



Oklahoma Tax Commission

Ad Valorem Division

Jeff Spelman, CAE, Director

Capitalization Rate Study

January, 2014

Mike Isbell, Administrator

Public Service Section

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OKLAHOMA TAX COMMISSION



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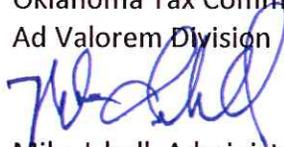
April 30, 2014

The Public Service Section of the Ad Valorem Division acknowledges the contribution of those individuals taking part in the development of our capitalization rates for 2014. Through the Capitalization Rate Conference, the draft posted on our website and the following comment period, participation has been helpful and positive.

This is an ongoing process, concepts in valuation methodology change, continuing the education process. It is our intent to be as transparent as possible while being receptive to any input given.

We look forward to your continued participation in this process.

Sincerely,

Oklahoma Tax Commission
Ad Valorem Division

Mike Isbell, Administrator
Public Service Section



- MEMBER -

EXECUTIVE SUMMARY

Executive Summary

The income approach to value converts projected future income or cash flow into an estimate of present value. The accuracy of this approach is no greater than the validity of the assumptions used to estimate the key variables, particularly the capitalization rate variable. The mathematical techniques used in the approach convert those assumptions into an estimate of current market value.

This booklet contains a study of each of the eight state assessed industry groups in Oklahoma. Industry data was gathered by group as identified by Value Line Investment Survey published from the period of November 2013 through January 2014.

Generally accepted appraisal procedures were used to estimate the cost of capital for debt and equity. The long term debt cost is the cost for a particular risk class of debt on the lien date. The equity rate reflects the rate of return or compensation that will satisfy the risk that a prospective purchaser would assume by investing in the property.

Authority for Valuation

The Oklahoma Tax Commission, Ad Valorem Division, is charged with the responsibility for the valuation of Railroad, Air Carrier, and Public Service Corporation property in accordance with Title 68, Oklahoma Statutes, Section 2808. The term "public service" includes electric companies, fluid or product pipeline companies, gas distribution and transmission companies, telecommunication companies, and water companies.

Band of Investment, Capital Structure

A representative capital structure is developed for each industry using the market value of equity and the book value of long term debt and any preferred stock. Using Value Line Investment Survey the market value of equity can be calculated by multiplying the number of shares outstanding by the listed stock price, or by utilizing the given market capitalization number already calculated. The debt components are book amounts unless market amounts are readily available and predetermined to be significantly different. Preferred stock was excluded in the calculations for all industry types.

The rates of debt and equity capital are weighted by the respective amounts of such capital deemed most likely to be employed by a prospective buyer. The result is a representative or typical capital structure of an industry group of companies, not that of the present owner, striking an optimum capital structure from the perspective of a potential investor.

Cost of Debt

Cost of debt was calculated as the twelve month bond yield average from Mergent Bond Record for public utility and industrial bonds utilizing that bond rating perceived as typical for each industry.

Executive Summary

Cost of Capital

Equity rate calculations were derived upon review of Discounted Cash Flow, Capital Asset Pricing Model (CapM), and Earnings Price Ratios.

Discounted Cash Flow (Gordon Growth Model) Allows for the calculation of two rates within its model utilizing the dividend yield, dividend growth rate estimates and earnings growth rate estimates as listed in Value Line Investment Survey. Cost of capital being calculated for dividends by adding the dividend yield and the dividend estimate. Similarly the cost of capital for earnings is calculated by adding the dividend yield and the earnings estimate. No calculation is utilized where yield or growth estimates for a given company are not available as provided by our sources.

Capital Asset Pricing Model (CapM) In the application of the CapM, the most sensitive component affecting the outcome is the estimate of the beta statistic. A choice of time frames and frequencies of measurement in the calculation of the beta can produce significantly different results. Another factor in the use of beta is the choice of whether to use an unadjusted beta or a beta adjusted to reflect the fact that betas revert to the mean over time. For this study the company levered betas as developed and presented in The Value Line Investment Survey for the selected industry groups are used.

Earnings Price Ratios (E/P Ratio) Utilizing Value Line Investment Survey for the selected industry groups, the E/P Ratio was calculated with the projected earnings divided by the recent price.

Flotation Costs

Flotation costs are those costs associated with the issuance of new securities and include both the underwriting spread and the costs incurred by the issuing company from the offering. Financial theory suggests and evidence supports that firms do not typically issue new common equity as a matter of common practice. Therefore in determining a capitalization rate, no adjustment will be made in the capitalization rate or the income stream for hypothetical flotation costs. Flotation costs actually incurred may be accounted for in the income stream.

Utilization of Other Studies and Data

Valuation staff has considered and where appropriate utilized data and capitalization studies submitted by assessed and interested parties in the development of the derived rates.

The capitalization rates published in this study are intended to be applied to the unitary operations of those companies subject to central valuation and assessment by the Oklahoma State Board of Equalization.

Industry Capitalization Rate Summary

<i>Industry</i>	<i>Equity Rate</i>	<i>Debt Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>	
<i>Airline</i>						
	<i>Cargo</i>	13.95%	5.22%	90.30%	9.70%	13.10%
	<i>Passenger</i>	14.10%	5.22%	68.17%	31.83%	11.27%
<i>Electric</i>		10.30%	4.98%	58.13%	41.87%	8.07%
<i>Fluid Pipeline (Petroleum Integrated)</i>		12.35%	5.22%	92.54%	7.46%	11.82%
<i>Gas Distribution (Natural Gas Utility)</i>		10.25%	4.98%	60.84%	39.16%	8.19%
<i>Gas Transmission (Natural Gas Diversified)</i>		12.70%	5.22%	81.39%	18.61%	11.31%
<i>Oil/Gas Distribution</i>		11.50%	5.22%	61.57%	38.43%	9.09%
<i>Pipeline MLPs</i>		13.00%	5.22%	72.53%	27.47%	10.86%
<i>Railroad</i>		13.55%	5.22%	86.56%	13.44%	12.43%
<i>Telecommunications Services</i>		12.55%	5.22%	66.95%	33.05%	10.13%
<i>Telecommunications Utility</i>		13.00%	4.98%	46.65%	53.35%	8.72%
<i>Water</i>		10.15%	4.57%	62.21%	37.79%	8.04%

Airline Industry

2014 Capitalization Rate Study Airline Industry Notes

- Recognizing the different operational services as provided by this industry group, it was broken out into two segments, cargo and passenger service.
- From the passenger service segment, Bristow Group, Inc. was excluded as their core business is the helicopter transport of personnel from onshore bases to offshore drilling rigs, platforms, and other installations. Also excluded were Copa Holdings, S.A., a leading Latin American provider of passenger and cargo service.
- Staff considered capitalization studies gathered and submitted by:

No Submissions

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Airline</i>				
<i>Cargo</i>	13.95%	90.30%	9.70%	13.10%
<i>Passenger</i>	14.10%	68.17%	31.83%	11.27%

Industry Equity Rate Summary

Airline

Cargo

CapM Ex Post Equity Rate	11.91%
CapM Ex Ante Equity Rate	15.09%
DCF (Dividend) Equity Rate	9.20%
DCF (Earnings) Equity Rate	9.70%
Earnings Price Ratio	9.18%

Passenger

CapM Ex Post Equity Rate	11.60%
CapM Ex Ante Equity Rate	14.67%
DCF (Dividend) Equity Rate	21.45%
DCF (Earnings) Equity Rate	16.35%
Earnings Price Ratio	12.55%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Airline</i>					
<i>Cargo</i>	10.63%	13.32%	1.18	11.91%	15.09%
<i>Passenger</i>	10.63%	13.32%	1.14	11.60%	14.67%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)

c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)

Value Line Investment Survey, November 2013 through January 2014

Morningstar 2014 Valuation Yearbook

Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Airline								
Cargo	Atlas Air Worldwide Holdings, Inc.	B+	925,000,000	0.00%	0.00%	3.00%		
	FedEx Corp.	A+	42,400,000,000	0.40%	8.00%	9.00%	8.40%	9.40%
	United Parcel Service, Inc.	A	94,000,000,000	2.50%	7.50%	7.50%	10.00%	10.00%
Median			42,400,000,000				9.20%	9.70%
Arithmetic Mean			45,775,000,000				9.20%	9.70%
Passenger								
	Alaska Air Group, Inc.	B+	5,300,000,000	1.10%	0.00%	9.50%		10.60%
	Allegiant Travel Company	B++	2,000,000,000	0.00%	0.00%	16.00%		
	Delta Air Lines, Inc.	C++	23,800,000,000	0.90%	0.00%	12.50%		13.40%
	Hawaiian Holdings, Inc.	C++	425,000,000	0.00%	0.00%	15.00%		
	JetBlue Airways Corp.	C++	2,500,000,000	0.00%	0.00%	14.50%		
	SkyWest, Inc.	B	825,000,000	1.00%	4.00%	24.00%	5.00%	25.00%
	Southwest Airlines	B+	12,700,000,000	0.90%	37.00%	15.50%	37.90%	16.40%
	Spirit Airlines, Inc.	B++	3,200,000,000	0.00%	0.00%	0.00%		
	United Continental Holdings, Inc.	C++	13,700,000,000	0.00%	0.00%	9.00%		
US Airways Group, Inc.	C++	4,800,000,000	0.00%	0.00%	9.50%			
Median			4,000,000,000				21.45%	14.90%
Arithmetic Mean			6,925,000,000				21.45%	16.35%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Airline						
Cargo	Atlas Air Worldwide Holdings, Inc.	B+	925,000,000	37.32	5.65	15.14%
	FedEx Corp.	A+	42,400,000,000	134.00	8.30	6.19%
	United Parcel Service, Inc.	A	94,000,000,000	100.72	6.25	6.21%
Median			42,400,000,000			6.21%
Arithmetic Mean			45,775,000,000			9.18%
Passenger						
Passenger	Alaska Air Group, Inc.	B+	5,300,000,000	75.69	7.00	9.25%
	Allegiant Travel Company	B++	2,000,000,000	106.51	8.15	7.65%
	Delta Air Lines, Inc.	C++	23,800,000,000	27.85	3.35	12.03%
	Hawaiian Holdings, Inc.	C++	425,000,000	8.20	2.30	28.05%
	JetBlue Airways Corp.	C++	2,500,000,000	8.75	0.75	8.57%
	SkyWest, Inc.	B	825,000,000	16.01	2.40	14.99%
	Southwest Airlines	B+	12,700,000,000	18.17	1.35	7.43%
	Spirit Airlines, Inc.	B++	3,200,000,000	43.76	3.80	8.68%
	United Continental Holdings, Inc.	C++	13,700,000,000	37.80	5.30	14.02%
US Airways Group, Inc.	C++	4,800,000,000	24.23	3.60	14.86%	
Median			4,000,000,000			10.64%
Arithmetic Mean			6,925,000,000			12.55%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Airline							
Cargo	Atlas Air Worldwide Holdings, Inc.	B+	925,000,000	1,473,700,000	1.59	38.56%	61.44%
	FedEx Corp.	A+	42,400,000,000	2,739,000,000	0.06	93.93%	6.07%
	United Parcel Service, Inc.	A	94,000,000,000	10,897,000,000	0.12	89.61%	10.39%
Median			42,400,000,000	2,739,000,000	0.12	89.61%	10.39%
Arithmetic Mean			45,775,000,000	5,036,566,667	0.59	74.04%	25.96%
Weighted Average			77,441,220,644	8,314,689,769		90.30%	9.70%
Passenger							
Passenger	Alaska Air Group, Inc.	B+	5,300,000,000	782,000,000	0.15	87.14%	12.86%
	Allegiant Travel Company	B++	2,000,000,000	166,100,000	0.08	92.33%	7.67%
	Delta Air Lines, Inc.	C++	23,800,000,000	10,077,000,000	0.42	70.25%	29.75%
	Hawaiian Holdings, Inc.	C++	425,000,000	651,800,000	1.53	39.47%	60.53%
	JetBlue Airways Corp.	C++	2,500,000,000	2,206,000,000	0.88	53.12%	46.88%
	SkyWest, Inc.	B	825,000,000	1,349,200,000	1.64	37.94%	62.06%
	Southwest Airlines	B+	12,700,000,000	2,616,000,000	0.21	82.92%	17.08%
	Spirit Airlines, Inc.	B++	3,200,000,000	0	0.00	100.00%	0.00%
	United Continental Holdings, Inc.	C++	13,700,000,000	10,985,000,000	0.80	55.50%	44.50%
	US Airways Group, Inc.	C++	4,800,000,000	5,506,000,000	1.15	46.57%	53.43%
Median			4,000,000,000	1,777,600,000	0.61	62.88%	37.12%
Arithmetic Mean			6,925,000,000	3,433,910,000	0.69	66.53%	33.47%
Weighted Average			14,265,722,022	6,662,252,780		68.17%	31.83%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Airline, Selected Comparables</i>						
<i>Cargo</i>	Atlas Air Worldwide Holdings, Inc.	1.60	1.60	1.65	1.65	1.60
	FedEx Corporation	0.95	1.00	1.00	1.00	1.05
	United Parcel Service, Inc.	0.85	0.85	0.85	0.85	0.90
<i>Median</i>		0.95	1.00	1.00	1.00	1.05
<i>Arithmetic Mean</i>		1.13	1.15	1.17	1.17	1.18
<hr/>						
<i>Passenger</i>	Alaska Air Group, Inc.	1.20	1.15	1.15	1.10	1.05
	Allegiant Travel Co.	0.85	0.80	0.80	0.75	0.65
	Delta Air Lines, Inc.	1.55	1.50	1.40	1.40	1.30
	Hawaiian Holdings, Inc.			1.10	1.10	1.10
	JetBlue Airways Corp.	1.25	1.25	1.25	1.25	1.25
	Skywest, Inc.	1.25	1.20	1.10	1.15	1.10
	Southwest Airlines	0.95	0.95	1.00	1.00	1.05
	Spirit Airlines, Inc.					1.00
	United Continental Holdings, Inc.		1.80	1.70	1.60	1.40
US Airways Group, Inc.	1.80	1.75	1.65	1.60	1.50	
<i>Median</i>		1.25	1.23	1.15	1.15	1.10
<i>Arithmetic Mean</i>		1.26	1.30	1.24	1.22	1.14

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Airline, Value Line</i>						
	Alaska Air Group, Inc.	1.20	1.15	1.15	1.10	1.05
	Allegiant Travel Co.	0.85	0.80	0.80	0.75	0.65
	Atlas Air Worldwide Holdings, Inc.	1.60	1.60	1.65	1.65	1.60
	Bristow Group, Inc.	1.35	1.35	1.30	1.25	1.25
	Copa Holdings S.A.			1.00	0.95	0.95
	Delta Air Lines, Inc.	1.55	1.50	1.40	1.40	1.30
	FedEx Corporation	0.95	1.00	1.00	1.00	1.05
	Hawaiian Holdings, Inc.			1.10	1.10	1.10
	JetBlue Airways Corp.	1.25	1.25	1.25	1.25	1.25
	Skywest, Inc.	1.25	1.20	1.10	1.15	1.10
	Southwest Airlines	0.95	0.95	1.00	1.00	1.05
	Spirit Airlines, Inc.					1.00
	United Continental Holdings, Inc.		1.80	1.70	1.60	1.40
	United Parcel Service, Inc.	0.85	0.85	0.85	0.85	0.90
	US Airways Group, Inc.	1.80	1.75	1.65	1.60	1.50
<i>Median</i>		1.25	1.23	1.13	1.13	1.10
<i>Arithmetic Mean</i>		1.24	1.27	1.21	1.19	1.14

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Electric Industry

2014 Capitalization Rate Study Electric Industry Notes

- From the Electric Industry segment, The Value Line Investment Survey list of companies was left intact.
- Staff considered capitalization studies gathered and submitted by:

No Submissions

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Electric</i>	10.30%	58.13%	41.87%	8.07%

Industry Equity Rate Summary

Electric

CapM Ex Post Equity Rate	9.00%
CapM Ex Ante Equity Rate	11.06%
DCF (Dividend) Equity Rate	8.83%
DCF (Earnings) Equity Rate	10.31%
Earnings Price Ratio	7.77%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Electric</i>	10.63%	13.32%	0.77	9.00%	11.06%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
 Value Line Investment Survey, November 2013 through January 2014
 Morningstar 2014 Valuation Yearbook

Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Electric								
	Allete, Inc.	A	2,000,000,000	4.10%	3.50%	6.00%	7.60%	10.10%
	Alliant Energy Corp.	A	5,700,000,000	3.80%	4.50%	6.00%	8.30%	9.80%
	Ameren Corp.	B++	8,600,000,000	4.50%	1.50%	-0.50%	6.00%	4.00%
	American Electric Power Company, Inc.	B++	22,000,000,000	4.40%	4.00%	5.50%	8.40%	9.90%
	CenterPoint Energy, Inc.	B++	10,000,000,000	3.70%	4.00%	6.00%	7.70%	9.70%
	Cleco Corporation	A	2,700,000,000	3.50%	10.00%	5.50%	13.50%	9.00%
	CMS Energy Corporation	B+	6,900,000,000	4.10%	8.00%	5.50%	12.10%	9.60%
	DTE Energy Company	B++	12,000,000,000	4.00%	5.50%	5.00%	9.50%	9.00%
	Empire District Electric Company	B++	975,000,000	4.60%	3.00%	5.00%	7.60%	9.60%
	Entergy Corporation	B++	11,000,000,000	5.40%	0.50%	-3.50%	5.90%	1.90%
	Great Plains Energy Incorporated	B+	3,700,000,000	3.90%	4.50%	6.50%	8.40%	10.40%
	Integrus Energy Group, Inc.	A	4,300,000,000	5.10%	1.00%	4.50%	6.10%	9.60%
	ITC Holdings Corp.	B++	4,900,000,000	1.90%	10.50%	15.50%	12.40%	17.40%
	MGE Energy Inc.	A	1,200,000,000	3.10%	3.50%	6.50%	6.60%	9.60%
	OGE Energy Corp.	A	6,800,000,000	2.60%	8.50%	5.00%	11.10%	7.60%
	Otter Tail Corporation	B+	1,000,000,000	4.20%	1.50%	21.50%	5.70%	25.70%
	Vectren Corp.	A	2,800,000,000	4.20%	2.50%	7.50%	6.70%	11.70%
	Westar Energy, Inc.	B++	4,000,000,000	4.40%	3.00%	6.00%	7.40%	10.40%
	Wisconsin Energy Corporation	A	9,300,000,000	3.80%	13.00%	7.00%	16.80%	10.80%
Median			4,900,000,000				7.70%	9.70%
Arithmetic Mean			6,309,210,526				8.83%	10.31%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Electric						
	Allete, Inc.	A	2,000,000,000	48.37	3.50	7.24%
	Alliant Energy Corp.	A	5,700,000,000	51.28	4.00	7.80%
	Ameren Corp.	B++	8,600,000,000	35.24	2.50	7.09%
	American Electric Power Company, Inc.	B++	22,000,000,000	46.16	4.00	8.67%
	CenterPoint Energy, Inc.	B++	10,000,000,000	23.24	1.75	7.53%
	Cleco Corporation	A	2,700,000,000	45.40	3.50	7.71%
	CMS Energy Corporation	B+	6,900,000,000	26.13	2.00	7.65%
	DTE Energy Company	B++	12,000,000,000	66.63	5.00	7.50%
	Empire District Electric Company	B++	975,000,000	22.42	1.70	7.58%
	Entergy Corporation	B++	11,000,000,000	61.30	5.50	8.97%
	Great Plains Energy Incorporated	B+	3,700,000,000	23.91	2.00	8.36%
	Integrus Energy Group, Inc.	A	4,300,000,000	53.66	4.25	7.92%
	ITC Holdings Corp.	B++	4,900,000,000	93.30	7.75	8.31%
	MGE Energy Inc.	A	1,200,000,000	54.06	3.85	7.12%
	OGE Energy Corp.	A	6,800,000,000	34.26	2.25	6.57%
	Otter Tail Corporation	B+	1,000,000,000	28.44	2.00	7.03%
	Vectren Corp.	A	2,800,000,000	34.45	2.70	7.84%
	Westar Energy, Inc.	B++	4,000,000,000	31.64	2.75	8.69%
	Wisconsin Energy Corporation	A	9,300,000,000	40.87	3.25	7.95%
Median			4,900,000,000			7.71%
Arithmetic Mean			6,309,210,526			7.77%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Electric							
	Allete, Inc.	A	2,000,000,000	1,064,200,000	0.53	65.27%	34.73%
	Alliant Energy Corp.	A	5,700,000,000	3,104,800,000	0.54	64.74%	35.26%
	Ameren Corp.	B++	8,600,000,000	5,274,000,000	0.61	61.99%	38.01%
	American Electric Power Company, Inc.	B++	22,000,000,000	16,202,000,000	0.74	57.59%	42.41%
	CenterPoint Energy, Inc.	B++	10,000,000,000	7,758,000,000	0.78	56.31%	43.69%
	Cleco Corporation	A	2,700,000,000	1,291,000,000	0.48	67.65%	32.35%
	CMS Energy Corporation	B+	6,900,000,000	7,229,000,000	1.05	48.84%	51.16%
	DTE Energy Company	B++	12,000,000,000	6,846,000,000	0.57	63.67%	36.33%
	Empire District Electric Company	B++	975,000,000	743,500,000	0.76	56.74%	43.26%
	Entergy Corporation	B++	11,000,000,000	12,308,000,000	1.12	47.19%	52.81%
	Great Plains Energy Incorporated	B+	3,700,000,000	3,515,800,000	0.95	51.28%	48.72%
	Integrus Energy Group, Inc.	A	4,300,000,000	2,506,200,000	0.58	63.18%	36.82%
	ITC Holdings Corp.	B++	4,900,000,000	3,364,900,000	0.69	59.29%	40.71%
	MGE Energy Inc.	A	1,200,000,000	400,400,000	0.33	74.98%	25.02%
	OGE Energy Corp.	A	6,800,000,000	2,400,000,000	0.35	73.91%	26.09%
	Otter Tail Corporation	B+	1,000,000,000	437,300,000	0.44	69.57%	30.43%
	Vectren Corp.	A	2,800,000,000	1,627,000,000	0.58	63.25%	36.75%
	Westar Energy, Inc.	B++	4,000,000,000	3,163,900,000	0.79	55.84%	44.16%
	Wisconsin Energy Corporation	A	9,300,000,000	4,370,900,000	0.47	68.03%	31.97%
Median			4,900,000,000	3,163,900,000	0.58	63.18%	36.82%
Arithmetic Mean			6,309,210,526	4,400,363,158	0.65	61.54%	38.46%
Weighted Average			10,264,864,442	7,392,770,407		58.13%	41.87%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Electric, Selected Comparables</i>						
	Allete, Inc.	0.70	0.70	0.70	0.70	0.75
	Alliant Energy Corp.	0.70	0.70	0.75	0.70	0.75
	Ameren Corp.	0.80	0.80	0.80	0.80	0.80
	American Electric Power, Inc.	0.70	0.70	0.70	0.65	0.70
	CenterPoint Energy, Inc.	0.80	0.80	0.80	0.75	0.80
	Cleco Corporation	0.65	0.65	0.70	0.65	0.70
	CMS Energy Corporation	0.80	0.75	0.75	0.75	0.70
	DTE Energy Company	0.75	0.75	0.75	0.75	0.80
	Empire District Electric Co.	0.75	0.70	0.70	0.65	0.70
	Energy Corporation	0.70	0.70	0.70	0.70	0.70
	Great Plains Energy, Inc.	0.75	0.75	0.75	0.75	0.85
	Integrus Energy Group, Inc.	0.95	0.90	0.90	0.90	1.00
	ITC Holdings Corp.	0.85	0.80	0.80	0.75	0.75
	MGE Energy Inc.	0.65	0.65	0.60	0.60	0.65
	OGE Energy Corporation	0.75	0.75	0.80	0.75	0.85
	Otter Tail Corporation	0.95	0.95	0.90	0.90	0.95
	Vectren, Corporation	0.75	0.70	0.70	0.70	0.70
	Westar Energy, Inc.	0.75	0.75	0.75	0.70	0.75
	Wisconsin Energy Corporation	0.65	0.65	0.65	0.60	0.65
<i>Median</i>		0.75	0.75	0.75	0.70	0.75
<i>Arithmetic Mean</i>		0.76	0.74	0.75	0.72	0.77

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	2010 <i>Value Line</i> <i>Levered Beta</i>	2011 <i>Value Line</i> <i>Levered Beta</i>	2012 <i>Value Line</i> <i>Levered Beta</i>	2013 <i>Value Line</i> <i>Levered Beta</i>	2014 <i>Value Line</i> <i>Levered Beta</i>
<i>Electric, Value Line</i>						
	Allete, Inc.	0.70	0.70	0.70	0.70	0.75
	Alliant Energy Corp.	0.70	0.70	0.75	0.70	0.75
	Ameren Corp.	0.80	0.80	0.80	0.80	0.80
	American Electric Power, Inc.	0.70	0.70	0.70	0.65	0.70
	CenterPoint Energy, Inc.	0.80	0.80	0.80	0.75	0.80
	Cleco Corporation	0.65	0.65	0.70	0.65	0.70
	CMS Energy Corporation	0.80	0.75	0.75	0.75	0.70
	DTE Energy Co.	0.75	0.75	0.75	0.75	0.80
	Empire District Electric Co.	0.75	0.70	0.70	0.65	0.70
	Energy Corporation	0.70	0.70	0.70	0.70	0.70
	Great Plains Energy, Inc.	0.75	0.75	0.75	0.75	0.85
	Integrus Energy Group, Inc.	0.95	0.90	0.90	0.90	1.00
	ITC Holdings Corp.	0.85	0.80	0.80	0.75	0.75
	MGE Energy Inc.	0.65	0.65	0.60	0.60	0.65
	OGE Energy Corporation	0.75	0.75	0.80	0.75	0.85
	Otter Tail Corporation	0.95	0.95	0.90	0.90	0.95
	Vectren, Corporation	0.75	0.70	0.70	0.70	0.70
	Westar Energy, Inc.	0.75	0.75	0.75	0.70	0.75
	Wisconsin Energy Corporation	0.65	0.65	0.65	0.60	0.65
Median		0.75	0.75	0.75	0.70	0.75
Arithmetic Mean		0.76	0.74	0.75	0.72	0.77

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Fluid Pipeline

2014 Capitalization Rate Study Fluid Pipeline (Petroleum Integrated) Industry Notes

- From the Fluid Pipeline (Petroleum Integrated) Industry segment, Petrobras (ADR) was excluded. While traded, the Brazilian Government is a majority holder of the common (voting) stock for this company.
- Staff considered capitalization studies gathered and submitted by:

No Submissions

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Fluid Pipeline (Petroleum Integrated)</i>	12.35%	92.54%	7.46%	11.82%

Industry Equity Rate Summary

Fluid Pipeline (Petroleum Integrated)

CapM Ex Post Equity Rate	11.67%
CapM Ex Ante Equity Rate	14.77%
DCF (Dividend) Equity Rate	13.89%
DCF (Earnings) Equity Rate	11.95%
Earnings Price Ratio	13.40%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Fluid Pipeline (Petroleum Integrated)</i>	10.63%	13.32%	1.15	11.67%	14.77%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
 Value Line Investment Survey, November 2013 through January 2014
 Morningstar 2014 Valuation Yearbook

Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Fluid Pipeline (Petroleum Integrated)								
	BP P.L.C. (ADR)	B+	149,000,000,000	4.80%	10.50%	10.50%	15.30%	15.30%
	Chevron Corp	A++	239,000,000,000	3.20%	8.00%	7.00%	11.20%	10.20%
	Exxon Mobil Corp.	A++	416,000,000,000	2.70%	8.50%	6.50%	11.20%	9.20%
	Hess Corporation	A	27,900,000,000	1.20%	18.50%	3.50%	19.70%	4.70%
	HollyFrontier Corporation	B++	9,500,000,000	2.80%	0.00%	0.00%		
	Imperial Oil	A+	36,800,000,000	1.20%	4.00%	6.50%	5.20%	7.70%
	Marathon Petroleum Corp	A	24,600,000,000	2.10%	22.00%	8.00%	24.10%	10.10%
	Murphy Oil Corporation	A+	12,000,000,000	1.90%	6.50%	12.50%	8.40%	14.40%
	Occidental Petroleum	A++	78,600,000,000	2.90%	11.00%	7.00%	13.90%	9.90%
	Phillips 66	B+	41,200,000,000	2.30%	0.00%	0.00%		
	Royal Dutch Shell (ADR)	A++	212,000,000,000	5.40%	3.00%	5.00%	8.40%	10.40%
	Suncor Energy, Inc.	A	55,400,000,000	2.10%	12.50%	12.50%	14.60%	14.60%
	Tesoro Corporation	B+	8,000,000,000	1.70%	0.00%	18.00%		19.70%
	Total S.A. (ADR)	A++	137,000,000,000	5.20%	5.00%	5.00%	10.20%	10.20%
	Valero Energy Corp.	B++	24,100,000,000	2.00%	22.50%	17.00%	24.50%	19.00%
Median			41,200,000,000				12.55%	10.20%
Arithmetic Mean			98,073,333,333				13.89%	11.95%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Fluid Pipeline (Petroleum Integrated)						
	BP P.L.C. (ADR)	B+	149,000,000,000	47.47	7.50	15.80%
	Chevron Corp	A++	239,000,000,000	123.74	16.45	13.29%
	Exxon Mobil Corp.	A++	416,000,000,000	95.09	11.00	11.57%
	Hess Corporation	A	27,900,000,000	82.63	7.00	8.47%
	HollyFrontier Corporation	B++	9,500,000,000	47.55	7.25	15.25%
	Imperial Oil	A+	36,800,000,000	43.40	5.15	11.87%
	Marathon Petroleum Corp	A	24,600,000,000	81.78	12.50	15.28%
	Murphy Oil Corporation	A+	12,000,000,000	64.22	8.60	13.39%
	Occidental Petroleum	A++	78,600,000,000	97.47	10.50	10.77%
	Phillips 66	B+	41,200,000,000	68.64	8.50	12.38%
	Royal Dutch Shell (ADR)	A++	212,000,000,000	67.51	10.50	15.55%
	Suncor Energy, Inc.	A	55,400,000,000	37.24	4.15	11.14%
	Tesoro Corporation	B+	8,000,000,000	57.56	8.00	13.90%
	Total S.A. (ADR)	A++	137,000,000,000	60.43	9.00	14.89%
	Valero Energy Corp.	B++	24,100,000,000	44.58	7.75	17.38%
Median			41,200,000,000			13.39%
Arithmetic Mean			98,073,333,333			13.40%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Fluid Pipeline (Petroleum Integrated)							
	BP P.L.C. (ADR)	B+	149,000,000,000	41,700,000,000	0.28	78.13%	21.87%
	Chevron Corp	A++	239,000,000,000	16,493,000,000	0.07	93.54%	6.46%
	Exxon Mobil Corp.	A++	416,000,000,000	7,404,000,000	0.02	98.25%	1.75%
	Hess Corporation	A	27,900,000,000	5,418,000,000	0.19	83.74%	16.26%
	HollyFrontier Corporation	B++	9,500,000,000	999,900,000	0.11	90.48%	9.52%
	Imperial Oil	A+	36,800,000,000	4,383,000,000	0.12	89.36%	10.64%
	Marathon Petroleum Corp	A	24,600,000,000	3,380,000,000	0.14	87.92%	12.08%
	Murphy Oil Corporation	A+	12,000,000,000	2,583,200,000	0.22	82.29%	17.71%
	Occidental Petroleum	A++	78,600,000,000	6,961,000,000	0.09	91.86%	8.14%
	Phillips 66	B+	41,200,000,000	6,132,000,000	0.15	87.04%	12.96%
	Royal Dutch Shell (ADR)	A++	212,000,000,000	31,972,000,000	0.15	86.90%	13.10%
	Suncor Energy, Inc.	A	55,400,000,000	10,331,000,000	0.19	84.28%	15.72%
	Tesoro Corporation	B+	8,000,000,000	3,364,000,000	0.42	70.40%	29.60%
	Total S.A. (ADR)	A++	137,000,000,000	33,923,000,000	0.25	80.15%	19.85%
	Valero Energy Corp.	B++	24,100,000,000	6,261,000,000	0.26	79.38%	20.62%
Median			41,200,000,000	6,261,000,000	0.15	86.90%	13.10%
Arithmetic Mean			98,073,333,333	12,087,006,667	0.18	85.58%	14.42%
Weighted Average			224,765,434,029	18,113,466,488		92.54%	7.46%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Fluid Pipeline (Petroleum Integrated), Selected Comparables</i>						
	BP P.L.C. (ADR)	1.00	1.00	1.05	1.05	1.10
	Chevron Corp.	0.90	0.90	0.95	0.95	1.00
	Exxon Mobil Corp.	0.75	0.75	0.80	0.80	0.85
	Hess Corporation	1.20	1.20	1.25	1.30	1.25
	HollyFrontier Corporation	1.25	1.20			1.25
	Imperial Oil			1.15	1.15	1.10
	Marathon Petroleum Corp	1.30	1.25			1.30
	Murphy Oil Corporation	1.20	1.20	1.20	1.25	1.20
	Occidental Petroleum	1.20	1.15	1.15	1.20	1.15
	Phillips 66					
	Royal Dutch Shell (ADR)	1.05	1.05	1.05	1.05	1.05
	Suncor Energy, Inc.			1.25	1.30	1.25
	Tesoro Corporation	1.30	1.25	1.25	1.30	1.20
	Total S.A. (ADR)	1.05	1.10	1.10	1.10	1.15
	Valero Energy Corp.	1.30	1.25	1.30	1.35	1.25
<i>Median</i>		1.20	1.18	1.15	1.18	1.18
<i>Arithmetic Mean</i>		1.13	1.11	1.13	1.15	1.15

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Fluid Pipeline (Petroleum Integrated), Value Line</i>						
	BP P.L.C. (ADR)	1.00	1.00	1.05	1.05	1.10
	Chevron Corp	0.90	0.90	0.95	0.95	1.00
	Exxon Mobil Corp.	0.75	0.75	0.80	0.80	0.85
	Hess Corporation	1.20	1.20	1.25	1.30	1.25
	HollyFrontier Corporation	1.25	1.20			1.25
	Imperial Oil			1.15	1.15	1.10
	Marathon Petroleum Corp.	1.30	1.25			1.30
	Murphy Oil Corporation	1.20	1.20	1.20	1.25	1.20
	Occidental Petroleum	1.20	1.15	1.15	1.20	1.15
	Petrobras (ADR)	1.65	1.60	1.55	1.55	1.45
	Phillips 66					
	Royal Dutch Shell (ADR)	1.05	1.05	1.05	1.05	1.05
	Suncor Energy, Inc.			1.25	1.30	1.25
	Tesoro Corporation	1.30	1.25	1.25	1.30	1.20
	Total S.A. (ADR)	1.05	1.10	1.10	1.10	1.15
	Valero Energy Corp.	1.30	1.25	1.30	1.35	1.25
<i>Median</i>		1.20	1.20	1.15	1.20	1.20
<i>Arithmetic Mean</i>		1.17	1.15	1.16	1.18	1.17

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Gas Distribution

2014 Capitalization Rate Study Gas Distribution (Natural Gas Utility) Industry Notes

- From the Natural Gas Utility Industry segment, UGI Corp. was excluded as their primary business is the marketing and delivery of propane gas.
- Staff considered capitalization studies gathered and submitted by:

No Submissions

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Gas Distribution (Natural Gas Utility)</i>	10.25%	60.84%	39.16%	8.19%

Industry Equity Rate Summary

Gas Distribution (Natural Gas Utility)

CapM Ex Post Equity Rate	8.75%
CapM Ex Ante Equity Rate	10.71%
DCF (Dividend) Equity Rate	7.92%
DCF (Earnings) Equity Rate	10.12%
Earnings Price Ratio	7.47%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Gas Distribution (Natural Gas Utility)</i>	10.63%	13.32%	0.73	8.75%	10.71%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Gas Distribution (Natural Gas Utility)								
	AGL Resources, Inc.	A	5,600,000,000	4.00%	4.50%	8.00%	8.50%	12.00%
	Atmos Energy Corporation	B++	4,100,000,000	3.30%	4.00%	7.50%	7.30%	10.80%
	Laclede Group, Inc.	B++	1,500,000,000	3.80%	3.50%	6.00%	7.30%	9.80%
	New Jersey Resources Corp.	A	1,900,000,000	3.70%	3.00%	5.50%	6.70%	9.20%
	Nisource Inc.	B+	10,000,000,000	3.10%	4.50%	10.50%	7.60%	13.60%
	Northwest Natural Gas Co.	A	1,200,000,000	4.30%	2.50%	4.50%	6.80%	8.80%
	Piedmont Natural Gas Co.	B++	2,500,000,000	3.70%	3.00%	4.00%	6.70%	7.70%
	South Jersey Industries, Inc.	B++	1,800,000,000	3.50%	8.50%	7.50%	12.00%	11.00%
	Southwest Gas	B++	2,500,000,000	2.60%	7.00%	8.00%	9.60%	10.60%
	WGL Holdings, Inc.	A	2,100,000,000	4.20%	2.50%	3.50%	6.70%	7.70%
Median			2,300,000,000				7.30%	10.20%
Arithmetic Mean			3,320,000,000				7.92%	10.12%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Gas Distribution (Natural Gas Utility)						
	AGL Resources, Inc.	A	5,600,000,000	47.24	3.90	8.26%
	Atmos Energy Corporation	B++	4,100,000,000	44.80	3.30	7.37%
	Laclede Group, Inc.	B++	1,500,000,000	46.61	3.85	8.26%
	New Jersey Resources Corp.	A	1,900,000,000	45.78	3.55	7.75%
	Nisource Inc.	B+	10,000,000,000	31.88	2.10	6.59%
	Northwest Natural Gas Co.	A	1,200,000,000	42.80	3.20	7.48%
	Piedmont Natural Gas Co.	B++	2,500,000,000	33.12	2.05	6.19%
	South Jersey Industries, Inc.	B++	1,800,000,000	55.97	4.40	7.86%
	Southwest Gas	B++	2,500,000,000	52.92	4.00	7.56%
	WGL Holdings, Inc.	A	2,100,000,000	40.00	2.95	7.38%
Median			2,300,000,000			7.52%
Arithmetic Mean			3,320,000,000			7.47%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Gas Distribution (Natural Gas Utility)							
	AGL Resources, Inc.	A	5,600,000,000	3,816,000,000	0.68	59.47%	40.53%
	Atmos Energy Corporation	B++	4,100,000,000	2,455,600,000	0.60	62.54%	37.46%
	Laclede Group, Inc.	B++	1,500,000,000	912,700,000	0.61	62.17%	37.83%
	New Jersey Resources Corp.	A	1,900,000,000	516,200,000	0.27	78.64%	21.36%
	Nisource Inc.	B+	10,000,000,000	7,089,100,000	0.71	58.52%	41.48%
	Northwest Natural Gas Co.	A	1,200,000,000	681,700,000	0.57	63.77%	36.23%
	Piedmont Natural Gas Co.	B++	2,500,000,000	875,000,000	0.35	74.07%	25.93%
	South Jersey Industries, Inc.	B++	1,800,000,000	580,400,000	0.32	75.62%	24.38%
	Southwest Gas	B++	2,500,000,000	1,280,400,000	0.51	66.13%	33.87%
	WGL Holdings, Inc.	A	2,100,000,000	524,100,000	0.25	80.03%	19.97%
Median			2,300,000,000	893,850,000	0.54	64.95%	35.05%
Arithmetic Mean			3,320,000,000	1,873,120,000	0.49	68.10%	31.90%
Weighted Average			5,289,759,036	3,404,525,904		60.84%	39.16%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Gas Distribution (Natural Gas Utility), Selected Comparables</i>						
	AGL Resources, Inc.	0.75	0.75	0.75	0.75	0.75
	Atmos Energy Corporation	0.65	0.65	0.70	0.70	0.80
	Laclede Group, Inc.	0.60	0.60	0.60	0.55	0.65
	New Jersey Resources Corp.	0.65	0.65	0.65	0.65	0.70
	Nisource, Inc.	0.85	0.85	0.85	0.80	0.85
	Northwest Natural Gas Co.	0.60	0.60	0.60	0.55	0.65
	Piedmont Natural Gas Co.	0.65	0.65	0.70	0.65	0.75
	South Jersey Industries, Inc.	0.65	0.65	0.65	0.65	0.70
	Southwest Gas Corp.	0.75	0.75	0.75	0.75	0.80
	WGL Holdings, Inc.	0.65	0.65	0.65	0.65	0.65
<i>Median</i>		0.65	0.65	0.68	0.65	0.73
<i>Arithmetic Mean</i>		0.68	0.68	0.69	0.67	0.73

Gas Distribution (Natural Gas Utility), Value Line

	AGL Resources, Inc.	0.75	0.75	0.75	0.75	0.75
	Atmos Energy Corporation	0.65	0.65	0.70	0.70	0.80
	Laclede Group, Inc.	0.60	0.60	0.60	0.55	0.65
	New Jersey Resources Corp.	0.65	0.65	0.65	0.65	0.70
	Nisource, Inc.	0.85	0.85	0.85	0.80	0.85
	Northwest Natural Gas Co.	0.60	0.60	0.60	0.55	0.65
	Piedmont Natural Gas Co.	0.65	0.65	0.70	0.65	0.75
	South Jersey Industries, Inc.	0.65	0.65	0.65	0.65	0.70
	Southwest Gas Corp.	0.75	0.75	0.75	0.75	0.80
	UGI Corp.	0.70	0.65	0.70	0.70	0.75
	WGL Holdings, Inc.	0.65	0.65	0.65	0.65	0.65
<i>Median</i>		0.65	0.65	0.70	0.65	0.75
<i>Arithmetic Mean</i>		0.68	0.68	0.69	0.67	0.73

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Gas Transmission

2014 Capitalization Rate Study Gas Transmission (Natural Gas Diversified) Industry Notes

- From the Gas Transmission Industry segment, Cabot Oil & Gas, Chesapeake Energy Corp., Cimarex Energy Company, Devon Energy, Encana Corporation, EOG Resources, Linn Energy, LLC, Newfield Exploration, Pengrowth Energy, QEP Resources, Inc., Quicksilver Resources, Inc., Southwestern Energy Company, Talisman Energy and WPX Energy were excluded as they are presented to be primarily engaged in the exploration and production of oil and natural gas.
- Staff considered capitalization studies gathered and submitted by:
 - K.E. Andrews & Company for Southern Star Central Gas Pipeline
 - Tegarden & Associates for Northern Natural Gas
- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Gas Transmission (Natural Gas Diversified)</i>	12.70%	81.39%	18.61%	11.31%

Industry Equity Rate Summary

Gas Transmission (Natural Gas Diversified)

CapM Ex Post Equity Rate	12.66%
CapM Ex Ante Equity Rate	16.13%
DCF (Dividend) Equity Rate	8.94%
DCF (Earnings) Equity Rate	11.24%
Earnings Price Ratio	6.19%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Gas Transmission (Natural Gas Diversified)</i>	10.63%	13.32%	1.29	12.66%	16.13%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Gas Transmission (Natural Gas Diversified)								
	Crosstex Energy, Inc.	C++	1,500,000,000	1.60%	16.50%	0.00%	18.10%	
	Energen Corporation	A	5,300,000,000	0.80%	4.50%	8.00%	5.30%	8.80%
	EQT Corporation, Inc.	B++	13,200,000,000	0.10%	-22.00%	17.00%		17.10%
	MDU Resources Group, Inc.	A+	5,700,000,000	2.30%	4.50%	8.00%	6.80%	10.30%
	National Fuel Gas Company	B++	5,700,000,000	2.20%	3.00%	7.50%	5.20%	9.70%
	Questar Corp.	A	3,900,000,000	3.30%	6.00%	7.00%	9.30%	10.30%
Median			5,500,000,000				6.80%	10.30%
Arithmetic Mean			5,883,333,333				8.94%	11.24%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
<i>Gas Transmission (Natural Gas Diversified)</i>						
	Crosstex Energy, Inc.	C++	1,500,000,000	31.76	0.95	2.99%
	Energen Corporation	A	5,300,000,000	73.33	6.55	8.93%
	EQT Corporation, Inc.	B++	13,200,000,000	87.53	4.50	5.14%
	MDU Resources Group, Inc.	A+	5,700,000,000	30.23	1.90	6.29%
	National Fuel Gas Company	B++	5,700,000,000	68.00	4.25	6.25%
	Questar Corp.	A	3,900,000,000	22.47	1.70	7.57%
<i>Median</i>			5,500,000,000			6.27%
<i>Arithmetic Mean</i>			5,883,333,333			6.19%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
<i>Gas Transmission (Natural Gas Diversified)</i>							
	Crosstex Energy, Inc.	C++	1,500,000,000	1,102,400,000	0.73	57.64%	42.36%
	Energen Corporation	A	5,300,000,000	1,028,500,000	0.19	83.75%	16.25%
	EQT Corporation, Inc.	B++	13,200,000,000	2,495,700,000	0.19	84.10%	15.90%
	MDU Resources Group, Inc.	A+	5,700,000,000	1,967,900,000	0.35	74.34%	25.66%
	National Fuel Gas Company	B++	5,700,000,000	1,649,000,000	0.29	77.56%	22.44%
	Questar Corp.	A	3,900,000,000	1,136,100,000	0.29	77.44%	22.56%
<i>Median</i>			5,500,000,000	1,392,550,000	0.29	77.50%	22.50%
<i>Arithmetic Mean</i>			5,883,333,333	1,563,266,667	0.34	75.80%	24.20%
<i>Weighted Average</i>			8,067,138,810	1,844,051,275		81.39%	18.61%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
Gas Transmission (Natural Gas Diversified), Selected Comparables						
	Crosstex Energy, Inc.	2.30	2.30	2.25	2.25	2.55
	Energen Corporation	1.15	1.10	1.15	1.20	1.20
	EQT Corporation, Inc.		1.15	1.20	1.20	1.15
	MDU Resources Group, Inc.	1.05	1.05	1.00	1.00	1.00
	National Fuel Gas Company	0.95	0.95	1.05	1.00	1.05
	Questar Corp.	1.20			0.75	0.80
Median		1.15	1.10	1.15	1.10	1.10
Arithmetic Mean		1.33	1.31	1.33	1.23	1.29
Gas Transmission (Natural Gas Diversified), Value Line						
	Cabot Oil & Gas	1.35	1.30	1.25	1.25	1.30
	Chesapeake Energy Corp.	1.40	1.35	1.35	1.35	1.40
	Cimarex Energy Co.		1.25	1.25	1.35	1.40
	Crosstex Energy	2.30	2.30	2.25	2.25	2.55
	Devon Energy	1.25	1.20	1.20	1.20	1.25
	Encana Corporation				1.20	1.15
	Energen Corp	1.15	1.10	1.15	1.20	1.20
	EOG Resources	1.20	1.15	1.15	1.20	1.25
	EQT Corporation, Inc.		1.15	1.20	1.20	1.15
	Linn Energy, LLC			0.90	0.85	0.85
	MDU Resources	1.05	1.05	1.00	1.00	1.00
	National Fuel Gas	0.95	0.95	1.05	1.00	1.05
	Newfield Explor.	1.35	1.35	1.35	1.40	1.40
	Pengrowth Energy			1.25	1.30	1.35
	QEP Resources, Inc.				1.35	1.30
	Questar Corp.	1.20			0.75	0.80
	Quicksilver Resources	1.70	1.70	1.65	1.65	1.65
	Southwestern Energy Company	1.20	1.15	1.15	1.15	1.10
	Talisman Energy			1.45	1.50	1.35
	WPX Energy, Inc.					1.30
Median		1.23	1.20	1.23	1.20	1.28
Arithmetic Mean		1.34	1.31	1.29	1.27	1.29

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Oil/Gas Distribution

2014 Capitalization Rate Study Oil/Gas Distribution Industry Notes

- From the Oil/Gas Distribution Industry, Clean Energy Fuels a provider of natural gas for vehicle fleet, develops and operates fueling stations, and supplies compressed natural gas and liquid natural gas was excluded from the sample, as was World Fuel Services, a global fuel logistics company engaged in the marketing and sale of fuel products and related products. Copano Energy was acquired by Kinder Morgan Energy Partners, LP of the Value Line in the Pipeline MLP's Industry.
- Staff considered capitalization studies gathered and submitted by:

K.E. Andrews & Company for Southern Star Central Gas Pipeline
Tegarden & Associates for Northern Natural Gas

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Oil/Gas Distribution</i>	11.50%	61.57%	38.43%	9.09%

Industry Equity Rate Summary

Oil/Gas Distribution

CapM Ex Post Equity Rate	9.30%
CapM Ex Ante Equity Rate	11.47%
DCF (Dividend) Equity Rate	12.60%
DCF (Earnings) Equity Rate	12.43%
Earnings Price Ratio	5.69%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Oil/Gas Distribution</i>	10.63%	13.32%	0.81	9.30%	11.47%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
 Value Line Investment Survey, November 2013 through January 2014
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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Oil/Gas Distribution								
	Enbridge, Inc. (TSE)	B++	36,900,000,000	2.80%	8.00%	6.50%	10.80%	9.30%
	Kinder Morgan, Inc	B++	37,200,000,000	4.60%	0.00%	0.00%		
	ONEOK, Inc.	B+	12,200,000,000	2.90%	12.50%	12.00%	15.40%	14.90%
	Pembina Pipeline	B++	10,800,000,000	4.90%	3.50%	8.50%	8.40%	13.40%
	Spectra Energy Corp.	B	22,800,000,000	4.00%	6.50%	4.50%	10.50%	8.50%
	TransCanada Corp.	B++	32,000,000,000	4.10%	3.00%	12.50%	7.10%	16.60%
	Williams Companies, Inc..	B+	24,500,000,000	4.90%	18.50%	7.00%	23.40%	11.90%
Median			24,500,000,000				10.65%	12.65%
Arithmetic Mean			25,200,000,000				12.60%	12.43%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
<i>Oil/Gas Distribution</i>						
	Enbridge, Inc. (TSE)	B++	36,900,000,000	44.80	2.20	4.91%
	Kinder Morgan, Inc	B++	37,200,000,000	35.92	1.75	4.87%
	ONEOK, Inc.	B+	12,200,000,000	59.27	3.20	5.40%
	Pembina Pipeline	B++	10,800,000,000	34.55	1.65	4.78%
	Spectra Energy Corp.	B	22,800,000,000	34.07	2.05	6.02%
	TransCanada Corp.	B++	32,000,000,000	45.28	3.75	8.28%
	Williams Companies, Inc..	B+	24,500,000,000	35.80	2.00	5.59%
<i>Median</i>			24,500,000,000			5.40%
<i>Arithmetic Mean</i>			25,200,000,000			5.69%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
<i>Oil/Gas Distribution</i>							
	Enbridge, Inc. (TSE)	B++	36,900,000,000	19,799,000,000	0.54	65.08%	34.92%
	Kinder Morgan, Inc	B++	37,200,000,000	33,000,000,000	0.89	52.99%	47.01%
	ONEOK, Inc.	B+	12,200,000,000	7,757,200,000	0.64	61.13%	38.87%
	Pembina Pipeline	B++	10,800,000,000	2,000,100,000	0.19	84.37%	15.63%
	Spectra Energy Corp.	B	22,800,000,000	12,268,000,000	0.54	65.02%	34.98%
	TransCanada Corp.	B++	32,000,000,000	19,062,700,000	0.60	62.67%	37.33%
	Williams Companies, Inc..	B+	24,500,000,000	10,359,000,000	0.42	70.28%	29.72%
<i>Median</i>			24,500,000,000	12,268,000,000	0.54	65.02%	34.98%
<i>Arithmetic Mean</i>			25,200,000,000	14,892,285,714	0.54	65.93%	34.07%
<i>Weighted Average</i>			29,223,469,388	18,242,258,050		61.57%	38.43%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Oil/Gas Distribution, Selected Comparables</i>						
	Enbridge, Inc. (TSE)	0.65	0.65	0.60	0.60	0.60
	Kinder Morgan, Inc					0.80
	ONEOK, Inc.	0.95	0.95	1.00	0.95	1.05
	Pembina Pipeline			0.65	0.60	0.55
	Spectra Energy Corp.	1.00	1.00	1.00	1.00	1.00
	TransCanada Corp.			0.90	0.85	0.85
	Williams Companies, Inc.	1.30	1.30	1.30		
<i>Median</i>		0.98	0.98	0.95	0.85	0.83
<i>Arithmetic Mean</i>		0.98	0.98	0.91	0.80	0.81

Oil/Gas Distribution, Value Line

	Clean Energy Fuels Corp.	1.35	1.35	1.40	1.40	1.25
	Enbridge, Inc. (TSE)	0.65	0.65	0.60	0.60	0.60
	Kinder Morgan, Inc					0.80
	ONEOK, Inc.	0.95	0.95	1.00	0.95	1.05
	Pembina Pipeline			0.65	0.60	0.55
	Spectra Energy Corp.	1.00	1.00	1.00	1.00	1.00
	TransCanada Corp.			0.90	0.85	0.85
	Williams Companies, Inc.	1.30	1.30	1.30		
	World Fuel Services Corp.					1.00
<i>Median</i>		1.00	1.00	1.00	0.90	0.93
<i>Arithmetic Mean</i>		1.05	1.05	0.98	0.90	0.89

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Pipeline MLPs Industry

2014 Capitalization Rate Study Pipeline MLPs Industry Notes

- From the Pipeline MLP Industry segment, Suburban Propane was removed from the sample as being primarily involved in the marketing and distribution of propane gas. Inergy, LP merged into Crestwood and was renamed Crestwood Equity Partners LP, a company not included in Value Line Investment Survey.
- Staff considered capitalization studies gathered and submitted by:
 - K.E. Andrews & Company for Southern Star Central Gas Pipeline
 - Tegarden & Associates for Northern Natural Gas

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Pipeline MLPs</i>	13.00%	72.53%	27.47%	10.86%

Industry Equity Rate Summary

Pipeline MLPs

CapM Ex Post Equity Rate	9.08%
CapM Ex Ante Equity Rate	11.18%
DCF (Dividend) Equity Rate	13.06%
DCF (Earnings) Equity Rate	14.33%
Earnings Price Ratio	6.09%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Pipeline MLPs</i>	10.63%	13.32%	0.78	9.08%	11.18%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)

c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)

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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Pipeline MLPs								
	Boardwalk Pipeline Partners, L.P.	B+	6,500,000,000	7.90%	1.50%	7.50%	9.40%	15.40%
	Buckeye Partners, L.P.	B+	7,800,000,000	6.30%	1.50%	7.50%	7.80%	13.80%
	El Paso Pipeline Partners	B	9,000,000,000	6.30%	11.00%	6.00%	17.30%	12.30%
	Energy Transfer Partners, L.P.	B++	17,900,000,000	6.70%	2.50%	6.50%	9.20%	13.20%
	Enterprise Products Partners, L.P.	B+	58,200,000,000	4.60%	9.50%	10.00%	14.10%	14.60%
	Kinder Morgan Energy Partners, L.P.	B+	35,900,000,000	6.80%	7.00%	11.00%	13.80%	17.80%
	Magellan Midstream Partners, L.P.	B++	14,100,000,000	4.50%	13.00%	13.00%	17.50%	17.50%
	Plains All American Pipeline, L.P.	B+	17,900,000,000	4.80%	9.00%	10.50%	13.80%	15.30%
	Williams Partners, L.P.	B+	22,400,000,000	7.10%	7.50%	2.00%	14.60%	9.10%
Median			17,900,000,000				13.80%	14.60%
Arithmetic Mean			21,077,777,778				13.06%	14.33%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
<i>Pipeline MLPs</i>						
	Boardwalk Pipeline Partners, L.P.	B+	6,500,000,000	26.89	2.05	7.62%
	Buckeye Partners, L.P.	B+	7,800,000,000	68.13	4.10	6.02%
	El Paso Pipeline Partners	B	9,000,000,000	41.52	2.85	6.86%
	Energy Transfer Partners, L.P.	B++	17,900,000,000	54.19	2.35	4.34%
	Enterprise Products Partners, L.P.	B+	58,200,000,000	62.94	4.05	6.43%
	Kinder Morgan Energy Partners, L.P.	B+	35,900,000,000	81.98	3.40	4.15%
	Magellan Midstream Partners, L.P.	B++	14,100,000,000	62.34	3.65	5.85%
	Plains All American Pipeline, L.P.	B+	17,900,000,000	52.19	3.90	7.47%
	Williams Partners, L.P.	B+	22,400,000,000	51.12	3.10	6.06%
<i>Median</i>			17,900,000,000			6.06%
<i>Arithmetic Mean</i>			21,077,777,778			6.09%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
<i>Pipeline MLPs</i>							
	Boardwalk Pipeline Partners, L.P.	B+	6,500,000,000	3,333,900,000	0.51	66.10%	33.90%
	Buckeye Partners, L.P.	B+	7,800,000,000	2,676,900,000	0.34	74.45%	25.55%
	El Paso Pipeline Partners	B	9,000,000,000	4,172,000,000	0.46	68.33%	31.67%
	Energy Transfer Partners, L.P.	B++	17,900,000,000	16,352,000,000	0.91	52.26%	47.74%
	Enterprise Products Partners, L.P.	B+	58,200,000,000	16,481,600,000	0.28	77.93%	22.07%
	Kinder Morgan Energy Partners, L.P.	B+	35,900,000,000	18,910,000,000	0.53	65.50%	34.50%
	Magellan Midstream Partners, L.P.	B++	14,100,000,000	2,236,800,000	0.16	86.31%	13.69%
	Plains All American Pipeline, L.P.	B+	17,900,000,000	7,018,000,000	0.39	71.84%	28.16%
	Williams Partners, L.P.	B+	22,400,000,000	8,063,000,000	0.36	73.53%	26.47%
<i>Median</i>			17,900,000,000	7,018,000,000	0.39	71.84%	28.16%
<i>Arithmetic Mean</i>			21,077,777,778	8,804,911,111	0.44	70.69%	29.31%
<i>Weighted Average</i>			32,691,249,341	12,380,966,632		72.53%	27.47%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Pipeline MLPs, Selected Comparables</i>						
	Boardwalk Pipeline Partners, L.P.	0.85	0.85	0.85	0.80	0.70
	Buckeye Partners, L.P.	0.85	0.85	0.80	0.80	0.75
	El Paso Pipeline Partners		0.75	0.75	0.70	0.65
	Energy Transfer Partners, L.P.	0.85	0.80	0.80	0.80	0.75
	Enterprise Products Partners, L.P.	0.85	0.85	0.85	0.85	0.80
	Kinder Morgan Energy Partners, L.P.	0.75	0.75	0.75	0.75	0.75
	Magellan Midstream Partners, L.P.	0.90	0.90	0.85	0.85	0.80
	Plains All American Pipeline, L.P.	0.90	0.85	0.85	0.80	0.75
	Williams Partners, L.P.		1.05	1.05	1.05	1.05
<i>Median</i>		0.85	0.85	0.85	0.80	0.75
<i>Arithmetic Mean</i>		0.85	0.85	0.84	0.82	0.78

Pipeline MLPs, Value Line

	Boardwalk Pipeline Partners, L.P.	0.85	0.85	0.85	0.80	0.70
	Buckeye Partners, L.P.	0.85	0.85	0.80	0.80	0.75
	El Paso Pipeline Partners		0.75	0.75	0.70	0.65
	Energy Transfer Partners, L.P.	0.85	0.80	0.80	0.80	0.75
	Enterprise Products Partners, L.P.	0.85	0.85	0.85	0.85	0.80
	Kinder Morgan Energy Partners, L.P.	0.75	0.75	0.75	0.75	0.75
	Magellan Midstream Partners, L.P.	0.90	0.90	0.85	0.85	0.80
	Plains All American Pipeline, L.P.	0.90	0.85	0.85	0.80	0.75
	Suburban Propane Partners, L.P.	0.75	0.75	0.75	0.70	0.70
	Williams Partners, L.P.		1.05	1.05	1.05	1.05
<i>Median</i>		0.85	0.85	0.83	0.80	0.75
<i>Arithmetic Mean</i>		0.84	0.84	0.83	0.81	0.77

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Railroad

2014 Capitalization Rate Study Railroad Industry Notes

- From the Railroad Industry segment; American Railcar, primarily engaged in the design and manufacture of hopper and tank railcars; GATX, specializing in tank car, freight car, and locomotive leasing; and Greenbriar Companies, who design, manufacture, repair and market railroad freight cars and related equipment were all excluded from the sample.
- Staff considered capitalization studies gathered and submitted by:

Union Pacific Railroad

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Railroad</i>	13.55%	86.56%	13.44%	12.43%

Industry Equity Rate Summary

Railroad

CapM Ex Post Equity Rate	12.07%
CapM Ex Ante Equity Rate	15.32%
DCF (Dividend) Equity Rate	19.03%
DCF (Earnings) Equity Rate	16.03%
Earnings Price Ratio	8.21%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Railroad</i>	10.63%	13.32%	1.21	12.07%	15.32%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Railroad								
	Canadian National Railway	A	46,400,000,000	1.50%	13.50%	12.50%	15.00%	14.00%
	Canadian Pacific Railway Limited	B++	25,900,000,000	0.90%	16.00%	24.00%	16.90%	24.90%
	CSX Corp.	B++	27,300,000,000	2.20%	16.50%	12.00%	18.70%	14.20%
	Genesee & Wyoming	B+	5,100,000,000	0.00%	0.00%	20.50%		
	Kansas City Southern, Inc.	A	13,400,000,000	0.70%	35.50%	16.50%	36.20%	17.20%
	Norfolk Southern Corp.	A	26,700,000,000	2.40%	9.00%	9.50%	11.40%	11.90%
	Union Pacific Corp	A+	73,000,000,000	2.00%	14.00%	12.00%	16.00%	14.00%
Median			26,700,000,000				16.45%	14.10%
Arithmetic Mean			31,114,285,714				19.03%	16.03%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Railroad						
	Canadian National Railway	A	46,400,000,000	55.47	4.35	7.84%
	Canadian Pacific Railway Limited	B++	25,900,000,000	147.55	10.80	7.32%
	CSX Corp.	B++	27,300,000,000	26.90	2.85	10.59%
	Genesee & Wyoming	B+	5,100,000,000	95.76	7.50	7.83%
	Kansas City Southern, Inc.	A	13,400,000,000	121.52	6.75	5.55%
	Norfolk Southern Corp.	A	26,700,000,000	86.30	8.50	9.85%
	Union Pacific Corp	A+	73,000,000,000	158.10	13.35	8.44%
Median			26,700,000,000			7.84%
Arithmetic Mean			31,114,285,714			8.21%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Railroad							
	Canadian National Railway	A	46,400,000,000	5,830,000,000	0.13	88.84%	11.16%
	Canadian Pacific Railway Limited	B++	25,900,000,000	4,453,000,000	0.17	85.33%	14.67%
	CSX Corp.	B++	27,300,000,000	8,787,000,000	0.32	75.65%	24.35%
	Genesee & Wyoming	B+	5,100,000,000	1,586,200,000	0.31	76.28%	23.72%
	Kansas City Southern, Inc.	A	13,400,000,000	1,728,600,000	0.13	88.57%	11.43%
	Norfolk Southern Corp.	A	26,700,000,000	8,499,000,000	0.32	75.85%	24.15%
	Union Pacific Corp	A+	73,000,000,000	8,764,000,000	0.12	89.28%	10.72%
Median			26,700,000,000	5,830,000,000	0.17	85.33%	14.67%
Arithmetic Mean			31,114,285,714	5,663,971,429	0.21	82.83%	17.17%
Weighted Average			45,071,258,035	6,995,766,575		86.56%	13.44%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Railroad, Selected Comparables</i>						
	Canadian National Railway	1.20	1.15	1.15	1.10	1.10
	Canadian Pacific Railway Limited	1.35	1.35	1.30	1.30	1.25
	CSX Corp.	1.25	1.25	1.20	1.20	1.25
	Genesee & Wyoming	1.35	1.30	1.25	1.25	1.30
	Kansas City Southern, Inc.	1.40	1.35	1.35	1.30	1.25
	Norfolk Southern Corp.	1.15	1.15	1.10	1.10	1.15
	Union Pacific Corp	1.20	1.15	1.15	1.15	1.15
<i>Median</i>		1.25	1.25	1.20	1.20	1.25
<i>Arithmetic Mean</i>		1.27	1.24	1.21	1.20	1.21

Railroad, Value Line

	American Railcar					1.60
	Canadian National Railway	1.20	1.15	1.15	1.10	1.10
	Canadian Pacific Railway Limited	1.35	1.35	1.30	1.30	1.25
	CSX Corp.	1.25	1.25	1.20	1.20	1.25
	GATX Corp					1.15
	Genesee & Wyoming	1.35	1.30	1.25	1.25	1.30
	Greenbrier Companies Inc.					2.05
	Kansas City Southern, Inc.	1.40	1.35	1.35	1.30	1.25
	Norfolk Southern Corp.	1.15	1.15	1.10	1.10	1.15
	Union Pacific Corp	1.20	1.15	1.15	1.15	1.15
<i>Median</i>		1.25	1.25	1.20	1.20	1.25
<i>Arithmetic Mean</i>		1.27	1.24	1.21	1.20	1.33

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Telecommunication Services

2014 Capitalization Rate Study Telecommunication Services Industry Notes

- From the Telecommunication Services segment, America Movil, J2 Global Communications, NII Holdings, Tel New Zealand, Telus Corporation, and Vodafone Group excluded as being principally and primarily involved in non-domestic operations. Inteliquent, Inc. omitted as they principally offer tandem interconnection services to competitive carriers. Dycom, Inc. omitted as they are engaged in the telecommunications and electrical services business providing engineering, construction, maintenance and installation to telecommunication providers. Millicom International Cellular, while still trading, is no longer covered by Value Line Investment Survey due to low trading volume. Clearwire was purchased by Sprint, MetroPCS was merged into T-Mobile US.
- Staff considered capitalization studies gathered and submitted by:
 - Duff & Phelps – Small Cap Wireline
 - AUS Consultants for Level 3 Communications
- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Telecommunications Services</i>	12.55%	66.95%	33.05%	10.13%

Industry Equity Rate Summary

Telecommunications Services

CapM Ex Post Equity Rate	10.46%
CapM Ex Ante Equity Rate	13.08%
DCF (Dividend) Equity Rate	7.04%
DCF (Earnings) Equity Rate	12.00%
Earnings Price Ratio	7.50%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Telecommunications Services</i>	10.63%	13.32%	0.98	10.46%	13.08%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)

c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)

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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Telecommunications Services								
	AT&T Inc.	A++	181,000,000,000	5.30%	4.00%	7.00%	9.30%	12.30%
	Atlantic Tele-Network, Inc.	B++	850,000,000	2.00%	7.50%	6.50%	9.50%	8.50%
	Cbeyond, Inc.	C++	200,000,000	0.00%	0.00%	0.00%		
	General Communication, Inc.	C++	375,000,000	0.00%	0.00%	26.00%		
	Leap Wireless International, Inc.	C	1,300,000,000	0.00%	0.00%	0.00%		
	NTELOS Holdings Corp.	B	425,000,000	8.30%	0.00%	7.00%		15.30%
	Shenandoah Telecommunications Company	B	550,000,000	1.60%	2.50%	16.00%	4.10%	17.60%
	Sprint Corporation	C++	31,500,000,000	0.00%	0.00%	0.00%		
	Telephone & Data Systems, Inc.	B	2,700,000,000	2.00%	4.00%	4.00%	6.00%	6.00%
	T-Mobile US, Inc.	B	19,100,000,000	0.00%	0.00%	0.00%		
	U.S. Cellular	B+	3,500,000,000	0.00%	0.00%	4.50%		
	Verizon Communications	A++	140,000,000,000	4.30%	2.00%	8.00%	6.30%	12.30%
	Vonage Holdings Corp.	C++	675,000,000	0.00%	0.00%	5.50%		
Median			1,300,000,000				6.30%	12.30%
Arithmetic Mean			29,398,076,923				7.04%	12.00%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Telecommunications Services						
	AT&T Inc.	A++	181,000,000,000	34.40	3.40	9.88%
	Atlantic Tele-Network, Inc.	B++	850,000,000	53.58	2.60	4.85%
	Cbeyond, Inc.	C++	200,000,000	6.68	0.35	5.24%
	General Communication, Inc.	C++	375,000,000	9.20	0.70	7.61%
	Leap Wireless International, Inc.	C	1,300,000,000	17.00	-0.90	
	NTELOS Holdings Corp.	B	425,000,000	20.25	2.00	9.88%
	Shenandoah Telecommunications Company	B	550,000,000	23.03	1.70	7.38%
	Sprint Corporation	C++	31,500,000,000	7.98	0.50	6.27%
	Telephone & Data Systems, Inc.	B	2,700,000,000	25.07	1.00	3.99%
	T-Mobile US, Inc.	B	19,100,000,000	26.26	2.50	9.52%
	U.S. Cellular	B+	3,500,000,000	41.21	1.50	3.64%
	Verizon Communications	A++	140,000,000,000	49.05	3.80	7.75%
	Vonage Holdings Corp.	C++	675,000,000	3.22	0.45	13.98%
Median			1,300,000,000			7.50%
Arithmetic Mean			29,398,076,923			7.50%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Telecommunications Services							
	AT&T Inc.	A++	181,000,000,000	68,350,000,000	0.38	72.59%	27.41%
	Atlantic Tele-Network, Inc.	B++	850,000,000	0	0.00	100.00%	0.00%
	Cbeyond, Inc.	C++	200,000,000	13,100,000			
	General Communication, Inc.	C++	375,000,000	1,082,700,000	2.89	25.73%	74.27%
	Leap Wireless International, Inc.	C	1,300,000,000	3,368,200,000	2.59	27.85%	72.15%
	NTELOS Holdings Corp.	B	425,000,000	486,100,000	1.14	46.65%	53.35%
	Shenandoah Telecommunications Company	B	550,000,000	230,200,000	0.42	70.49%	29.51%
	Sprint Corporation	C++	31,500,000,000	32,420,000,000	1.03	49.28%	50.72%
	Telephone & Data Systems, Inc.	B	2,700,000,000	1,721,100,000	0.64	61.07%	38.93%
	T-Mobile US, Inc.	B	19,100,000,000	20,449,000,000	1.07	48.29%	51.71%
	U.S. Cellular	B+	3,500,000,000	878,900,000	0.25	79.93%	20.07%
	Verizon Communications	A++	140,000,000,000	90,938,000,000	0.65	60.62%	39.38%
	Vonage Holdings Corp.	C++	675,000,000	40,200,000	0.06	94.38%	5.62%
Median			1,300,000,000	1,082,700,000	0.64	60.85%	39.15%
Arithmetic Mean			29,398,076,923	16,921,346,154	0.93	61.41%	38.59%
Weighted Average			140,619,171,518	69,411,517,368		66.95%	33.05%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Telecommunications Services, Selected Comparables</i>						
	AT&T Inc.	0.75	0.75	0.75	0.70	0.70
	Atlantic Tele-Network, Inc.	0.95	1.00	0.95	1.00	1.00
	Cbeyond, Inc.	1.10	1.10	1.10	1.00	0.80
	General Communication, Inc.		1.10	1.15	1.20	1.15
	Leap Wireless International, Inc.	1.30	1.30	1.45	1.40	1.45
	NTELOS Holdings Corp.	0.85	0.85			0.75
	Shenandoah Telecom. Company	0.80	0.80	0.80	0.85	0.90
	Sprint Corporation	1.35	1.30	1.30	1.35	1.05
	Telephone & Data Systems, Inc.	0.80	0.85	0.90	0.90	1.05
	T-Mobile US, Inc.					
	U.S. Cellular	1.10	1.10	1.10	1.10	1.00
	Verizon Communications	0.70	0.70	0.70	0.70	0.65
	Vonage Holdings Corp.	1.05	1.10	1.15	1.20	1.20
<i>Median</i>		0.95	1.05	1.10	1.00	1.00
<i>Arithmetic Mean</i>		0.98	1.00	1.03	1.04	0.98

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Telecommunications Services, Value Line</i>						
	America Movil (ADR)	1.30	1.25	1.15	1.15	1.10
	AT&T Inc.	0.75	0.75	0.75	0.70	0.70
	Atlantic Tele-Network, Inc.	0.95	1.00	0.95	1.00	1.00
	Cbeyond, Inc.	1.10	1.10	1.10	1.00	0.80
	Dycom Industries, Inc.	1.35	1.35	1.40	1.40	1.40
	General Communications, Inc.		1.10	1.15	1.20	1.15
	Inteliquent, Inc. (Neutral Tandem)		1.00	1.00	0.95	
	J2 Global Communications	1.05	1.00	1.00	0.95	0.90
	Leap Wireless International, Inc.	1.30	1.30	1.45	1.40	1.45
	NTELOS Holdings Corp.	0.85	0.85			0.75
	NII Holdings, Inc	1.80	1.75	1.65	1.55	1.50
	Shenandoah Telecom Company	0.80	0.80	0.80	0.85	0.90
	Sprint Corporation	1.35	1.30	1.30	1.35	1.05
	Tele. Corp. of New Zealand Ltd. (ADR)	0.95	1.00	1.00		0.85
	Telephone & Data Systems	0.80	0.85	0.90	0.90	1.05
	Telus Corp.	0.60	0.60	0.60	0.55	0.50
	T-Mobile, US					
	U.S. Cellular	1.10	1.10	1.10	1.10	1.00
	Verizon Communications	0.70	0.70	0.70	0.70	0.65
	Vodafone GRP (ADR)	0.80	0.80	0.80	0.75	0.85
	Vonage Holdings Corp.	1.05	1.10	1.15	1.20	1.20
<i>Median</i>		1.00	1.00	1.00	1.00	1.00
<i>Arithmetic Mean</i>		1.03	1.04	1.05	1.04	0.99

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Telecommunications Utility

2014 Capitalization Rate Study Telecommunications Utility Industry Notes

- From the Telecommunication Utility segment, BCE INC., BT Group, Deutsche Tele., Telefonica, S.A. excluded as being principally and primarily involved in non-domestic operations.
- Staff considered capitalization studies gathered and submitted by:
 - Duff & Phelps – Small Cap Wireline
 - AUS Consultants for Level 3 Communications
- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Telecommunications Utility</i>	13.00%	46.65%	53.35%	8.72%

Industry Equity Rate Summary

Telecommunications Utility

CapM Ex Post Equity Rate	9.93%
CapM Ex Ante Equity Rate	12.36%
DCF (Dividend) Equity Rate	1.05%
DCF (Earnings) Equity Rate	18.93%
Earnings Price Ratio	9.60%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Telecommunications Utility</i>	10.63%	13.32%	0.90	9.93%	12.36%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
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Discounted Cash Flow (Gordon Growth)

Industry	Company	Value Line Strength	Market Capitalization d	Dividend Yield e	Growth Estimate		Equity Rate Dividend (e+f)	Equity Rate Earnings (e+g)
					Dividends f	Earnings g		
Telecommunications Utility								
	Alaska Communications Systems Group, Inc.	C+	100,000,000	0.00%	0.00%	18.00%		
	CenturyLink, Inc.	B+	18,600,000,000	6.90%	-5.00%	8.00%	1.90%	14.90%
	Cincinnati Bell	C+	700,000,000	0.00%	0.00%	34.00%		
	Consolidated Communication Holdings, Inc	C++	775,000,000	8.10%	0.00%	13.50%		21.60%
	Frontier Communications Corporation	B	4,600,000,000	8.70%	-8.50%	9.50%	0.20%	18.20%
	TW Telecom Inc.	B	4,200,000,000	0.00%	0.00%	24.00%		
	Windstream Corp.	B	4,800,000,000	12.50%	0.00%	8.50%		21.00%
Median			4,200,000,000				1.05%	19.60%
Arithmetic Mean			4,825,000,000				1.05%	18.93%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Telecommunications Utility						
	Alaska Communications Systems Group, Inc.	C+	100,000,000	2.24	0.40	17.86%
	CenturyLink, Inc.	B+	18,600,000,000	31.51	3.00	9.52%
	Cincinnati Bell	C+	700,000,000	3.31	0.25	7.55%
	Consolidated Communication Holdings, Inc	C++	775,000,000	19.02	1.40	7.36%
	Frontier Communications Corporation	B	4,600,000,000	4.61	0.35	7.59%
	TW Telecom Inc.	B	4,200,000,000	28.88	1.40	4.85%
	Windstream Corp.	B	4,800,000,000	8.01	1.00	12.48%
Median			4,200,000,000			7.59%
Arithmetic Mean			4,825,000,000			9.60%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Telecommunications Utility							
	Alaska Communications Systems Group, Inc.	C+	100,000,000	444,800,000	4.45	18.36%	81.64%
	CenturyLink, Inc.	B+	18,600,000,000	20,391,000,000	1.10	47.70%	52.30%
	Cincinnati Bell	C+	700,000,000	2,108,200,000	3.01	24.93%	75.07%
	Consolidated Communication Holdings, Inc	C++	775,000,000	1,202,200,000	1.55	39.20%	60.80%
	Frontier Communications Corporation	B	4,600,000,000	7,887,300,000	1.71	36.84%	63.16%
	TW Telecom Inc.	B	4,200,000,000	1,822,800,000	0.43	69.74%	30.26%
	Windstream Corp.	B	4,800,000,000	8,760,800,000	1.83	35.40%	64.60%
Median			4,200,000,000	2,108,200,000	1.71	36.84%	63.16%
Arithmetic Mean			4,825,000,000	6,088,157,143	2.01	38.88%	61.12%
Weighted Average			12,106,606,218	13,847,926,129		46.65%	53.35%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Telecommunications Utility, Selected Comparables</i>						
	Alaska Comm. Systems Group, Inc.	0.80	0.80	0.80	0.80	0.85
	CenturyLink, Inc.	0.75	0.70	0.75	0.75	0.75
	Cincinnati Bell	1.05	1.10	1.05	1.05	1.05
	Consolidated Comm. Holdings, Inc	0.95	0.95	0.90	0.85	0.80
	Frontier Communications Corp.	0.95	0.90	0.90	0.95	0.90
	TW Telecom Inc.	1.45	1.40	1.35	1.30	1.05
	Windstream Corp.		0.95	0.90	0.90	0.90
<i>Median</i>		0.95	0.95	0.90	0.90	0.90
<i>Arithmetic Mean</i>		0.99	0.97	0.95	0.94	0.90
<i>Telecommunications Utility, Value Line</i>						
	Alaska Comm. Systems Group, Inc.	0.80	0.80	0.80	0.80	0.85
	BCE Inc	0.75	0.75	0.75	0.70	0.70
	BT Group PLC	0.90	0.95	1.00	1.00	1.05
	CenturyLink, Inc.	0.75	0.70	0.75	0.75	0.75
	Cincinnati Bell	1.05	1.10	1.05	1.05	1.05
	Consolidated Comm. Holdings, Inc	0.95	0.95	0.90	0.85	0.80
	Deutsche Telekom	0.75	0.75	0.80	0.80	0.90
	Frontier Communications Corp.	0.95	0.90	0.90	0.95	0.90
	Telefonica, S.A.	0.85	0.90	0.90	0.95	1.00
	TW Telecom Inc.	1.45	1.40	1.35	1.30	1.05
	Windstream Corp.		0.95	0.90	0.90	0.90
<i>Median</i>		0.88	0.90	0.90	0.90	0.90
<i>Arithmetic Mean</i>		0.92	0.92	0.92	0.91	0.90

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%

Water

2014 Capitalization Rate Study Water Industry Notes

- From the Water Industry segment, Consolidated Water Company excluded as being principally and primarily involved in non-domestic operations.
- Staff considered capitalization studies gathered and submitted by:

No Submissions

- Staff relied upon the results of the following models and appraisal judgment in the development of equity rates:
 1. Discounted Cash Flow
 2. Capital Asset Pricing Model, Ex-Post and Ex Ante
 3. Earnings/Price Ratio

Industry Capitalization Rate

<i>Industry</i>	<i>Equity Rate</i>	<i>Market Capitalization</i>	<i>Long Term Debt</i>	<i>Capitalization Rate</i>
<i>Water</i>	10.15%	62.21%	37.79%	8.04%

Industry Equity Rate Summary

Water

CapM Ex Post Equity Rate	8.50%
CapM Ex Ante Equity Rate	10.36%
DCF (Dividend) Equity Rate	8.88%
DCF (Earnings) Equity Rate	10.06%
Earnings Price Ratio	5.88%

CapM Equity Rates

<i>Industry</i>	<i>Ex Post Risk Premium b*</i>	<i>Ex Ante Risk Premium c*</i>	<i>Value Line Beta d</i>	<i>Ex Post CapM EquityRate (((b-3.67%)*d)+3.67%)</i>	<i>Ex Ante CapM EquityRate (((c-3.67%)*d)+3.67%)</i>
<i>Water</i>	10.63%	13.32%	0.69	8.50%	10.36%

b* Risk Free Rate (3.67%) plus Risk Premium Rate (6.96%)
c* Risk Free Rate (3.67%) plus Risk Premium Rate (9.65%)
 Value Line Investment Survey, November 2013 through January 2014
 Morningstar 2014 Valuation Yearbook

Discounted Cash Flow (Gordon Growth)

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization d</i>	<i>Dividend Yield e</i>	<i>Growth Estimate</i>		<i>Equity Rate Dividend (e+f)</i>	<i>Equity Rate Earnings (e+g)</i>
					<i>Dividends f</i>	<i>Earnings g</i>		
<i>Water</i>	American States Water Co.	A	1,100,000,000	3.10%	10.00%	7.00%	13.10%	10.10%
	American Water Works Company, Inc.	B+	7,400,000,000	2.80%	7.50%	8.50%	10.30%	11.30%
	Aqua America, Inc.	B++	4,100,000,000	2.80%	9.50%	10.00%	12.30%	12.80%
	California Water Service Group	B++	1,100,000,000	3.00%	6.50%	7.00%	9.50%	10.00%
	Connecticut Water	B+	375,000,000	2.80%	3.00%	6.50%	5.80%	9.30%
	Middlesex Water Company	B++	325,000,000	3.70%	1.50%	4.00%	5.20%	7.70%
	SJW Corporation	B+	600,000,000	2.60%	4.50%	7.50%	7.10%	10.10%
	York Water Company	B+	275,000,000	2.70%	5.00%	6.50%	7.70%	9.20%
<i>Median</i>			850,000,000				8.60%	10.05%
<i>Arithmetic Mean</i>			1,909,375,000				8.88%	10.06%

E/P Ratio

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Recent Price d</i>	<i>Projected Earnings e</i>	<i>E/P Ratio (e/d)</i>
Water						
	American States Water Co.	A	1,100,000,000	28.15	1.80	6.39%
	American Water Works Company, Inc.	B+	7,400,000,000	41.71	2.90	6.95%
	Aqua America, Inc.	B++	4,100,000,000	23.09	1.45	6.28%
	California Water Service Group	B++	1,100,000,000	22.47	1.40	6.23%
	Connecticut Water	B+	375,000,000	35.09	1.85	5.27%
	Middlesex Water Company	B++	325,000,000	20.80	1.15	5.53%
	SJW Corporation	B+	600,000,000	29.15	1.60	5.49%
	York Water Company	B+	275,000,000	21.37	1.05	4.91%
Median			850,000,000			5.88%
Arithmetic Mean			1,909,375,000			5.88%

Capital Structure

<i>Industry</i>	<i>Company</i>	<i>Value Line Strength</i>	<i>Market Capitalization c</i>	<i>Long Term Debt d</i>	<i>Debt/Equity Ratio (d/c)</i>	<i>Percentage Equity (c/(c+d))</i>	<i>Percentage Debt (d/(c+d))</i>
Water							
	American States Water Co.	A	1,100,000,000	332,100,000	0.30	76.81%	23.19%
	American Water Works Company, Inc.	B+	7,400,000,000	5,174,100,000	0.70	58.85%	41.15%
	Aqua America, Inc.	B++	4,100,000,000	1,439,300,000	0.35	74.02%	25.98%
	California Water Service Group	B++	1,100,000,000	430,200,000	0.39	71.89%	28.11%
	Connecticut Water	B+	375,000,000	175,500,000	0.47	68.12%	31.88%
	Middlesex Water Company	B++	325,000,000	130,600,000	0.40	71.33%	28.67%
	SJW Corporation	B+	600,000,000	335,100,000	0.56	64.16%	35.84%
	York Water Company	B+	275,000,000	84,900,000	0.31	76.41%	23.59%
Median			850,000,000	333,600,000	0.40	71.61%	28.39%
Arithmetic Mean			1,909,375,000	1,012,725,000	0.44	70.20%	29.80%
Weighted Average			4,888,502,455	2,969,601,637		62.21%	37.79%

Five Year Historical Beta

<i>Industry</i>	<i>Company</i>	<i>2010 Value Line Levered Beta</i>	<i>2011 Value Line Levered Beta</i>	<i>2012 Value Line Levered Beta</i>	<i>2013 Value Line Levered Beta</i>	<i>2014 Value Line Levered Beta</i>
<i>Water, Selected Comparables</i>						
	American States Water Co.	0.80	0.80	0.70	0.70	0.65
	American Water Works Co., Inc.		0.65	0.65	0.65	0.65
	Aqua America, Inc.	0.65	0.65	0.65	0.60	0.60
	California Water Service Group	0.75	0.70	0.65	0.65	0.60
	Connecticut Water				0.75	0.75
	Middlesex Water Company			0.70	0.70	0.75
	SJW Corporation			0.85	0.85	0.85
	York Water Company					0.70
<i>Median</i>		0.75	0.68	0.68	0.70	0.68
<i>Arithmetic Mean</i>		0.73	0.70	0.70	0.70	0.69
<i>Water, Value Line</i>						
	American States Water Co.	0.80	0.80	0.70	0.70	0.65
	American Water Works Co., Inc.		0.65	0.65	0.65	0.65
	Aqua America, Inc.	0.65	0.65	0.65	0.60	0.60
	California Water Service Group	0.75	0.70	0.65	0.65	0.60
	Connecticut Water				0.75	0.75
	Consolidated Water Co. Ltd					1.00
	Middlesex Water Company			0.70	0.70	0.75
	SJW Corporation			0.85	0.85	0.85
	York Water Company					0.70
<i>Median</i>		0.75	0.68	0.68	0.70	0.70
<i>Arithmetic Mean</i>		0.73	0.70	0.70	0.70	0.73

Mergents 2013 Corporate Bond Yield Averages

Month	Corporate by Groups		Public Utility Bonds			Industrial Bonds			
	Public Utility	Industrial	Aa	A	Baa	Aaa	Aa	A	Baa
January	4.24%	4.14%	3.90%	4.15%	4.66%	3.80%	3.84%	4.13%	4.81%
February	4.29%	4.25%	3.95%	4.18%	4.74%	3.90%	3.95%	4.20%	4.95%
March	4.29%	4.29%	3.95%	4.20%	4.72%	3.93%	3.98%	4.25%	4.99%
April	4.08%	4.07%	3.74%	4.00%	4.49%	3.73%	3.79%	4.05%	4.69%
May	4.24%	4.22%	3.91%	4.17%	4.65%	3.89%	3.97%	4.20%	4.80%
June	4.63%	4.63%	4.27%	4.53%	5.08%	4.27%	4.36%	4.58%	5.29%
July	4.78%	4.74%	4.44%	4.68%	5.21%	4.34%	4.47%	4.69%	5.43%
August	4.85%	4.92%	4.53%	4.73%	5.28%	4.54%	4.72%	4.83%	5.57%
September	4.90%	4.99%	4.58%	4.80%	5.31%	4.64%	4.80%	4.90%	5.62%
October	4.78%	4.86%	4.48%	4.70%	5.17%	4.53%	4.69%	4.76%	5.44%
November	4.86%	4.95%	4.56%	4.77%	5.24%	4.63%	4.79%	4.85%	5.52%
December	4.89%	4.95%	4.59%	4.81%	5.25%	4.62%	4.76%	4.89%	5.51%
	4.57%	4.58%	4.24%	4.48%	4.98%	4.24%	4.34%	4.53%	5.22%