares outstanding by the recent price, also as reported in Value Line. The average market capital structure for the companies in the study population is as follows:

	DEBT	PREFERRED	EQUITY
Top 10 Producers	20%	0%	80%

*Table 1. Capital Structure*

These percentages will later be used to compute the cost of capital for the industry.

---

---

## COST OF EQUITY

---

---

The current cost of equity capital should be based on data taken from the capital markets for the top ten producers. Equity rates should reflect the representative cost of equity financing for a given industry type as of the appraisal date. There is no single commonly accepted method for making this estimate. However, there are three generally accepted methods which can be used in conjunction with each other. These include (1) the Discounted Cash Flow (DCF) model, (2) Capital Asset Pricing Model (CAPM), and (3) Risk Premium (RP) model.

**The Discounted Cash Flow Model (DCF):** This model measures the rate of return requirements of industrial stock (equity) as demonstrated by investors in the market. The basic theory of DCF is that the prices paid for a share of stock reflect the investors' discounted present values of future expected earnings/anticipated cash flows for both dividends and stock appreciation. The basic formula appears in the box to the right. The  $D_1$  variable comes from the dividend declared per share Value Line has projected for 2011.  $P_0$  is the average of the annual high and low prices of the stocks of the companies in our study. The growth factor in the model was computed using a weighted average of the growth indicators: Earnings, 1/6; Book Value, 2/6; and Dividends, 3/6. The Department looks at three computations of the DCF to determine the relative propriety of the indicator: 1) a DCF model that reduces the impact of any company for whom the projected dividend or any of the growth factors is "Nil" or "NMF" per Value Line; 2) a

$$K_E = \frac{D_1}{P_0} + G$$

where:

$K_E$  = Cost of Capital

$D_1$  = Projected Dividend

$P_0$  = Current Stock Price

$G$  = Growth

DCF model which adjusts for the "Nil" and "NMF" items; and 3) a DCF model calculated on the average dividends, growth factors, and stock prices of the companies in the study group. Application of this model resulted in the equity rate shown in Table 3.

**Capital Asset Pricing Model (CAPM):** CAPM uses the concept that value is composed of a "safe rate" plus an add-on for equity risk. The market risk premium is defined as the difference between the expected rate of return in a given investment and the "risk-free rate" on government Treasury Bonds. This definition is based upon the premise that an informed investor expects to earn a greater return on his equity capital investment than he would receive from an alternative investment in risk free government bonds. Theoretically, the greater the investor's perceived risk in investment, the greater the risk premium. However, in the CAPM, the risk premium for the overall market must be adjusted by a market risk measure, "Beta", for the companies under review. The basic formula appears in the box at the right. Various versions of the CAPM take into account the different equity perceptions that prevail in the oil and gas industry, i.e. Long-Term, Intermediate, Short-Term and Corporate. Application of this formula to the various risk groups resulted in the use of the rate presented in Table 3.

$$K_E = R_F + B(R_M - R_F)$$

where:

$K_E$  = Cost of Capital  
 $R_F$  = Risk Free Rate  
 $B$  = Beta  
 $R_M$  = Return on the Market

**Risk Premium Model (RP):** This model assumes that the rate of return required by equity investors depends upon: (1) the risk-free rate of return or what investors could obtain by investing in Treasury Bonds, which have an assured rate of return guaranteed by the U.S. Government, and (2) some risk premium, or an amount of compensation above the risk-free rate required to induce investors to invest their money in a risky stock. The formula appears in the box on the right. Various versions of the Risk Premium consider the different equity perceptions that prevail in the oil and gas industry, i.e. Long-Term, Intermediate, Short-Term and Corporate.

$$K_E = R_F + R_P$$

where:

$K_E$  = Cost of Capital  
 $R_F$  = Risk Free Rate  
 $R_P$  = Risk Premium

As a matter of form, the Department calculates Long-Term, Intermediate, Short-Term and Corporate rates for both the CAPM and RP models. We then determine which rate is most appropriate for the top ten producers. The two primary considerations are the nature the operating assets and the term of debt instruments for companies within the industry. Generally speaking, the major assets of oil and gas companies have useful lives in excess of twenty years. Further, these oil and gas companies often issue debt with maturities in excess of twenty years. For these reasons, we consider the long-term rate, as shown in the table below, to be the most appropriate for the ten oil and gas companies used as a basis for the rate of return calculation.

	DCF	CAPM	RP
Top 10 Producers	10.72%	10.73%	10.15%

Table 3: Equity Rates

---

---

## CONCLUSION REGARDING THE EQUITY RATE

---

---

For the cost of equity, rates from the CAPM, RP model and the traditional DCF models were given consideration for the ten oil and gas companies. The resulting equity capitalization rate, adjusted for flotation cost for the top ten producers is 10.53%.

---

---

## FLOTATION COST ADJUSTMENTS

---

---

The costs of the various types of capital determined in the previous sections of this report consider only secondary market rates, the rates of return to be earned by the holders of the securities. These rates do not reflect any adjustment for primary costs, those costs a company incurs to raise capital initially. When a company issues new securities, it incurs legal, underwriting and accounting expenses. These expenses are known as "flotation" costs. They reduce the amount of actual proceeds the company receives from the issuance of the securities. As a result the effective required rates of return for the different types of securities are somewhat higher than the secondary rates indicate. Flotation costs are expressed as a percentage of the proceeds of the issue. To determine the true cost of capital the secondary rates must be adjusted for the flotation costs.

The objective of the flotation cost adjustment is to determine the effective rate of return for a security based on the net proceeds from the security issue. To calculate the real required rate of return for the two basic types of securities (debt and equity), we use the formulas in the box to the right. (Note: the term "equity" applies to both common and preferred stock issues.)

The formula for the debt rate requires some explanation. The reason for the income tax rate adjustment lies in the nature of flotation costs for debt issues. Under income tax law such costs are amortized and deducted to determine taxable income; however, they are not deductible to determine net operating income. Thus, the flotation cost has to be adjusted to recognize the difference between the tax treatment and the appraisal treatment of the flotation costs. There is no similar adjustment to the flotation costs for equity issues because they are not deductible for income tax purposes; the financial statements of the issuer simply reflect the net proceeds of the issue. The Department uses an income tax rate of 38% to incorporate the maximum federal corporate income tax rate of 35% plus an allowance of three percentage points for an average effective state corporate income tax rate.

*For Debt:*

$$K_A = \frac{K_B}{1 - (FC \times (1 - TR))}$$

*For Equity (Common and Preferred):*

$$K_A = \frac{K_B}{1 - FC}$$

where:

$K_A$  = Adjusted Cost of Capital

$K_B$  = Unadjusted (Base) Cost of Capital

FC = Flotation Cost as a Percentage

TR = Income Tax Rate (38%)

---

## OVERALL WEIGHTED AVERAGE COST OF CAPITAL

---

The Mineral Tax Division computed an overall weighted average cost of capital using the band of investment method. The basic formula appears in the box at the right. The resulting capitalization rate (also known as the discount rate) will be applied to the appropriate income stream to determine indicators of the current market value for the top ten producers. The results of this band of investment analysis for the cost of capital appear in Exhibit A.

$$K = (D \times D_R) + (P \times P_R) + (E \times E_R)$$

where:

K = Weighted Average Cost of Capital

D = Percent of Debt in Capital Structure

D<sub>R</sub> = Cost of Debt (Debt Rate)

P = Percent of Preferred in Capital Structure

P<sub>R</sub> = Cost of Preferred (Preferred Rate)

E = Percent of Equity in Capital Structure

E<sub>R</sub> = Cost of Equity (Equity Rate)

---

## DIRECT CAPITALIZATION

---

Direct capitalization is a valuation technique which takes a single year's income (or some other common unit of comparison) divided by a rate (or multiplied by a factor) to derive an estimate of value. This technique is often used in real estate appraisal to determine an overall or total valuation of the property. Income, whether potential gross income, effective gross income, or net operating income, is divided by the sales prices for comparable properties and the resulting ratio is then divided into the same level of income for the subject property to determine an overall valuation estimate.

This approach is not limited to various levels of income. The same concepts are used in the sales comparison approach, where various units of comparison are divided into the sales prices of comparable properties. The resulting rates (ratios) are then divided into the comparable units for the subject property to calculate an overall value.

The same procedures can be applied to ten producers. However, because direct capitalization is a comparable sales technique, it requires a higher level of comparability between the subject property (company) and the comparables than is required for yield capitalization. The process is one of identifying units of comparison, dividing such units by the sales price and applying the resulting average factor to the subject property (company). In the Direct Capitalization Study the goal is to develop value estimates for three distinct components system value: equity, preferred, and debt. This is a similar concept to the use of the Band of Investment method of rate development.

The Capitalization Rate Study lists six units of comparison for equity value from the December 2011, issue of The Value Line Investment Survey for the ten producers. All six units are shown on a per share basis for each individual company within the industry. The price per share used to compute the ratios is the same average of the 52-week highs and lows of the publicly traded prices for the preceding calendar year use in the DCF model. The resulting ratios appear in the table below. They are then divided into the appropriate figures for the subject company to obtain the estimate of value for the equity portion of the company.

	RATE
Revenue (Sales) per Share	101.17%
"Cash Flow" per Share	16.69%
Earnings per Share	8.73%
Dividends Declared per Share	2.20%
Capital Spending/Gross Equipment per Share	16.87%
Book Value per Share	62.25%

*Table 4. Direct Capitalization Rates*

It is important to emphasize that the developed value represents the value of the equity portion of the company, not the value of the item capitalized. This is because the basis for all the ratios is price per share of the common stock (or equity) of the company. After developing the equity value, the value of the preferred stock and the long-term debt must be derived directly from the market.

The market value of the preferred stock (if applicable) is obtained by dividing the preferred dividends paid by the subject company by the market preferred yield rate. This rate is found within the Capitalization Rate Study on page 2. The market value of the long-term debt is likewise found by dividing the long-term interest expense by the debt yield rate. Finally, the three portions (equity, preferred stock, and long-term debt) are added together to develop an estimate of the total value for the company.

The final step in calculating the Direct Capitalization indicator of value is to determine the market value for the operating property. It uses a factor developed in the stock and debt approach to remove non-operating property from the value of the company. Ratios that are generally utilized are the asset influence (operating assets divided by total assets), the income influence (operating income divided by total income), or an average of the two. The value of the non-operating property is thus excluded from the total valuation to determine the final value for the operating property by the Direct Capitalization approach.



# **EXHIBIT A**

## **WEIGHTED AVERAGE COST OF CAPITAL**

## Production Year 2011 Rate of Return on Investment

<u>Type of Capital</u>	<u>Cost of Capital</u>	<u>Flotation Cost</u>	<u>Adjusted Cost of Capital</u>	x	<u>Percent of Structure</u>	=	<u>Weighted Average Cost of Capital</u>
Debt	5.23%	1.10%	5.29%		20%		1.0474%
Preferred			<i>Not Applicable</i>				0.0000%
Equity	10.53%	3.25%	10.88%		80%		8.7258%
<b>Modified Netback Rate of Return</b>							<u><u>9.7732%</u></u>

# **EXHIBIT B**

## **DEBT & EQUITY INFORMATION**

Wyoming Department of Revenue  
 Netback Return on Investment Calculation  
 2011 Debt to Equity Ratio's  
 Production Year: 2011

2011 Netback Return on Investment  
 Debt - Equity

Company Name	Production Year 2011			Calculated from Source			
	a Long Term Debt	b Shares of Common Stock*	c Value Line Recent Price	d Value of Equity <i>d=b*c</i>	e Debt & Equity <i>a=b+d</i>	f Debt % <i>a/e</i>	g Equity % <i>100%-f</i>
Encana Corp.	\$6,598,000,000	736,272,054	\$19.17	\$14,114,335,275	\$20,712,335,275	32%	68%
Ultra Petroleum Corp.	\$1,560,000,000	152,922,524	\$30.77	\$4,705,426,063	\$6,265,426,063	25%	75%
ExxonMobil	\$9,331,000,000	4,793,207,715	\$76.93	\$368,741,469,515	\$378,072,469,515	2%	98%
Anadarko Petroleum	\$12,808,000,000	491,098,118	\$77.37	\$37,996,261,390	\$50,804,261,390	25%	75%
QEP Resources Inc.	\$1,582,700,000	176,952,496	\$30.73	\$5,437,750,202	\$7,020,450,202	23%	77%
BP p.l.c.	\$33,800,000,000	3,159,674,800	\$41.00	\$129,546,666,800	\$163,346,666,800	21%	79%
Williams Cos	\$9,024,000,000	589,411,024	\$31.10	\$18,330,682,846	\$27,354,682,846	33%	67%
Royal Dutch Shell	\$31,092,000,000	3,118,250,000	\$66.85	\$208,455,012,500	\$239,547,012,500	13%	87%
Chevron Corp	\$9,384,000,000	1,991,716,106	\$97.39	\$193,973,231,563	\$203,357,231,563	5%	95%
Devon Energy	\$5,970,000,000	403,900,000	\$61.91	\$25,005,449,000	\$30,975,449,000	19%	81%

\* BP p.l.c and Royal Dutch Shell are traded using American Depository Receipt's (ADR's). An ADR represents the ownership in the shares of a foreign company trading on US financial markets. The stock of many non-US companies trades on US exchanges through the use of ADRs. ADRs enable US investors to buy shares in foreign companies without undertaking cross-border transactions. ADRs carry prices in US dollars, pay dividends in US dollars, and can be traded like the shares of US-based companies

# **EXHIBIT C**

## **RISK FREE RATES**

## Risk Free Rate for 2011 Capitalization Rates

Long Term Risk Free Rate: 3.55%

Source:  
2011 Federal Reserve Bulletin monthly 20 year  
Treasury Bond yields with constant maturity

Intermediate Risk Free Rate: 2.76%

Source:  
2011 weekly Value Line Investment Survey  
Selection & Opinion reports, "Selected Yields"  
Section, average of the annual high and low for the  
weekly 10 year US Treasury Securities yield rates

Short Term Risk Free Rate: 1.60%

Source:  
2011 weekly Value Line Investment Survey  
Selection & Opinion reports, "Selected Yields"  
Section, average of the annual high and low for the  
weekly 5 year US Treasury Securities yield rates

Corporate Risk Free Rate: 4.85%

Source:  
2011 weekly Value Line Investment Survey  
Selection & Opinion reports, "Market Monitor"  
Section, average of the annual high and low for the  
weekly Mergent Aaa Corporate bond yield

Prime Lending Rate: 3.25%

Source:  
Wall Street Journal, January 3, 2012 edition,  
"Money Rates" section

# **EXHIBIT D**

**MORNINGSTAR INC. DATA**

**Morningstar Inc.**  
**SBBI 2012 Yearbook**  
*(Market Results for 1926 - 2011)*

<u>Series</u>		<u>Geometric Mean</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Large Company Stocks	Total Return	9.80%	11.80%	20.30%
Small Company Stocks	Total Return	11.90%	16.50%	32.50%
Long-Term Corporate Bonds	Total Return	6.10%	6.40%	8.40%
Long-Term Government Bonds	Total Return	5.70%	6.10%	9.80%
	Income Return	5.10%	5.20%	2.60%
Intermediate-Term Government Bonds	Total Return	5.40%	5.50%	5.70%
	Income Return	4.60%	4.60%	2.90%
U.S. Treasury Bills	Total Return	3.60%	3.60%	3.10%
Inflation		3.00%	3.10%	4.20%

<b>RP Rate Calculation (Rated Companies)</b> <i>(Using Arithmetic Means)</i>	<u>Long Term Equity Risk Premium</u>	<u>Intermediate Equity Risk Premium</u>	<u>Short Term Equity Risk Premium</u>	<u>Corporate Equity Risk Premium</u>
---	--------------------------------------	---	---------------------------------------	--------------------------------------

**Base:**

Total return on Large Company Stocks	11.80%	11.80%	11.80%	11.80%
--------------------------------------	--------	--------	--------	--------

**Risk Free Rates:**

Income Return on Long-Term Government Bonds	5.20%			
Income Return Intermediate-Term Government Bonds		4.60%		
Total Return on U.S. Treasury Bills			3.60%	
Total Return on Long-Term Corporate Bonds				6.40%
<b>Equity Risk Premiums</b>	<b>6.60%</b>	<b>7.20%</b>	<b>8.20%</b>	<b>5.40%</b>



# **EXHIBIT E**

## **LIBRARY OF RATINGS**

# State of Wyoming - Department of Revenue

## Capitalization Rate Study

Production Year 2011

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)
COMPANY DATA													
Capital Structure													
Company Name	Standard & Pooors Credit Rating	Moody's Credit Rating	Value Line Source	% of Debt	% of Preferred Stock	% of Common Equity	Type of Operations (pure or diversified)	Projected Dividend Per Share (2011)	Earnings Growth Rate	Dividends Growth Rate	Book Value Growth Rate	Beta	Wall Street Journal Common Stock Price
Encana Corp.	BBB	Baa2	Issue 3; 12/9/2011	32%	0%	68%	Diversified	\$0.80	NMF	NMF	NMF	NMF	\$26.43
Ultra Petroleum Corp.	NR	NR	Issue 12; 11/11/2011	25%	0%	75%	Diversified	Nil	18.5%	Nil	28.0%	1.10	\$37.80
ExxonMobil	AAA	Aaa	Issue 3; 12/9/2011	2%	0%	98%	Diversified	\$1.91	9.5%	7.0%	14.0%	0.80	\$77.63
Anadarko Petroleum	BBB-	Ba1	Issue 12; 11/11/2011	25%	0%	75%	Diversified	\$0.40	21.5%	3.5%	7.0%	1.25	\$71.31
QEP Resources Inc.	BB+	Ba1	Issue 3; 12/9/2011	23%	0%	77%	Diversified	\$0.12	11.0%	NMF	6.5%	NMF	\$34.38
BP p.l.c.	A	A2	Issue 3; 12/9/2011	21%	0%	79%	Diversified	\$1.72	13.0%	1.5%	11.0%	1.05	\$41.56
Williams Cos	BB+	Baa3	Issue 3; 12/9/2011	33%	0%	67%	Diversified	\$1.00	10.5%	22.0%	3.0%	1.30	\$27.69
Royal Dutch Shell	AA	Aa1	Issue 3; 12/9/2011	13%	0%	87%	Diversified	\$3.40	6.5%	3.5%	8.5%	1.05	\$67.97
Chevron Corp	AA	Aa1	Issue 3; 12/9/2011	5%	0%	95%	Diversified	\$3.30	10.0%	7.5%	8.0%	0.95	\$98.35
Devon Energy	BBB+	Baa1	Issue 3; 12/9/2021	19%	0%	81%	Diversified	\$0.68	8.0%	4.0%	14.5%	1.20	\$72.15
Mean				20%	0%	80%		\$1.33	12.1%	6.1%	11.2%	1.09	\$55.53
Median				22%	0%	78%		\$1.00	10.5%	4.0%	8.5%	1.08	\$54.77
Minimum				2%	0%	67%		\$0.12	6.5%	1.5%	3.0%	0.80	\$26.43
Maximum				33%	0%	98%		\$3.40	21.5%	22.0%	28.0%	1.30	\$98.35

@ - Calculation for Discounted Cash Flow (Traditional Model) is  $((f)/(n)) + (((f)^2) + ((j)^3) + ((k)^4) + ((l)^5) + ((m)^6)) / 6$

- - The Weighted Cap Rate is calculated using the total of all growth rates divided by the total of all weighting factors

# State of Wyoming - Department of Revenue

## Capitalization Rate Study

Production Year 2011

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	RISK PREMIUM MODEL			
														(o)	(p)	(q)	(r)
INDUSTRY DATA																	
12/31/2011																	
Company Name	Long-Term Risk Free Rate	Long-Term Equity Risk Premium	Intermediate Risk Free Rate	Intermediate Equity Risk Premium	Short-Term Risk Free Rate	Short-Term Equity Risk Premium	Corp. Risk Free Rate	Corp. Equity Risk Premium	Long-Term Risk Premium	Intermediate Risk Premium	Short-Term Risk Premium	Corp. Risk Premium	Corporate Risk Premium				
Encana Corp.	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Ultra Petroleum Corp.	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
ExxonMobil	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Anadarko Petroleum	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
QEP Resources Inc.	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
BP p.l.c.	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Williams Cos	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Royal Dutch Shell	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Chevron Corp	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Devon Energy	3.55%	6.60%	2.76%	7.20%	1.60%	8.20%	4.85%	5.40%	10.15%	9.96%	9.80%	9.80%	10.25%				
Mean																	
Median																	
Minimum																	
Maximum																	

# State of Wyoming - Department of Revenue

## Capitalization Rate Study

Production Year 2011

(a)	(aa)	(ab)	(ac)	(ad)	(ae)	(af)	(ag)	(ah)	(ai)
COMPANY FINANCIAL CALCULATIONS									
12/31/2011									
Capital Asset Pricing Model									
Discounted Cash Flow									
Company Name	Long-Term CAPM	Intermediate CAPM	Short-Term CAPM	Corporate CAPM	Traditional Model	Treating "Nil" as Zero	Based on Library Averages	Value Line Page Number	NYSE Ticker
	(o)+(p)*(n)	(q)+(r)*(n)	(s)+(t)*(n)	(u)+(v)*(n)	@	(i)+(j)+(bb)	(bb)		
Encana Corp.	NMF	NMF	NMF	NMF	NMF	NMF	NMF	528	ECA
Ultra Petroleum Corp.	10.81%	10.68%	10.62%	10.79%	NMF	12.42%	12.42%	2399	UPL
ExxonMobil	8.83%	8.52%	8.16%	9.17%	13.04%	12.21%	9.75%	505	XOM
Anadarko Petroleum	11.80%	11.76%	11.85%	11.60%	14.23%	8.23%	7.67%	2388	APC
QEP Resources Inc.	NMF	NMF	NMF	NMF	NMF	4.35%	4.00%	536	QEP
BP p.l.c.	10.48%	10.32%	10.21%	10.52%	14.56%	10.72%	6.58%	502	BP
Williams Cos	12.13%	12.12%	12.26%	11.87%	13.53%	17.36%	13.75%	619	WMB
Royal Dutch Shell	10.48%	10.32%	10.21%	10.52%	11.67%	10.67%	5.67%	513	ARDS
Chevron Corp	9.82%	9.60%	9.39%	9.98%	12.27%	11.44%	8.08%	503	CVX
Devon Energy	11.47%	11.40%	11.44%	11.33%	10.44%	9.11%	8.17%	524	DVN
Mean	10.73%	10.59%	10.52%	10.72%	12.82%	10.72%	8.45%		
Median	10.65%	10.50%	10.42%	10.66%	13.04%	10.72%	8.08%		
Minimum	8.83%	8.52%	8.16%	9.17%	10.44%	4.35%	4.00%		
Maximum	12.13%	12.12%	12.26%	11.87%	14.56%	17.36%	13.75%		

# State of Wyoming - Department of Revenue Capitalization Rate Study

Production Year 2011

(a)	(aj)	(ak)	(al)	(am)	(an)	(ao)	(ap)	(aq)	(ar)	(as)	(at)	(au)
	DIRECT CAPITALIZATION ANALYSIS											
12/31/2011	Value Line Direct Capitalization Data											
	Computed Equity Ratios											
Company Name	Revenue (Sales) Per Share (ap)/(n)	Cash Flow Per Share (aq)/(n)	Earnings Per Share (ar)/(n)	Dividends Declared Per Share (as)/(n)	Capital Spending Per Share (at)/(n)	Book Value Per Share (au)/(n)	Revenue (Sales) Per Share (ap)	Cash Flow Per Share (aq)	Earnings Per Share (ar)	Dividends Declared Per Share (as)	Capital Spending Per Share (at)	Book Value Per Share (au)
Encana Corp.	41.05%	19.49%	2.46%	3.03%	23.46%	88.72%	\$10.85	\$5.15	\$0.65	\$0.80	\$6.20	\$23.45
Ultra Petroleum Corp.	20.64%	11.38%	6.75%	0.00%	23.15%	26.33%	\$7.80	\$4.30	\$2.55	Nil	\$8.75	\$9.95
ExxonMobil	117.22%	15.46%	10.95%	2.38%	7.66%	44.89%	\$91.00	\$12.00	\$8.50	\$1.85	\$5.95	\$34.85
Anadarko Petroleum	40.18%	6.24%	4.70%	0.53%	14.52%	54.55%	\$28.65	\$4.45	\$3.35	\$0.38	\$10.35	\$38.90
QEP Resources Inc.	48.57%	18.03%	5.67%	0.23%	22.25%	54.25%	\$16.70	\$6.20	\$1.95	\$0.08	\$7.65	\$18.65
BP p.l.c.	285.49%	24.42%	16.00%	4.04%	14.44%	86.98%	\$118.65	\$10.15	\$6.65	\$1.68	\$6.00	\$36.15
Williams Cos	65.20%	15.71%	5.78%	2.82%	18.96%	50.21%	\$18.05	\$4.35	\$1.60	\$0.78	\$5.25	\$13.90
Royal Dutch Shell	224.00%	18.61%	12.28%	4.94%	11.77%	80.26%	\$152.25	\$12.65	\$8.35	\$3.36	\$8.00	\$54.55
Chevron Corp	131.63%	22.01%	14.64%	3.14%	10.22%	61.98%	\$129.45	\$21.65	\$14.40	\$3.09	\$10.05	\$60.95
Devon Energy	37.70%	15.59%	8.11%	0.93%	22.25%	74.36%	\$27.20	\$11.25	\$5.85	\$0.67	\$16.05	\$53.65
Mean	101.17%	16.69%	8.73%	2.20%	16.87%	62.25%	\$60.06	\$9.22	\$5.39	\$1.27	\$8.43	\$34.50
Median	56.89%	16.87%	7.43%	2.60%	16.74%	58.27%	\$27.93	\$8.18	\$4.60	\$0.80	\$7.83	\$35.50
Minimum	20.64%	6.24%	2.46%	0.00%	7.66%	26.33%	\$7.80	\$4.30	\$0.65	\$0.08	\$5.25	\$9.95
Maximum	285.49%	24.42%	16.00%	4.94%	23.46%	88.72%	\$152.25	\$21.65	\$14.40	\$3.36	\$16.05	\$60.95



# **EXHIBIT F**

## **FLOTATION COST DATA**

**2012 Summary of Flotation Cost Analyses**  
**Public Utilities Financing Tracker 2007--2011**  
 2/1/2012

	Number of Companies	Rate (Wtd. Avg.)
<b>DEBT:</b>		
Public Utilities Financing Tracker 2007--2011	306	1.10%

<b>COMMON:</b>		
Public Utilities Financing Tracker 2007--2011	19	3.25%



**FLOTATION COST ANALYSIS 2012  
DEBT ISSUES - PUBLIC OFFERINGS 2007 to 2011**

Company	Issue	Type of Utility	Year Issued	Amount Offered (\$000)	Price to Public (%)	Under-Writers' Commission (%)	Estimated Expenses (\$000)	Flotation Amount (\$000)	Per Cent (%)	Weighted Average (%)
GEORGIA POWER	SER 2007A	ELEC	2007	250,000	99.559	0.875	310	2,498	1.01%	0.00222%
GEORGIA POWER	SER 2007B	ELEC	2007	450,000	99.784	0.650	350	3,275	0.73%	0.00299%
GEORGIA POWER	SER 2007D	ELEC	2007	300,000	100.000	3.150	1550	11,000	3.81%	0.01022%
GEORGIA POWER	SER 2007E	ELEC	2007	250,000	100.000	3.150	1460	9,335	3.88%	0.00866%
GEORGIA POWER	SER 2007F	ELEC	2007	100,000	100.000	3.150	261	3,411	3.53%	0.00311%
GREAT PLAINES ENERGY INC	NOTES	ELEC	2007	100,000	99.484	0.650	500	1,150	1.16%	0.00107%
GULF POWER	SER 2007A	ELEC	2007	85,000	99.954	0.650	235	788	0.94%	0.00077%
IDAHO POWER CO	1ST MORT BONDS	ELEC	2007	140,000	99.801	0.750	NA	1,050	0.76%	0.00099%
IDAHO POWER CO	1ST MORT BONDS	ELEC	2007	100,000	99.732	0.750	NA	750	0.76%	0.00077%
ALABAMA POWER	SER 2007B	ELEC	2007	250,000	100.000	3.150	615	8,490	3.52%	0.00788%
ALABAMA POWER	SER 2007A	ELEC	2007	200,000	99.660	0.650	300	1,600	0.81%	0.00144%
CENTERPOINT ENERGY RESOURCES COR	SR, NOTES	ELEC	2007	250,000	98.995	0.875	NA	2,188	0.88%	0.00202%
CENTERPOINT ENERGY RESOURCES COR	SR, NOTES	ELEC	2007	250,000	99.658	0.650	NA	1,625	0.65%	0.00157%
CLEVELAND ILLUMINATING COMPANY	SR, NOTES	ELEC	2007	250,000	99.841	0.650	645	2,270	0.92%	0.00207%
CENTERPOINT ENERGY RESOURCES COR	SR, NOTES	ELEC	2007	250,000	99.741	0.650	533	2,158	0.87%	0.00191%
CENTERPOINT ENERGY RESOURCES COR	SR, NOTES	ELEC	2007	150,000	99.531	0.875	460	1,773	1.20%	0.00167%
APPALACIAN POWER	SR, NOTES, SER P	ELEC	2007	250,000	99.975	0.875	230	2,418	0.98%	0.00222%
FLORIDA GROUP CAPITAL	SER C JR. SUB DEBT	ELEC	2007	400,000	99.840	1.000	400	4,400	1.11%	0.00407%
FLORIDA GROUP CAPITAL	SER D JR. SUB DEBT	ELEC	2007	250,000	99.775	1.000	400	2,900	1.17%	0.00266%
FLORIDA GROUP CAPITAL	SER E JR. SUB DEBT	ELEC	2007	350,000	25.000	0.788	400	3,156	0.91%	0.00288%
FLORIDA POWER AND LIGHT CO	1ST MORT BONDS	ELEC	2007	300,000	99.972	0.650	1600	3,550	1.20%	0.00322%
PROGRESS ENERGY FLORIDA, INC	1ST MORT BONDS	ELEC	2007	250,000	99.731	0.650	NA	1,625	0.65%	0.00157%
PROGRESS ENERGY FLORIDA, INC	1ST MORT BONDS	ELEC	2007	500,000	99.868	0.875	NA	4,375	0.88%	0.00399%
EXELON GENERATING	SR, NOTES	ELEC	2007	700,000	99.756	0.650	400	4,950	0.71%	0.00449%
FLORIDA POWER AND LIGHT CO	1ST MORT BONDS	ELEC	2007	300,000	99.800	0.875	1600	4,225	1.43%	0.00388%
VIRGINIA ELECTRIC & POWER CO.	SERIES B SR, NOTES	ELEC	2007	600,000	99.612	0.650	200	4,100	0.69%	0.00377%
VIRGINIA ELECTRIC & POWER CO.	SERIES A SR, NOTES	ELEC	2007	600,000	99.724	0.875	200	5,450	0.93%	0.00499%
COMMONWEALTH EDISON	1ST MORT BONDS, SER 106	ELEC	2007	425,000	99.718	0.650	1400	4,163	0.99%	0.00379%
ALABAMA POWER	SER 2007C	ELEC	2007	200,000	100.000	3.200	1220	7,620	3.96%	0.00711%
COMMONWEALTH EDISON	1ST MORT BONDS, SER 103	ELEC	2007	300,000	100.000	4.145	NA	12,435	4.32%	0.01166%
CONNECTICUT LIGHT & POWER CO.	1ST AND REF 2007A	ELEC	2007	150,000	99.715	0.650	NA	975	0.65%	0.00099%
CONNECTICUT LIGHT & POWER CO.	1ST AND REF 2007B	ELEC	2007	150,000	99.032	0.875	NA	1,313	0.88%	0.00129%
CONNECTICUT LIGHT & POWER CO.	1ST AND REF 2007A	ELEC	2007	100,000	99.764	0.650	NA	650	0.65%	0.00066%
CONNECTICUT LIGHT & POWER CO.	1ST AND REF 2007B	ELEC	2007	100,000	99.765	0.875	NA	875	0.88%	0.00087%
DOMINION RESOURCES	SER, NOTES SER. A	ELEC	2007	350,000	99.719	0.650	150	2,425	0.70%	0.00222%
DUNE ENERGY CAROLINA	SR, NOTES	ELEC	2007	500,000	99.987	0.875	625	5,000	1.01%	0.00457%
EMPIRE DISTRICT ELECTRIC COMP	1ST MORT BONDS	ELEC	2007	80,000	99.789	0.875	300	1,000	1.27%	0.00099%
WESTERN MASS ELECT CO	SR, NOTES, SER. D	ELEC	2007	40,000	99.527	0.875	215	565	1.43%	0.00059%
KANSAS CITY POWER & LIGHT CO.	NOTES	ELEC	2007	250,000	99.832	0.650	500	2,125	0.86%	0.00199%
MID AMERICA ENERGY	SR, NOTES	ELEC	2007	250,000	99.787	0.176	NA	439	0.18%	0.00044%
MISSISSIPPI POWER	SER 2007A	ELEC	2007	35,000	100.000	0.650	225	453	1.31%	0.00044%
NEVADA POWER CO	GEN & REF MORT NOTES, SER R	ELEC	2007	350,000	99.973	1.250	NA	4,375	1.27%	0.00399%
NSTAR	DEBT	ELEC	2007	300,000	99.563	0.650	420	2,370	0.80%	0.00211%
POTOMAC ELECTRIC POWER CO.	SR, NOTES	ELEC	2007	250,000	99.751	0.875	200	2,388	0.96%	0.00211%
PPL CAP FUNDING	SER A JR SUB NOTES	ELEC	2007	500,000	99.766	1.250	525	6,775	1.37%	0.00611%
PPL CAP FUNDING	SR, NOTES	ELEC	2007	100,000	25.000	0.788	200	988	1.00%	0.00099%

PPL ELECT UTILITIES	SR SEC BONDS SER. A	ELEC	2007	250,000	99.973	0.875	350	2,538	1.03%	0.0023%
PLDGET SOUND ENERGY	SER A ENHANCED JR. SUB	ELEC	2007	250,000	100.000	1.500	400	4,150	1.69%	0.0038%
SOUTHWESTERN ELECTRIC POWER CO.	SR NOTES, SER E	ELEC	2007	250,000	99.711	0.650	250	1,875	0.76%	0.0017%
SOUTHWESTERN ELECTRIC POWER CO.	SR. NOTES, SER F	ELEC	2007	300,000	99.636	0.650	235	2,185	0.73%	0.0020%
TAMPA ELECTRIC CO	NOTES	ELEC	2007	250,000	99.433	0.875	290	2,478	1.00%	0.0022%
AMEREN UE	SR SEC BONDS SER. A	ELEC	2007	425,000	99.912	0.650	250	3,013	0.71%	0.0027%
ALABAMA GAS CORP	NOTES	GAS	2007	45,000	100.000	0.875	200	594	1.34%	0.0005%
ATMOS ENERGY CORP	SR. NOTES	GAS	2007	250,000	99.729	0.650	300	1,925	0.78%	0.0017%
VERIZON COMM INC	NOTES	TELE	2007	750,000	99.303	0.450	NA	3,375	0.45%	0.0030%
VERIZON COMM INC	NOTES	TELE	2007	750,000	99.171	0.875	NA	6,563	0.88%	0.0059%
AT&T INC	GLOBAL NOTES	TELE	2007	2,000,000	99.559	0.875	NA	17,500	0.88%	0.0157%
AT&T INC	GLOBAL NOTES	TELE	2007	2,000,000	99.568	0.875	NA	17,500	0.88%	0.0157%
AT&T INC	SR NOTES	TELE	2007	1,150,000	100.000	3.150	NA	36,225	3.25%	0.0333%
CLECO POWER LLC	2008 SR SEC. STORM REC BONDS, A	ELEC	2008	113,000	99.938	0.450		509	0.45%	0.0005%
CLECO POWER LLC	2008 SR SEC. STORM REC BONDS, A	ELEC	2008	676,000	99.858	0.450		3,042	0.45%	0.0027%
PPL ENERGY SUPPLY, LLC	SR. NOTES	ELEC	2008	400,000	99.661	0.650	300	2,900	0.73%	0.0026%
AMERICAN ELECTRIC POWER CO.	JR. SUBORDANTE DEBT	ELEC	2008	275,000	25.000	0.788	8663	10,828	4.10%	0.0100%
MID-AMERICAN ENERGY CO	SR. NOTES	ELEC	2008	350,000	99.657	0.650	350	2,625	0.76%	0.0024%
APPALACHIAN POWER CO.	SR. NOTES, SER. Q	ELEC	2008	500,000	99.340	0.875	NA	4,375	0.88%	0.0039%
AMEREN U.E.	SR. SEC NOTES	ELEC	2008	250,000	99.698	0.650	250	1,875	0.76%	0.0017%
DOMINION VA POWER	SER A SR NOTES	ELEC	2008	600,000	99.775	0.650	200	4,100	0.69%	0.0037%
EL PASO ELECTRIC CO.	SR. NOTES	ELEC	2008	150,000	99.146	0.875	501	1,814	1.23%	0.0016%
ALABAMA POWER CO.	SER. 2008 A SR. NOTES	ELEC	2008	300,000	99.741	0.875	330	2,955	0.99%	0.0027%
TAMPA ELECTRIC CO.	NOTES	ELEC	2008	150,000	100.000	0.650	337	1,312	0.88%	0.0012%
EMPIRE DISTRICT ELEC. CO.	1ST MORT BONDS	ELEC	2008	90,000	99.944	0.650	300	885	0.99%	0.0008%
CONNECTICUT LIGHT & POWER	1ST AND REF MORT BONDS	ELEC	2008	300,000	99.757	0.650	399	2,349	0.79%	0.0021%
CLECO POWER LLC	6.65% NOTES	ELEC	2008	250,000	99.643	0.650	200	1,825	0.74%	0.0016%
SOUTHWESTERN ELECTRIC POWER CO.	SR. NOTES, SER. G	ELEC	2008	400,000	99.870	0.650	250	2,850	0.72%	0.0026%
AMEREN U.E.	SR SEC NOTES	ELEC	2008	450,000	99.707	0.650	250	3,175	0.71%	0.0028%
CONSTELLATION ENERGY GROUP	Series A Junior Subordinated Debentures	ELEC	2008	450,000	25.000	0.788	500	4,044	0.91%	0.0036%
SOUTHERN CA EDISON	1ST AND REF MORT BONDS	ELEC	2008	400,000	99.432	0.650	650	3,250	0.82%	0.0029%
DOMINION VA POWER	SER B SR NOTES	ELEC	2008	700,000	99.995	0.875	150	6,275	0.90%	0.0056%
ATLANTIC CITY ELEC CO.	1ST MORT BONDS	ELEC	2008	250,000	99.541	0.650	200	1,825	0.74%	0.0016%
DOMINION RESOURCES, INC	SER. D SR. NOTES	ELEC	2008	600,000	99.972	0.600	150	3,750	0.63%	0.0034%
VECTREN UTILITY HOLDINGS, INC	SR. MONTHLY NOTES	GAS	2008	125,000	100.000	3.150	325	4,263	3.53%	0.0039%
QUESTAR GAS CO.	NOTES DUE 2018	GAS	2008	50,000	99.400	0.650		325	0.65%	0.0003%
QUESTAR GAS CO.	NOTES DUE 2038	GAS	2008	100,000	99.930	0.875		875	0.88%	0.0008%
LACLEDE GAS CO	1ST MORT BONDS, SER. 6.35%	GAS	2008	80,000	100.000	3.150	150	2,670	3.45%	0.0025%
WASHINGTON GAS LIGHT	MED-TERM NOTES SER. H	GAS	2008	50,000	100.000	1.250	NA	625	1.27%	0.0006%
AT&T INC	GLOBAL NOTES	TELE	2008	250,000	99.780	0.450	235	1,360	0.55%	0.0012%
AT&T INC	GLOBAL NOTES	TELE	2008	750,000	97.713	0.875	7153	13,716	1.86%	0.0124%
PACIFIC CORP	1ST MORT	ELEC	2009	350,000	99.345	0.650		2,275	0.65%	0.0020%
PACIFIC CORP	1ST MORT	ELEC	2009	650,000	99.050	0.875		5,688	0.88%	0.0051%
PROGRESS ENERGY OF CAROLINAS, INC	1ST MORT BONDS	ELEC	2009	600,000	99.908	0.650	700	4,600	0.77%	0.0041%
INDIANA MICHIGAN POWER	SR NOTES, SER 1	ELEC	2009	475,000	99.326	0.650	350	3,438	0.73%	0.0031%
METROPOLITON EDISON	SR. NOTES	ELEC	2009	300,000	100.000	0.650	485	2,435	0.82%	0.0022%
JERSEY CENTRAL POWER & LIGHT CO.	SR. NOTES	ELEC	2009	300,000	99.872	0.650	488	2,438	0.82%	0.0022%
APS	NOTES	ELEC	2009	500,000	99.945	0.650	NA	3,250	0.65%	0.0029%
GEORGIA POWER	SER 2009A, SR. NOTE	ELEC	2009	500,000	99.628	0.875	415	4,790	0.97%	0.0043%
CONNECTICUT LIGHT & POWER CO.	1ST AND REFUNDING, SER A	ELEC	2009	250,000	99.601	0.650	370	1,995	0.80%	0.0018%
NEVADA PWER CO	GEN. & REF. MORT NOTES, SER. U	ELEC	2009	500,000	99.917	0.650	500	3,750	0.76%	0.0034%
ALABAMA POWER	SR. NOTES, SER 2009A	ELEC	2009	500,000	99.808	0.875	420	4,795	0.97%	0.0043%
CONSUMERS ENERGY CO	1ST MORT BONDS	ELEC	2009	500,000	99.952	0.650	300	3,550	0.72%	0.0033%

ISSUER	DEBT	ELEC	2009	500,000	99.957	0.650	400	3.650	0.74%	0.0033%
FPL GROUP CAPITAL	DEBT	ELEC	2009	500,000	99.957	0.650	400	3.650	0.74%	0.0033%
MISSISSIPPI POWER	SR. NOTES, SER 2009A	ELEC	2009	125,000	99.306	0.650	265	1,078	0.87%	0.0010%
PACIFIC GAS & ELEC CO.	SR. NOTES	ELEC	2009	550,000	98.761	0.875	425	5,238	0.96%	0.0047%
APPALACHIAN POWER CO	SR. NOTES SER R	ELEC	2009	350,000	99.551	0.650	350	2,625	0.76%	0.0024%
SOUTH CAROLINA ELECTRIC AND GAS	1ST MORT BONDS	ELEC	2009	175,000	99.584	0.875	365	1,896	1.10%	0.0017%
FLORIDA POWER & LIGHT	1ST MORT BONDS	ELEC	2009	500,000	99.927	0.875	NA	4,375	0.88%	0.0039%
FPL GROUP CAPITAL	SER. F. DEBENTURES	ELEC	2009	350,000	25,000	0.788	1102.5	13,781	4.10%	0.0128%
AMEREN UE	SR. SEC NOTES	ELEC	2009	350,000	99.667	0.875	250	3,313	0.96%	0.0030%
SOUTHERN CALIFORNIA EDISON	1ST AND REF MORT BOND, SER 200K	ELEC	2009	500,000	99.181	0.875	1100	5,475	1.11%	0.0049%
DUKE ENERGY INDIANA	1ST MORT BONDS, SER MMM	ELEC	2009	450,000	99.708	0.875	300	4,238	0.95%	0.0038%
DUKE POWER, OHIO	1ST MORT BONDS	ELEC	2009	450,000	99.960	0.650	325	3,250	0.75%	0.0029%
KANSAS CITY POWER & LIGHT CO.	MORT BONDS, SER 2009A	ELEC	2009	400,000	99.892	0.650	1300	3,900	0.98%	0.0035%
CONSOLIDATED EDISON CO. OF NY.	DEBENTURES, SER 2009B	ELEC	2009	475,000	99.854	0.650	750	3,838	0.81%	0.0034%
THE EMPIRE DISTRICT ELECT. CO	1ST MORT BONDS	ELEC	2009	750,000	100.000	2.750	300	20,925	2.87%	0.0192%
IDAHO POWER	1ST MORT BONDS	ELEC	2009	100,000	99.815	0.625	NA	625	0.63%	0.0008%
PORTLAND GENERAL ELECTRIC CO	1ST MORTGAGE	ELEC	2009	300,000	99.926	0.650	400	2,350	0.79%	0.0021%
TOLLEDO EDISON	SR. SEC NOTES	ELEC	2009	300,000	99.803	0.662	488	2,474	0.83%	0.0022%
SAN DIEGO GAS & ELEC CO	1ST MORT BONDS, SER GGG	ELEC	2009	300,000	99.540	0.875	250	2,875	0.97%	0.0026%
ENTERGY TEXAS	MORT BONDS	ELEC	2009	150,000	100.000	3.150	150	4,875	3.36%	0.0045%
PP&L ELECTRIC UTILITY CORP	1ST MORTGAGE BONDS	ELEC	2009	300,000	99.398	0.875	350	2,975	1.00%	0.0027%
PUBLIC SERVICE CO. OF CO	1ST MORT BONDS, SER NO 20	ELEC	2009	400,000	99.460	0.650	1166	3,766	0.95%	0.0034%
NRG ENERGY	SR NOTES	ELEC	2009	700,000	98.348	1.500	300	10,800	1.57%	0.0098%
VIRGINIA ELEC & POWER CO	SR NOTES, SER A	ELEC	2009	350,000	99.805	0.650	150	2,425	0.70%	0.0022%
CMS ENERGY CORP	SR. NOTES	ELEC	2009	300,000	98.374	1.500	350	4,850	1.64%	0.0044%
CMS ENERGY CORP	CONVERTIBLE SR. NOTES	ELEC	2009	150,000	100.000	2.750	400	4,525	3.11%	0.0042%
ENERGY MISSISSIPPI	1ST MORT BONDS	ELEC	2009	150,000	99.936	0.650	442	1,417	0.95%	0.0013%
DOMINION RESOURCES INC	ENHANCED JR. SUB NOTES	ELEC	2009	625,000	25,000	0.788	250	5,172	0.83%	0.0046%
INTERSTATE POWER & LIGHT CO	SR. DEBT	ELEC	2009	300,000	99.368	0.875	260	2,885	0.97%	0.0026%
WISCONSIN POWER & LIGHT	DEBENTURES	ELEC	2009	200,000	99.385	0.650	260	1,885	0.76%	0.0017%
DOMINION RESOURCES INC	SR. NOTES	ELEC	2009	500,000	99.869	0.650	150	3,400	0.68%	0.0030%
THE ILLUMINATING CO	1ST MORT BONDS	ELEC	2009	300,000	99.466	0.750	567	2,817	0.95%	0.0025%
DUKE ENERGY	SR. NOTES	ELEC	2009	500,000	99.623	0.650	2250	5,500	1.11%	0.0050%
PEN ELECTRIC	SR. NOTES	ELEC	2009	250,000	99.648	0.650		1,625	0.65%	0.0015%
PEN ELECTRIC	SR. NOTES	ELEC	2009	250,000	99.785	0.875		2,188	0.88%	0.0020%
PUDGET SOUND ENERGY	SR. NOTES	ELEC	2009	350,000	100.000	0.875	350	3,413	0.98%	0.0031%
AVISTA	1ST MORT BONDS	ELEC	2009	250,000	99.770	0.675	650	2,338	0.94%	0.0021%
OHIO POWER CO	SR. NOTES, SERIES N	ELEC	2009	500,000	99.587	0.675	350	3,725	0.75%	0.0033%
ENTERGY GULF STATES LOUISIANA	1ST MORT BONDS	ELEC	2009	300,000	99.920	0.750	425	2,675	0.90%	0.0024%
BLACK HILLS POWER	1ST MORT BONDS, SER AF	ELEC	2009	180,000	99.831	0.875	340	1,915	1.08%	0.0017%
CLECO POWER LLC	NOTES	ELEC	2009	145,000	96.806	0.875	300	1,569	1.09%	0.0014%
NORTHERN STATES POWER CO	1ST MORT BONDS	ELEC	2009	300,000	99.810	0.875	1200	3,825	1.29%	0.0035%
PUBLIC SERVICE OF OKLAHOMA	SR. NOTES, SER H	ELEC	2009	250,000	99.717	0.650	250	1,875	0.76%	0.0017%
PACIFIC GAS & ELEC CO.	SR. NOTES	ELEC	2009	550,000	98.579	0.875	425	5,238	0.96%	0.0047%
AMERICAN ENERGY GENERATING	SR NOTES, SER I	ELEC	2009	250,000	99.746	0.650	300	1,925	0.78%	0.0017%
NSTAR	DEBENTURES	ELEC	2009	350,000	99.167	0.650	530	2,805	0.81%	0.0025%
DUKE ENERGY CAROLINAS	1ST AND REFUNDING MORTGAGE	ELEC	2009	750,000	99.579	0.875	425	6,988	0.94%	0.0063%
PROGRESSIVE ENERGY INC	SR NOTES	ELEC	2009	350,000	99.809	0.650		2,275	0.65%	0.0020%
PROGRESSIVE ENERGY INC	SR. NOTES	ELEC	2009	600,000	99.914	0.875		5,250	0.88%	0.0047%
SCANA CORP	SER A ENHANCED JR. SUB NOTES	ELEC	2009	150,000	25,000	0.788	360	1,541	1.04%	0.0014%
PUBLIC SERVICE ELECTRIC & GAS CO	SEC MED. TERM NOTE, SER. G	ELEC	2009	250,000	99.679	0.750	NA	1,875	0.76%	0.0017%
IDAHO POWER	1ST MORT BONDS	ELEC	2009	130,000	99.819	0.625	NA	813	0.63%	0.0007%
NINOURCE FINANCIAL CORP	NOTES	ELEC	2009	500,000	99.569	0.675	150	3,525	0.71%	0.0032%
CONSOLIDATED EDISON OF NY	DEBENTURES, SER 2009C	ELEC	2009	600,000	99.622	0.875	600	5,850	0.98%	0.0053%

SOUTH CAROLINA ELECTRIC AND GAS	IST MORT BONDS	ELEC	2009	150,000	99.214	0.875	350	1.663	1.12%	0.0015%
GEORGIA POWER	SER 2009B, SR. NOTE	ELEC	2009	500,000	99.744	0.650	425	3.675	0.74%	0.0033%
WISCONSIN ELECT POWER CO	DEBT	ELEC	2009	250,000	99.678	0.650	350	1.975	0.80%	0.0018%
PUBLIC SERVICE COMPANY OF NEW HA	IST MORT BOND, SER P	ELEC	2009	150,000	99.613	0.650	325	1,300	0.87%	0.0012%
NORTHWEST NATURAL GAS CO.	SEC-MED TERM NOTES, SER. B	GAS	2009	75,000	100,000	0.625	NA	469	0.63%	0.0004%
ATMOS ENERGY	SR. NOTES	GAS	2009	450,000	99.813	0.650	575	3,500	0.78%	0.0031%
NATIONAL FUEL GAS CO	NOTES	GAS	2009	250,000	99.762	0.650	600	2,225	0.90%	0.0020%
AGI CAPITAL CORP	SR. NOTES	GAS	2009	300,000	99.783	0.650	225	2,175	0.73%	0.0020%
SEMPRA ENERGY	NOTES	GAS	2009	750,000	99.159	0.875	250	6,813	0.92%	0.0061%
AT&T	GLOBAL NOTES	TELE	2009	250,000	99.689	0.450		1,125	0.45%	0.0010%
AT&T	GLOBAL NOTES	TELE	2009	250,000	99.437	0.750		1,875	0.76%	0.0017%
AT&T	GLOBAL NOTES	TELE	2009	1,662,170	99.891	6.000	152	99,882	6.39%	0.0946%
VERIZON COMMUNICATION	NOTES	TELE	2009	1,750,000	98.518	0.450		7,875	0.45%	0.0070%
VERIZON COMMUNICATION	NOTES	TELE	2009	1,000,000	98.288	0.750		7,500	0.76%	0.0067%
CENTURY LINK	SR. NOTES, SER P	TELE	2009	400,000	99.955	0.875		3,500	0.88%	0.0031%
CENTURY LINK	SR. NOTES, SER Q	TELE	2009	250,000	99.891	0.650		1,625	0.65%	0.0015%
CMIS ENERGY CORPORATION	SR. NOTES	ELEC	2010	300,000	99.436	1.250	NA	3,750	1.27%	0.0034%
FLORIDA POWER & LIGHT COMPANY	IST MORTGAGE BONDS	ELEC	2010	500,000	99.866	0.875	2400	6,775	1.37%	0.0061%
PUBLIC SERVICE ELECTRIC AND GAS CO	MEDIUM-TERM NOTES, SERIES G	ELEC	2010	300,000	99.521	0.750	NA	2,250	0.76%	0.0020%
PLUGET SOUND ENERGY	SR. NOTES	ELEC	2010	325,000	100,000	0.875	485	3,329	1.03%	0.0030%
SOUTHWESTERN ELECTRIC POWER CO.	SR. NOTES, SERIES H	ELEC	2010	250,000	99.958	0.975	389	2,827	1.14%	0.0025%
WESTERN MASSACHUSETTS ELECTRIC CO	SR NOTES, SERIES E	ELEC	2010	95,000	99.646	0.650	235	853	0.91%	0.0008%
TECO ENERGY	NOTES	ELEC	2010	300,000	99.552	0.650	677	2,627	0.88%	0.0024%
SOUTHERN CALIFORNIA EDISON CO.	IST AND REFUDING MORT BONDS, DEBENTURES	ELEC	2010	500,000	98.797	0.875	975	5,350	1.08%	0.0048%
NSTAR ELECTRIC COMPANY	DEBENTURES	ELEC	2010	300,000	98.398	0.875	520	3,145	1.06%	0.0028%
FLORIDA POWER CORPORATION	IST MORT BONDS, SERIES 2020	ELEC	2010	250,000	99.943	0.650		1,625	0.65%	0.0015%
FLORIDA POWER CORPORATION	IST MORT BONDS, SERIES 2040	ELEC	2010	350,000	99.583	0.875		3,063	0.88%	0.0028%
PACIFIC GAS & ELECTRIC CO.	SR. NOTES	ELEC	2010	250,000	98.455	0.875	475	2,663	1.08%	0.0024%
GULF POWER	SERIES 2010A SR. NOTES	ELEC	2010	175,000	99.984	0.650	275	1,413	0.81%	0.0013%
ENERGY MISSISSIPPI	IST MORTGAGE BONDS	ELEC	2010	80,000	100,000	3.150	280	2,800	3.63%	0.0026%
SAN DIEGO GAS & ELECTRIC CO.	IST MORTGAGE BONDS	ELEC	2010	250,000	99.866	0.875	250	2,438	0.98%	0.0022%
GEORGIA POWER CO.	SR. NOTES SER 2010B	ELEC	2010	600,000	99.339	0.875	485	5,735	0.97%	0.0052%
EMPIRE DISTRICT ELECTRIC CO.	IST MORTGAGE BONDS	ELEC	2010	100,000	99.786	0.675	300	975	0.98%	0.0009%
CONSOLIDATION EDISON COMPANY OF DEBENTURES, SERIES 2010A		ELEC	2010	350,000	99.783	0.650		2,275	0.65%	0.0020%
CONSOLIDATION EDISON COMPANY OF DEBENTURES, SERIES 2010B		ELEC	2010	350,000	99.514	0.875		3,063	0.88%	0.0028%
DUKE ENERGY CAROLINAS	IST AND REFUDING ORT BONDS	ELEC	2010	450,000	99.765	0.650	317	3,242	0.73%	0.0029%
OKLAHOMA GAS AND ELECTRIC COMP	SR. NOTES	ELEC	2010	250,000	99.358	0.875	420	2,608	1.05%	0.0023%
WISCONSIN POWER & LIGHT CO.	SR. NOTES	ELEC	2010	150,000	99.833	0.650	275	1,250	0.84%	0.0011%
PUGET SOUND ENERGY	SR NOTES	ELEC	2010	250,000	100,000	0.875	475	2,663	1.08%	0.0024%
DUKE ENERGY INDIANA	IST MORTGAGE BONDS, SER PPP	ELEC	2010	500,000	99.908	0.650	375	3,625	0.73%	0.0033%
BLACK HILLS CORP NOTES	NOTES	ELEC	2010	200,000	100,000	0.650	394	1,694	0.85%	0.0015%
COMMONWEATH EDISON CO	IST MORTGAGE BONDS	ELEC	2010	500,000	99.976	0.650	1	3,251	0.65%	0.0029%
COMMONWEATH EDISON CO	NOTES	ELEC	2010	550,000	99.940	0.650	800	4,375	0.80%	0.0039%
COMMONWEATH EDISON CO	SR. NOTES	ELEC	2010	300,000	99.598	0.650	250	2,200	0.74%	0.0020%
COMMONWEATH EDISON CO	SR. NOTES	ELEC	2010	250,000	99.748	0.600	NA	1,500	0.60%	0.0013%
PUBLIC SERVICE ELECTRIC AND GAS CO	MEDIUM-TERM NOTES, SERIES G	ELEC	2010	250,000	99.717	0.875	1600	3,788	1.54%	0.0034%
NORTHERN STATES POWER CO.	IST MORT BONDS	ELEC	2010	250,000	99.971	0.600	2587	3,332	2.76%	0.0030%
ENERGY ARKANSAS RESTORATION FU	SR. SEC STORM RECOVERY BONDS	ELEC	2010	124,100	99.971	0.600		738	1.50%	0.0007%
EMPIRE DISTRICT ELECTRIC CO.	IST MORTGAGE BONDS	ELEC	2010	50,000	99.697	0.875	300	738	1.50%	0.0007%
INTERSTATE POWER AND LIGHT COMP	SR. DEBENTURES	ELEC	2010	200,000	99.925	0.650	275	1,575	0.79%	0.0014%
SAN DIEGO GAS & ELECTRIC CO.	IST MORTGAGE BONDS	ELEC	2010	500,000	98.897	0.875	250	4,625	0.93%	0.0042%
IDAHO POWER CO	IST MORTGAGE BONDS	ELEC	2010	100,000	99.830	0.750	NA	750	0.76%	0.0007%
IDAHO POWER CO	IST MORTGAGE BONDS	ELEC	2010	100,000	99.501	0.625	NA	625	0.63%	0.0006%
SOUTHERN CALIFORNIA EDISON CO.	IST AND REFUDING MORT BONDS,	ELEC	2010	500,000	99.364	0.875	950	5,325	1.08%	0.0048%

VIRGINIA ELECTRIC & POWER COMPANY	SENIOR NOTES SERIES A	ELEC	2010	300,000	99,786	0.675	150	2,175	0.73%	0.0020%
GEORGIA POWER CO.	SR. NOTES	ELEC	2010	500,000	99,036	0.875	440	4,815	0.97%	0.0043%
PACIFIC GAS & ELECTRIC CO.	SR. NOTES	ELEC	2010	550,000	99,504	0.650	730	4,305	0.79%	0.0039%
NEVADA POWER COMPANY	GENERAL AND REFUNDING MORTGAGE NOTES	ELEC	2010	250,000	99,689	0.875	500	2,688	1.09%	0.0024%
GULF POWER ENERGY	SERIES 2010B SR. NOTES	ELEC	2010	125,000	99,936	0.875	260	1,354	1.09%	0.0012%
ENERGY LOUISIANA LLC	SR. NOTES	ELEC	2010	450,000	99,985	0.650	1000	3,925	0.88%	0.0035%
ALABAMA POWER CO.	1ST MORTGAGE BONDS	ELEC	2010	250,000	99,896	0.750	250	2,125	0.86%	0.0019%
ENERGY GULF STATES LOUISIANA, L	SER.2010A SR. NOTES	ELEC	2010	250,000	99,840	0.650	340	1,965	0.79%	0.0018%
UIL HOLDINGS CORPORATION	1ST MORTGAGE BONDS	ELEC	2010	250,000	99,861	0.650	250	1,875	0.76%	0.0017%
ENERGY ARKANSAS	NOTES	ELEC	2010	450,000	99,204	0.650	325	3,250	0.73%	0.0029%
OGLETHORPE POWER CORPORATION	1ST MORTGAGE BONDS	ELEC	2010	225,000	100,000	3.150	250	7,338	3.37%	0.0068%
PUBLIC SERVICE CO. OF COORADO	1ST MORTGAGE BONDS SER.2010A	ELEC	2010	450,000	99,750	0.875	1000	4,938	1.11%	0.0044%
CLECO POWER LLC	1ST MORTGAGE BONDS	ELEC	2010	400,000	99,593	0.650	1000	3,600	0.91%	0.0032%
ENERGY ARKANSAS	NOTES	ELEC	2010	250,000	98,898	0.875	300	2,488	1.00%	0.0022%
INTEGRITY ENERGY GROUP, INC	1ST MORTGAGE BONDS	ELEC	2010	350,000	99,971	0.650	250	2,525	0.73%	0.0023%
ENERGY NEW ORLEANS, INC	SR. NOTES	ELEC	2010	250,000	99,937	0.650	450	2,075	0.84%	0.0019%
ENERGY LOUISIANA LLC	1ST MORTGAGE BONDS	ELEC	2010	25,000	99,789	0.650	300	463	1.88%	0.0004%
FLORIDA POWER & LIGHT COMPANY	SR. NOTES	ELEC	2010	315,000	100,000	1.250	500	4,438	1.43%	0.0040%
NISOURCE FINANCE COMPANY	1ST MORTGAGE BONDS	ELEC	2010	150,000	100,000	3.150	250	4,975	3.43%	0.0046%
WASHINGTON GAS LIGHT CO.	1ST MORTGAGE BONDS	ELEC	2010	400,000	99,752	0.875	2000	5,500	1.39%	0.0050%
SOUTHWEST GAS CORPORATION	NOTES	ELEC	2010	250,000	98,730	0.875	225	2,413	0.97%	0.0022%
CINCINNATI BELL	MED-TERM NOTES, SERIES I	GAS	2010	75,000	100,000	0.021	NA	16	0.02%	0.0000%
TDS	SR. NOTES	GAS	2010	125,000	99,818	0.650	400	1,213	0.98%	0.0011%
PUBLIC SERVICE COMPANY OF OKLAHOMA	SR. NOTES	TELE	2010	500,000	100,000	1.750	1000	9,750	1.99%	0.0089%
PROGRESS ENERGY INC	SR. NOTES, SER I	TELE	2010	200,000	100,000	3.150	700	7,000	3.63%	0.0065%
ALABAMA POWER	SR. NOTES	ELEC	2011	250,000	99,246	0.650	250	1,875	0.76%	0.0017%
ENERGY LOUISIANA	SERIES 2011A, SR. NOTES	ELEC	2011	500,000	99,633	0.650	550	3,800	0.77%	0.0034%
APPALACIAN POWER CO.	1ST MORT BONDS	ELEC	2011	250,000	99,243	0.875	350	2,538	1.03%	0.0023%
PUDGET SOUND ENERGY	SR. NOTES, SERIES T	ELEC	2011	200,000	99,827	0.650	250	1,550	0.78%	0.0014%
ATLANTIC CITY ELECTRIC CO.	SR. NOTES	ELEC	2011	350,000	99,721	0.650	250	2,525	0.73%	0.0023%
SOUTHERN CALIFORNIA EDISON	1ST MORT BONDS	ELEC	2011	300,000	99,995	0.875	525	3,150	1.06%	0.0028%
PACIFICORP	1ST AND REF MORT BONDS SER 2011	ELEC	2011	200,000	99,848	0.650	200	1,500	0.76%	0.0013%
NEVADA POWER CO.	1ST MORT BONDS	ELEC	2011	500,000	99,423	0.650	1035	4,285	0.86%	0.0038%
PACIFIC GAS & ELECTRIC CO	GEN REF. MORT NOTES, SER. Y	ELEC	2011	400,000	99,814	0.650	575	3,175	0.80%	0.0029%
DETROIT EDISON	SR. NOTES	ELEC	2011	250,000	99,970	0.875	500	2,688	1.09%	0.0024%
GULF POWER ENERGY, MISSISSIPPI, INC	2011 SERIES B, GENERAL & REFUNDING	ELEC	2011	300,000	99,919	0.650	562	2,512	0.84%	0.0023%
GREAT PLAINS ENERGY INC	SER 2011A, SR. NOTES	ELEC	2011	250,000	99,735	0.650	350	1,975	0.80%	0.0018%
SOUTH CAROLINA ELECT AND GAS CO.	1ST MORT BONDS	ELEC	2011	125,000	100,000	3.150	315	4,253	3.52%	0.0039%
ALABAMA POWER	MED TERM NOTES	ELEC	2011	150,000	100,000	3.150	352	5,077	3.50%	0.0047%
ALABAMA POWER	1ST MORT BONDS	ELEC	2011	300,000	99,739	0.650	1950	3,900	1.32%	0.0035%
PUBLIC SERVICE CO. OF NEW HAMPSHIRE	NOTES	ELEC	2011	350,000	99,904	0.650	400	2,675	0.77%	0.0024%
OKLAHOMA GAS & ELECT CO	1ST MORT BONDS	ELEC	2011	100,000	102,799	0.875	340	1,215	1.23%	0.0011%
FLORIDA POWER & LIGHT CO.	SER 2001C, SR. NOTES	ELEC	2011	250,000	99,863	0.875	350	2,538	1.03%	0.0023%
NEXTERA ENERGY CAPITAL HOLDINGS	SER 2011B SR. NOTES	ELEC	2011	200,000	99,786	0.650	3	1,303	0.66%	0.0012%
NISOURCE FINANCE CORP	1ST MORT BONDS, SER Q	ELEC	2011	122,000	99,739	0.650	288	1,081	0.89%	0.0010%
PPL ELECTRIC UTILITY CORP	SR. NOTES	ELEC	2011	250,000	99,389	0.875	410	2,598	1.05%	0.0023%
SOUTHWESTERN PUBLIC SERVICE CO	1ST MORT BONDS	ELEC	2011	250,000	99,910	0.875	1300	3,488	1.41%	0.0031%
DONINON RESOURCES	DEBENTURES	ELEC	2011	400,000	99,922	0.650	500	3,100	0.78%	0.0028%
PUBLIC SERVICE COMPANY OF COLORADO	NOTES	ELEC	2011	400,000	99,693	0.875	150	3,650	0.92%	0.0033%
	1ST MORT BONDS	ELEC	2011	250,000	99,428	0.875	400	2,588	1.05%	0.0023%
	1ST MORT BONDS, SER.#1	ELEC	2011	200,000	98,493	0.875	2250	4,000	2.04%	0.0036%
	2011 SERIES C SR. NOTES	ELEC	2011	500,000	98,471	0.875	150	4,525	0.91%	0.0041%
	1ST MORT BOND, SER #22	ELEC	2011	250,000	99,618	0.875	650	2,838	1.15%	0.0026%

SAN DIEGO GAS & ELECTRIC CO.	1ST MORT BONDS, SER JJJ	ELEC	2011	350,000	99.487	0.650	250	2,525	0.73%	0.0023%
OGLETHORPE POWER CORP	1ST MORT BONDS, SER 2011A	ELEC	2011	300,000	99.800	0.875	510	3,135	1.06%	0.0028%
PPL ELECT UTILITY CORP	1ST MORT BONDS	ELEC	2011	400,000	99.191	0.650	500	3,100	0.78%	0.0028%
DUKE ENERGY	SR. NOTES	ELEC	2011	500,000	99.981	0.650	475	3,725	0.75%	0.0033%
ARIZONA PUBLIC SERVICE CO	NOTES	ELEC	2011	300,000	99.326	0.875	515	3,140	1.06%	0.0028%
DETROIT EDISON	2011 SER H GEN & REF MORT BOND	ELEC	2011	140,000	98.866	0.875	250	1,475	1.06%	0.0013%
WISCONSIN ELECTRIC POWER CO.	DEBENTURES	ELEC	2011	300,000	98.793	0.650	400	2,350	0.79%	0.0021%
ENERGY TEXAS INC	1ST MORT BONDS	ELEC	2011	75,000	99.839	0.650	285	773	1.04%	0.0007%
PACIFIC GAS & ELECTRIC CO	SR. NOTES	ELEC	2011	250,000	99.475	0.650	467	2,092	0.84%	0.0019%
ACEL ENERGY	SR NOES	ELEC	2011	250,000	99.763	0.875	500	2,688	1.09%	0.0024%
PROGRESS ENERGY CAROLINAS, INC	1ST MORT BONDS	ELEC	2011	500,000	99.828	0.650	650	3,900	0.79%	0.0035%
WESTERN MASS ELECT CO.	SR. NOTES, SERIES F	ELEC	2011	100,000	99.092	0.650	275	925	0.93%	0.0008%
PROGRESS ENERGY FLORIDA INC	1ST MORT BONDS	ELEC	2011	300,000	99.796	0.650	1600	3,550	1.20%	0.0032%
KANSAS CITY POWER & LIGHT CO.	NOTES	ELEC	2011	400,000	99.358	0.875	400	3,900	0.98%	0.0035%
SOUTHERN POWER	SER 2001A, SR. NOTES	ELEC	2011	300,000	99.547	0.875	350	2,975	1.00%	0.0027%
ENERGY LOUISIANA	SR. SEC. INVESTMENT REC BONDS	ELEC	2011	207,156	99.989	0.350	2583	3,308	1.62%	0.0030%
PUBLIC SERVICE CO OF NEW MEXICO	SR UNS NOTES	ELEC	2011	160,000	99.857	0.650	600	1,640	1.04%	0.0015%
MISSISSIPPI POWER	SR. 2011B SR. NOTES	ELEC	2011	150,000	99.921	0.875	285	1,598	1.08%	0.0014%
TUCSON ELECTRIC POWER CO	NOTES	ELEC	2011	250,000	99.682	0.650	275	1,900	0.77%	0.0017%
SOUTHERN POWER	SERIES 2011A, SR NOTES	ELEC	2011	275,000	101.465	0.875	335	2,741	1.01%	0.0025%
BALTIMORE GAS & ELECT CO.	NOTES	ELEC	2011	300,000	99.449	0.650	500	2,450	0.82%	0.0022%
PUDGET SOUND ENERGY	SR NOTES	ELEC	2011	250,000	100.000	0.875	500	2,688	1.09%	0.0024%
NISOURCE FINANCE CORP	NOTES	ELEC	2011	250,000	99.623	0.650	400	1,625	0.65%	0.0015%
NISOURCE FINANCE CORP	NOTES	ELEC	2011	250,000	99.783	0.875	2188	2,188	0.88%	0.0020%
SAN DIEGO GAS & ELECTRIC CO.	1ST MORT BONDS SER LLL	ELEC	2011	250,000	99.860	0.875	250	2,438	0.98%	0.0022%
PUDGET SOUND ENERGY	SR. NOTES	ELEC	2011	45,000	100.000	0.875	300	694	1.57%	0.0006%
SOUTHERN CALIFORNIA EDISON	1ST & REF MORT BONDS SER. 2011E	ELEC	2011	250,000	99.438	0.875	525	2,713	1.10%	0.0024%
DTE ENERGY CO.	SERIES I, JR SUB DEBT	ELEC	2011	280,000	25.000	0.788	350	2,555	0.92%	0.0023%
PACIFIC GAS & ELECTRIC CO	SR. NOTES	ELEC	2011	250,000	99.655	0.875	475	2,663	1.08%	0.0024%
FLORIDA POWER & LIGHT CO.	1ST MORT BONDS	ELEC	2011	600,000	99.753	0.875	2400	7,650	1.29%	0.0069%
PPL ENERGY SUPPLY COMPANY	SR. NOTES	ELEC	2011	500,000	99.968	0.650	400	3,650	0.74%	0.0033%
AGL CAPITAL CORP	SR. NOTES	GAS	2011	500,000	99.833	0.875	275	4,650	0.94%	0.0042%
ATMOS ENERGY CO	SR. NOTES	GAS	2011	400,000	99.678	0.875	1000	4,500	1.14%	0.0041%
NORTHWEST NATURAL GAS CO	SEC.MED TERM NOTES, SER B	GAS	2011	500,000	100.000	0.625	NA	3,125	0.63%	0.0028%
AGL CAPITAL CORP	SR.NOTES	GAS	2011	300,000	98.483	0.650	195	2,145	0.72%	0.0019%
AGL CAPITAL CORP	SR. NOTES	GAS	2011	200,000	113.434	0.875	130	1,880	0.95%	0.0017%
NATIONAL FUEL GAS CO	NOTES	GAS	2011	500,000	99.867	0.650	650	3,900	0.79%	0.0035%
TELEPHONE & DATA SYSTEMS, INC	SR. NOTES	TELE	2011	300,000	100.000	3.150	700	10,150	3.50%	0.0094%
VERIZON COMMUNICATIONS, INC	NOTES	TELE	2011	1,500,000	99.145	0.450	6750	6,750	0.45%	0.0060%
VERIZON COMMUNICATIONS, INC	NOTES	TELE	2011	1,000,000	98.333	0.750	7500	7,500	0.76%	0.0067%
QWEST CORP	NOTES	TELE	2011	575,000	100.000	3.150	400	18,513	3.33%	0.0170%
CENTURY LINK	SERIES NOTES SER. S	TELE	2011	1,250,000	99.659	0.800	10,000	10,000	0.81%	0.0090%
CENTURY LINK	SERIES NOTES SER. P	TELE	2011	400,000	95.377	1.025	4,100	4,100	1.04%	0.0037%
AT&T	GLOBAL NOTES	TELE	2011	1,500,000	99.705	0.750	6,750	6,750	0.45%	0.0060%
AT&T	GLOBAL NOTES	TELE	2011	2,000,000	99.336	0.450	15,000	15,000	0.76%	0.0135%
QWEST CORP	NOTES	TELE	2011	950,000	98.181	0.650	600	6,775	0.72%	0.0061%
VERIZON COMMUNICATIONS, INC	NOTES	TELE	2011	1,850,000	99.208	0.450	8,325	8,325	0.45%	0.0074%
VERIZON COMMUNICATIONS, INC	NOTES	TELE	2011	750,000	99.068	0.750	5,625	5,625	0.76%	0.0050%
Flotation cost all companies				112,294,426					1.13%	1.10%
				306						

**FLOTATION COST ANALYSIS 2012**  
**COMMON STOCK ISSUES - PUBLIC OFFERINGS - 2007 to 2011**

Company	Type of Utility	Year Issued	Number of Shares (000)	Amount Offered (\$000)	Underwriter Commission		EARNINGS PER SHARE	Estimated Expenses (000)	Flotation Cost		
					Per Share (\$)	% of Price (%)			\$000	Per Cent %	Wtd Avg %
ENERGY EAST CORP	ELEC	2007	9,000	218,250	0.728	3.000	1.770	165	6,713	3.08%	0.10%
VECTRON CORP	GAS	2007	4,600	130,318	0.990	3.495	1.440		4,554	3.49%	0.07%
EMPIRE DISTR ELECTRIC COMP	ELEC	2007	3,000	69,000	0.997	4.335	1.380	250	3,241	4.71%	0.05%
JTC HOLDING CORP	ELEC	2008	5,583	291,669	2.131	4.079	0.920	900	12,798	4.40%	0.19%
ITC HOLDING CORP	ELEC	2008	4,000	40,000	0.100	0.010	NA	40	440	1.10%	0.01%
OTTERTAIL CORP	ELEC	2008	4,500	135,000	1.088	3.625	1.780	40	4,934	3.65%	0.07%
IDACORP	ELEC	2008	3,000	85,215	0.284	0.010	NA	90	942	1.11%	0.01%
AMEREN	ELEC	2009	19,000	479,750	0.758	3.000	2.880	450	14,843	3.09%	0.22%
CLEAN ENERGY	GAS	2009	8,200	68,060	0.498	6.000	-0.980	400	4,484	6.59%	0.07%
GREAT PLAINS ENERGY INC	ELEC	2009	10,000	140,000	0.490	3.500	1.510	300	5,200	3.71%	0.08%
PORTLAND GENERAL ELECTRIC CORP	ELEC	2009	10,850	152,985	0.494	3.500	NA	375	5,729	3.75%	0.08%
PROGRESSIVE ENERGY	ELEC	2009	12,500	468,750	1.125	3.000	NA	300	14,363	3.06%	0.21%
NORTHEAST UTILITIES	ELEC	2009	16,500	333,300	0.657	3.250	0.830	335	11,167	3.35%	0.16%
AMERICAN ELECTRIC POWER CO., INC	ELEC	2009	60,000	1,470,000	0.735	3.000	3.430	400	44,500	3.03%	0.65%
UIL HOLDINGS CORP	ELEC	2009	4,000	84,000	1.050	5.000	3.120	325	4,525	5.39%	0.07%
PENNACLE WEST CAPITAL CORPORATION	ELEC	2010	6,000	228,000	1.330	3.500	2.100	190	8,170	3.58%	0.12%
CENTERPOINT ENERGY	ELEC	2010	22,000	283,800	0.452	3.500	2.140	277	10,210	3.60%	0.15%
BLACK HILLS CORP	ELEC	2010	4,000	119,000	1.040	3.496	2.690	277	4,437	3.73%	0.07%
PPL Corp	ELEC	2011	80,000	2,024,000	0.759	0.030	NA		60,720	3.00%	0.89%
<b>Flotation Cost All Companies</b>		<b>19</b>		<b>6,821,097</b>					<b>Average</b>	<b>3.55%</b>	<b>3.25%</b>

# **EXHIBIT G**

## **Bond Ratings**



Wyoming Department of Revenue  
 Netback Return on Investment Calculation  
 2011 Bond Ratings  
 Production Year: 2011

Company Name	Standard & Poors	Moody's
Encana Corp.	BBB	Baa2
Ultra Petroleum Corp.	NR	NR
ExxonMobil	AAA	Aaa
Anadarko Petroleum	BBB-	Ba1
QEP Resources Inc.	BB+	Ba1
BP p.l.c.	A	A2
Williams Cos	BB+	Baa3
Royal Dutch Shell	AA	Aa1
Chevron Corp	AA	Aa1
Devon Energy	BBB+	Baa1

Note: The source of Moody's credit rating the Moody's website [www.moodys.com](http://www.moodys.com). The source of the Standard and Poor's credit rating from the Standard and Poor's website [www.standardandpoors.com](http://www.standardandpoors.com). All information current as of February 1, 2012.